

PROPOSED REGULATIONS FOR THE PREVENTION OF POLLUTION FROM SHIPS AND FOR DANGEROUS CHEMICALS

It is proposed that

PART 1

GENERAL PROVISIONS

DIVISION 1

GENERAL

Subdivision 1

Interpretation

1. (1) The following definitions apply in these Regulations.

“Act” means the *Canada Shipping Act. (Loi)*

“Anti-Fouling Systems Convention” means the International Convention on the Control of Harmful Anti-Fouling Systems on Ships, 2001. (*Convention sur le contrôle des systèmes antisalissure*)

“anti-fouling system” means a coating, paint, surface treatment, surface or device that is used on a ship to control or prevent the attachment of unwanted organisms. (*système antisalissure*)

“approved classification society” means the American Bureau of Shipping, Bureau Veritas (Canada), Det Norske Veritas, Germanischer Lloyd or Lloyd’s Register of Shipping. (*société de classification agréée*)

“a similar stage of construction” means the stage at which

(a) construction identifiable with a specific ship begins; and

(b) assembly of that ship has commenced comprising at least 50 tonnes or 1 per cent of the estimated mass of all structural material, whichever is less. (*dont la construction se trouve à un stade équivalent*)

“BCH Code” means the *Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk*, 1971, adopted and published by the IMO. (*Recueil BCH*)

“biochemical oxygen demand” means the quantity of oxygen used in the biochemical oxidation of organic matter during a five-day period when the organic matter is tested in

accordance with the method described in section 5210 B of the Standard Methods.

(demande biochimique en oxygène)

“black smoke” means smoke that appears black or approximately black. *(fumée noire)*

“cargo residues” means the remnants of any cargo material on board a ship that cannot be placed in proper cargo holds (loading excess and spillage) or that remain in cargo holds or elsewhere after unloading procedures are completed (unloading residual and spillage) and includes cargo sweepings. *(résidus de cargaison)*

“Certificate of Fitness” means a certificate of fitness in accordance with the applicable provisions of the IBC Code or the BCH Code. *(certificat d'aptitude au transport)*

“chemical tanker” is a ship constructed or adapted and used for the carriage in bulk of any liquid product listed in Chapter 17 of the IBC Code. *(navire-citerne pour produits chimiques)*

“Circular MSC/Circ.353” means the IMO circular entitled *Revised Guidelines for Inert Gas Systems*, dated July 4, 1983. *(circulaire MSC/Circ.353)*

“crude oil” means any liquid hydrocarbon mixture occurring naturally in the earth whether or not treated to render it suitable for transportation and includes

(a) crude oil from which certain distillate fractions may have been removed; and

(b) crude oil to which certain distillate fractions may have been added. *(pétrole brut)*

“crude oil tanker” means an oil tanker engaged in the trade of carrying crude oil.

(transporteur de pétrole brut)

“dangerous chemical” means any substance listed in Chapter 17 of the IBC Code.

(produit chimique dangereux)

“deadweight” means the difference in tonnes between the displacement of a ship in water of a specific gravity of 1.025 at the load waterline corresponding to the assigned summer freeboard and the lightweight of the ship. *(port en lourd)*

“emission” means any release of a substance that is subject to control by Annex VI to the Pollution Convention from ships into the atmosphere or sea. *(émission)*

“en route”, in respect of a ship, means being underway on a course that, so far as practicable for navigational purposes, will cause any discharge to be spread over as great an area as is reasonably practicable. *(fait route)*

“fishing zone” has the same meaning as a fishing zone of Canada described in the *Fishing Zones of Canada (Zones 1, 2 and 3) Order*, *Fishing Zones of Canada (Zones 4 and 5) Order* and *Fishing Zones of Canada (Zone 6) Order* made under the *Oceans Act*. (*zone de pêche*)

“from the nearest land” means seaward from the baseline from which the territorial sea of Canada is established in accordance with international law. (*à partir de la terre la plus proche*)

“garbage” means all kinds of victual, domestic and operational waste that are generated during the normal operation of a ship and are liable to be disposed of continuously or periodically, excluding fresh fish and any of their parts. This definition includes plastics, dunnage, lining and packing materials, food wastes and refuse such as paper products, rags, glass, metal, bottles, crockery, incinerator ash and cargo residues other than a cargo residue that is a pollutant referred to in paragraphs 4(a) to (c). (*ordures*)

“gas carrier” has the same meaning as in regulation 3.20 of Chapter II-1 of the Safety Convention. (*transporteur de gaz*)

“Great Lakes Basin” means the waters of the Great Lakes, their connecting and tributary waters and the St. Lawrence River as far as the lower exit of the St. Lambert Lock at Montréal in the Province of Quebec. (*bassin des Grands Lacs*)

“high viscosity substance” means a noxious liquid substance in Category X or Y with a viscosity equal to or greater than 50 mPa·s at the unloading temperature. (*substance à viscosité élevée*)

“IBC Code” means the *International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk*, adopted and published by the IMO. (*Recueil IBC*)

“IMO” means the International Maritime Organization. (*OMI*)

“internal waters of Canada” means the waters referred to in section 6 of the *Oceans Act*. (*eaux intérieures du Canada*)

“lightweight” means the displacement of a ship in tonnes without cargo, fuel, lubricating oil, ballast water, fresh water and feed water in tanks, consumable stores, or passengers and crew and their effects. (*poids léger*)

“liquid substance” means a substance that has a vapour pressure not exceeding 0.28 MPa absolute at a temperature of 37.8°C. (*substance liquide*)

“loading facility” means any shore or sea installation that is used for the loading of oil or an oily mixture or a noxious liquid substance or a dangerous chemical onto a ship.

(installation de chargement)

“machinery spaces” has the same meaning as in section 2 of the *Marine Machinery Regulations*. *(tranche des machines)*

“major conversion” means

(a) in the case of a ship referred to in Divisions 1 and 2, a conversion of a ship

(i) that substantially alters the dimensions or carrying capacity of the ship,

(ii) that changes the type of the ship,

(iii) the intent of which is to substantially prolong the life of the ship, or

(iv) that alters the ship such that it becomes subject to provisions of these Regulations that would not be applicable to it otherwise; and

(b) in the case of a diesel engine referred to in Division 6, a modification of an engine where

(i) the engine is replaced by a new engine built on or after January 1, 2000,

(ii) any substantial modification, as defined in the NO_x Technical Code, is made to the engine, or

(iii) the maximum continuous rating of the engine is increased by more than 10 per cent. *(transformation importante)*

“marine sanitation device” means any equipment installed on board a ship designed to receive and treat sewage. *(appareil d'épuration marine)*

“Minister” means the Minister of Transport. *(ministre)*

“NLS ship” means a ship that carries a noxious liquid substance in bulk and includes an NLS tanker. *(navire pour SLM)*

“NLS tanker” means a chemical tanker as defined in Annex II to the Pollution Convention. *(navire-citerne pour SLM)*

“NO_x Technical Code” means the *Technical Code on Control of Emission of Nitrogen Oxides from Marine Diesel Engines*, adopted and published by the IMO. *(Code technique sur les NO_x)*

“noxious liquid substance” or “NLS” means a substance, alone or in a mixture with other substances, that is carried in bulk and listed and categorized as Category X, Y or Z in the Pollution Category column of Chapter 17 or 18 of the IBC Code or provisionally assessed under regulation 6.3 of Annex II to the Pollution Convention as falling into Category X, Y or Z. (*substance liquide nocive ou SLN*)

“oily mixture” means a mixture with any oil content. (*mélange d’hydrocarbures*)

“ozone-depleting substance” means a controlled substance defined in paragraph 4 of article 1 of the *Montreal Protocol on Substances that Deplete the Ozone Layer, 1987*, adopted and published by the United Nations, listed in Annexes A, B, C or E to the said Protocol. (*substance qui appauvrit la couche d’ozone*)

“ppm” means parts per million, by volume. (*ppm*)

“product carrier” means an oil tanker engaged in the trade of carrying oil other than crude oil. (*transporteur de produits*)

“reception facility” means a facility that is capable of receiving, storing, processing or transshipping, in an environmentally safe manner, shipboard-generated residues and wastes that are controlled under these Regulations. (*installation de réception*)

“residual chlorine content” means the quantity of free available chlorine when tested in accordance with the amperometric titration method described in section 4500-C1 D of the Standard Methods. (*chlore résiduel*)

“Resolution A.444(XI)” means the IMO recommendation entitled *Recommendation Concerning the Installation of Oily-Water Separating Equipment Under the International Convention for the Prevention of Pollution from Ships, 1973, as Modified by the Protocol of 1978 Relating Thereto*, adopted November 15, 1979. (*résolution A.444(XI)*)

“Resolution A.744(18)” means the IMO recommendation entitled *Guidelines on the Enhanced Programme of Inspections During Surveys of Bulk Carriers and Oil Tankers*, adopted November 4, 1993. (*résolution A.744(18)*)

“Resolution MEPC.107(49)” means the IMO recommendation entitled *Revised Guidelines and Specifications for Pollution Prevention Equipment for Machinery Space Bilges of Ships*, adopted July 18, 2003. (*résolution MEPC.107(49)*)

“Section I waters” means fishing zone 1, 2 or 3 or any portion of the internal waters of Canada that is not within a shipping safety control zone. (*eaux de la section I*)

“Section II waters” means any portion of the territorial sea or of fishing zone 4, 5 or 6 that is not within a shipping safety control zone. (*eaux de la section II*)

“segregated ballast” means ballast water that is introduced into a tank that is completely separated from the cargo and oil fuel system and permanently allocated to the carriage of ballast or to the carriage of ballast or cargoes other than pollutants. (*ballast séparé*)

“sewage” means

- (a) human body wastes and wastes from other living animals;
- (b) drainage and other wastes from toilets and other receptacles intended to receive or retain human body wastes;
- (c) drainage from medical premises such as a dispensary or a sick bay via wash basins, wash tubs and scuppers located in such premises;
- (d) drainage from spaces containing living animals; or
- (e) other drainage or wastes when mixed with the drainage or other wastes referred to in paragraph (a), (b), (c) or (d). (*eaux usées*)

“ship constructed” means a ship the keel of which is laid or that is at a similar stage of construction. (*navire construit*)

“shipboard incineration” means the incineration of wastes or other matter on board a ship, if the wastes or other matter were generated during the normal operation of the ship. (*incinération à bord*)

“shipboard incinerator” means a shipboard facility designed for the primary purpose of shipboard incineration. (*incinérateur de bord*)

“shipping safety control zone” has the same meaning as in section 2 of the *Arctic Waters Pollution Prevention Act*. (*zone de contrôle de la sécurité de la navigation*)

“sludge oil” means sludge from the fuel or lubricating oil separators, waste lubricating oil from main or auxiliary machinery, or waste oil from bilge water separators, oil filtering equipment or drip trays. (*boues d'hydrocarbures*)

“smoke” means any solid, liquid, gas or combination of them produced by the combustion of fuel and includes soot, ash and grit. (*fumée*)

“smoke chart” means a smoke chart described in section 163. (*carte des fumées*)

“SO_x emission control area” means an area listed in or designated under Regulation 14 of Annex VI to the Pollution Convention. (*zone de contrôle des émissions de SO*)

“solidifying substance” means a noxious liquid substance that at the time of unloading is, in the case of a substance with a melting point below 15°C, at a temperature of less than 5°C above its melting point or, in the case of a substance with a melting point of or above 15°C, at a temperature of less than 10°C above its melting point. (*substance qui se solidifie*)

“Standard Methods” means the *Standard Methods for the Examination of Water and Wastewater*, published by the American Public Health Association. (*Standard Methods*)

“suspended solids” means the total suspended solid matter in or on a liquid when it is tested in accordance with procedures specified in section 2540 D of the Standard Methods. (*matières solides en suspension*)

“total residual chlorine” means the total quantity of chlorine when tested in accordance with the amperometric titration method described in Standard Methods. (*chlore résiduel total*)

“transfer operation” means

- (a) the loading of oil, an oily mixture, a noxious liquid substance or a dangerous chemical onto a ship from a loading facility or from another ship; or
- (b) the unloading of oil, an oily mixture, a noxious liquid substance or a dangerous chemical from a ship onto an unloading facility or onto another ship. (*opération de transbordement*)

“unloading facility” means any shore or sea installation that is used for the unloading of oil, an oily mixture, a noxious liquid substance or a dangerous chemical from a ship. (*installation de déchargement*)

“waters under Canadian jurisdiction” means

- (a) Canadian waters; and
 - (b) the exclusive economic zone of Canada. (*eaux de compétence canadienne*)
- (2) For the purposes of these Regulations, every reference to “Administration” in any material that is incorporated by reference into these Regulations means
- (a) in the case of a Canadian ship, the Minister; and

(b) in the case of a ship that is not a Canadian ship, the government of the state whose flag the ship is entitled to fly.

(3) In the event of an inconsistency between a definition in any material incorporated by reference into these Regulations and any other definition in these Regulations, that other definition shall prevail to the extent of the inconsistency.

(4) For the purpose of interpreting any material incorporated by reference into these Regulations, “should” shall be read to mean “shall”.

Incorporation by Reference

2. Unless otherwise indicated in these Regulations, any reference to material that is incorporated by reference into these Regulations is a reference to that material as amended from time to time.

Subdivision 2

Application

3. (1) Unless otherwise specified, these Regulations apply to

(a) a Canadian ship anywhere; and

(b) a ship that is not a Canadian ship in waters under Canadian jurisdiction.

(2) These Regulations do not apply in respect of any ship owned or operated by a state and used only in government non-commercial service.

(3) A ship registered in a state that is not a signatory to the Pollution Convention shall comply with these Regulations, in addition to the applicable regulations made under Part V of the Act, before operating in waters under Canadian jurisdiction.

Subdivision 3

Prescribed Pollutants

4. For the purposes of Part XV of the Act, the following substances are prescribed to be pollutants:

(a) oil and any oily mixture;

(b) any noxious liquid substance;

- (c) for the purposes of Division 3, any substance listed in Schedule 1, except when it is carried in packaged form or in a freight container, road vehicle, trailer, portable tank or railway vehicle or a tank mounted on a chassis;
- (d) sewage and sewage sludge;
- (e) any organotin compounds; and
- (f) garbage, excluding any pollutant referred to in paragraphs (a) to (e).

Subdivision 4

General Requirements

Plans and Specifications

5. For the purposes of these Regulations, the Minister may accept plans and specifications that have been approved by an approved classification society or by an agency of a country other than Canada if the society or agency applies the same requirements as Canada in its approval process.

Mixture of Pollutants

6. If a pollutant is mixed with another pollutant, the more stringent requirements respecting the individual pollutants apply.

Special Inspections

7. (1) If the construction, arrangement, equipment, fittings, installations or systems of a ship are changed by an accident, the discovery of a defect, major repair or major conversion that affects the ship's compliance with these Regulations, the owner or master of the ship shall report the change in writing to the Board as soon as practicable.

(2) If an owner or master of a ship reports a change to the Board, the Board may require a steamship inspector to perform a special general or partial inspection of the ship to ensure that the necessary repairs have been made and the ship complies with these Regulations.

(3) The owner or master of a ship need not report minor repairs or the direct replacement of equipment or fittings that comply with these Regulations to the Board.

Subdivision 5

Exceptions to Discharge Provisions

Exceptions

8. Sections 9, 10, 40, 82, 83, 108, 128 and 139 respecting the discharge of a pollutant and Division 6 respecting the pollution of the air do not apply if
- (a) a discharge is necessary for the purpose of saving lives, securing the safety of a ship or preventing the immediate loss of a ship;
 - (b) a discharge occurs as a result of an accident of navigation in which a ship or its equipment is damaged, unless the accident occurs as a result of an action that is outside the ordinary practice of seamen;
 - (c) minimal and unavoidable leakage of oil occurs as a result of the operation of an underwater machinery component;
 - (d) a discharge is made for the purpose of scientific research into pollution abatement or control in accordance with permission granted by the Minister;
 - (e) an accidental loss of synthetic fishing nets occurs, provided that all reasonable precautions were taken to prevent the loss;
 - (f) a discharge of garbage results from damage to a ship or its equipment, provided all reasonable precautions have been taken before and after the occurrence of the damage to prevent or minimize the discharge; or
 - (g) an emission involving pollution of the air results from damage to a ship or its equipment, provided all reasonable precautions have been taken before and after the occurrence of the damage to prevent or minimize the emission.

Canadian Ships in Special Areas

9. A Canadian ship shall comply with the following requirements, if they are in effect, that are set out in the Pollution Convention respecting a discharge of a pollutant:
- (a) in the case of a ship in a special area, as defined in Annex I to the Pollution Convention, the requirements of regulations 15 and 34 of Annex I to the Pollution Convention as they apply to a discharge in a special area;
 - (b) in the case of a ship in a special area, as defined in Annex V to the Pollution Convention, regulation 5(1) of Annex V to the Pollution Convention; and

(c) in the case of a ship in the Antarctic area, as defined in regulation 13.8.1 of Annex II to the Pollution Convention, regulation 13.8.2 of Annex II to the Pollution Convention.

Canadian Ships in SO_x Emission Control Areas

10. A Canadian ship that is in a SO_x emission control area shall comply with the requirements that are set out in Regulations 14(3) to (7) of Annex VI to the Pollution Convention and are in effect.

Equipment Requirements

11. (1) Equipment that is on a Canadian ship and regulated under these Regulations requires a certificate of type approval issued by the Minister.

(2) Equipment regulated under these Regulations that is on a ship shall not be operated unless it continues to meet the standards for which it was initially approved.

Issuance of a Certificate of Type Approval

12. (1) For equipment that requires a certificate of type approval, the equipment shall be tested in accordance with the requirements of these Regulations and the test data and results, including the test laboratory's analyses of any test samples, shall be forwarded to the Minister in the format required by these Regulations.

(2) If the Minister is satisfied that the equipment meets the requirements of these Regulations, the Minister may issue a certificate of type approval.

[13 to 16 reserved]

PART 2

SPECIFIC PROVISIONS

DIVISION 1

OIL

Subdivision 1

Construction and Equipment

Plans and Specifications

17. (1) Subject to subsection (2), the owner of a Canadian oil tanker of 150 tons gross tonnage or more or of any other Canadian ship of 400 tons gross tonnage or

more shall build, fit out or carry out major repairs to the ship in accordance with the plans and specifications required under this section, and shall submit four copies of those plans and specifications to the Minister.

(2) The plans and specifications shall contain a description of

(a) in the case of an oil tanker,

(i) containers or enclosed deck areas referred to in section 20,

(ii) the slop tank arrangement referred to in regulation 29 of Annex I to the Pollution Convention,

(iii) the oil discharge monitoring and control system referred to in regulations 31.2 and 31.3 of Annex I to the Pollution Convention,

(iv) the oil-water interface detector referred to in regulation 32 of Annex I to the Pollution Convention,

(v) the pumping, piping and discharge arrangements referred to in regulations 30.1 to 30.4 of Annex I to the Pollution Convention,

(vi) the subdivision and stability requirements referred to in regulations 27, 28.1 to 28.4 and 28.6 of Annex I to the Pollution Convention,

(vii) the hypothetical outflow of oil referred to in regulations 25.1 to 25.4 of Annex I to the Pollution Convention, and

(viii) the limitation of size and arrangements of cargo tanks referred to in regulations 26.2 to 26.6 of Annex I to the Pollution Convention;

(b) in the case of a crude oil tanker of 20,000 tonnes deadweight or more,

(i) the requirements referred to in paragraph (a),

(ii) the segregated ballast tanks referred to in regulation 18.2 of Annex I to the Pollution Convention,

(iii) the protective location of segregated ballast tanks referred to in regulations 18.12 to 18.15 of Annex I to the Pollution Convention,

(iv) the crude oil washing system referred to in regulation 33.2 of Annex I to the Pollution Convention, and

- (v) the inert gas system referred to in paragraph 5.5 of regulation 4 of Chapter II-2 of the Safety Convention;
 - (c) in the case of a product carrier of 30,000 tonnes deadweight or more, the requirements referred to in paragraph (a) and subparagraphs (b)(ii) and (iii);
 - (d) in the case of any ship of 400 tons gross tonnage or more,
 - (i) the containers or enclosed deck areas referred to in section 19,
 - (ii) the tank referred to in section 21,
 - (iii) the pump and piping system referred to in section 24 for discharging oily residues and sludge oil to a reception facility,
 - (iv) the standard discharge connection referred to in Regulation 13 of Annex I to the Pollution Convention, and
 - (v) unless the ship engages only on voyages in Section I waters and is fitted with a holding tank that has a volume adequate for the retention on board of oily bilge water, the oil filtering equipment, alarm arrangements and automatic stopping arrangements referred to in Regulation 14 of Annex I to the Pollution Convention;
 - (e) in the case of a ship that engages only on voyages in the inland waters of Canada,
 - (i) the requirements referred to in subparagraphs (d)(i) to (iv), and
 - (ii) unless the ship is fitted with a holding tank that has a volume adequate for the retention on board of oily mixtures from the machinery space bilges, the oil filtering equipment referred to in Regulation 14 of Annex I to the Pollution Convention, a 5 ppm bilge alarm that is substantially similar to that referred to in Part 3 and an automatic stopping arrangement that is substantially similar to that referred to in Regulation 14.7 of Annex I to the Pollution Convention; and
 - (f) in the case of a ship of less than 10,000 tons gross tonnage that engages on voyages in Section II waters, the oil filtering equipment referred to in subparagraph (d)(v), except that the equipment need not be fitted with an alarm or automatic stopping arrangement.
- (3) The owner of an oil tanker need not meet the requirements referred to in subparagraphs (2)(a)(ii) to (iv) if the oil tanker

(a) engages exclusively in the carriage of asphalt or similar oils that, through their physical properties, inhibit the effective separation of oil and water and monitoring of the discharge of oil; or

(b) engages only on voyages in waters under Canadian jurisdiction within 50 nautical miles from the nearest land and that are exclusively of 72 hours or less in duration.

(4) The owner of an oil tanker need not meet the requirements referred to in subparagraphs (2)(a)(iii) and (iv) if the oil tanker engages only on voyages in waters under Canadian jurisdiction within 50 nautical miles from the nearest land.

(5) The owner of a non-self-propelled oil tanker that cannot wash or ballast its cargo tanks while en route need not meet the requirements referred to in subparagraphs (2)(a)(ii) to (v).

(6) Subparagraphs (2)(a)(vii) and (viii) do not apply to an oil tanker

(a) for which the building contract is placed on or after January 1, 2007;

(b) whose keel is laid or that is at a similar stage of construction on or after July 1, 2007, in the absence of a building contract;

(c) the delivery of which is on or after January 10, 2010; or

(d) that has undergone a major conversion

(i) for which the building contract is placed on or after January 1, 2007,

(ii) the construction work of which is begun on or after July 1, 2007, in the absence of a building contract, or

(iii) which is completed on or after January 1, 2010.

Emergency Plan

18. Subject to subsection 38(3), the owner of a Canadian oil tanker of 150 tons gross tonnage or more or any other Canadian ship of 400 tons gross tonnage or more that carries oil as cargo or as fuel shall submit four copies of either of the following plans to the Minister:

(a) the shipboard oil pollution emergency plan; or

(b) if the plan has been combined with the shipboard marine pollution emergency plan for noxious liquid substances, the shipboard marine pollution emergency plan.

Containers or Enclosed Deck Areas of Ships for Bunkering Operations

19. (1) Subject to subsection (2), a ship of 100 tons gross tonnage or more shall be fitted or equipped with a container or an enclosed deck area that, under even-keel conditions,

(a) is capable of retaining oil that may leak or spill during bunkering operations;

(b) has a capacity of not less than 0.08 m³ if the ship is of less than 400 tons gross tonnage or not less than 0.16 m³ if the ship is of 400 tons gross tonnage or more; and

(c) does not adversely affect the stability of the ship or the safety of its crew.

(2) Subsection (1) does not apply in respect of a ship

(a) that is fitted with an overflow system that prevents oil from discharging onto the open deck; or

(b) that usually fills its bunkers from a truck and is equipped with a bunkering hose that has an inside diameter of 51 mm or less and employs an automatic shut-off nozzle.

Containers or Enclosed Deck Areas for Oil Tankers

20. (1) An oil cargo loading or unloading manifold and a cargo transfer connection point on an oil tanker shall be fitted or equipped with a container or an enclosed deck area

(a) that is capable of retaining oil that may leak or spill during transfer operations;

(b) that has a means for the removal of the oil retained in it; and

(c) that does not adversely affect the stability of the oil tanker or the safety of its crew.

(2) If the largest conduit serving an oil cargo loading or unloading manifold or a cargo transfer connection point on an oil tanker has an inside diameter set out in Column 1 of an item of the table to this subsection, the container or enclosed deck area shall, under even-keel conditions, have the volume set out in Column 2 of that item.

TABLE

Column 1		Column 2
Item	Inside Diameter	Volume of Container or Enclosed Deck Area
1.	Less than 51 mm	0.08 m ³
2.	51 mm or more, but less than 101 mm	0.16 m ³

	Column 1	Column 2
Item	Inside Diameter	Volume of Container or Enclosed Deck Area
3.	101 mm or more, but less than 153 mm	0.32 m ³
4.	153 mm or more, but less than 305 mm	0.48 m ³
5.	305 mm or more	0.64 m ³

Tanks for Oily Residue and Sludge Oil

21. A ship of 400 tons gross tonnage or more shall be equipped with at least one tank

(a) that has an adequate capacity, having regard to the type of machinery fitted on the ship and the ship's usual length of voyage, to receive the oily residues and sludge oil that result from the purification of fuel and lubricating oils and from oil leakages into the ship's machinery spaces; and

(b) that is designed and constructed so as to facilitate its cleaning.

Prohibited Forepeak Tanks and Tanks Forward of the Collision Bulkhead

22. No ship of 400 tons gross tonnage or more that is put into service on or after February 16, 1993 shall carry oil in a forepeak tank or in a tank forward of the collision bulkhead.

Cargo Spaces for Carrying Oil in Bulk on Ships other than Oil Tankers

23. (1) A ship, other than an oil tanker, that is fitted with cargo spaces that are constructed and used for carrying oil in bulk and have an aggregate capacity of at least 200 m³ but less than 1,000 m³ shall comply with the construction and operational requirements referred to in regulation 26.4 of Annex I to the Pollution Convention, sections 20 and 22 and subsections 42(2) and 51(4).

(2) A ship, other than an oil tanker, that is fitted with cargo spaces that are constructed and used for carrying oil in bulk and have an aggregate capacity of at least 1,000 m³ shall comply with

(a) construction and operational requirements referred to in regulation 26.4 of Annex I to the Pollution Convention and sections 20 and 22 and subsections 42(2) and 51(4);

(b) the requirements of an oil discharge monitoring and control system referred to in subparagraphs 17(2)(a)(ii) to (iv) and 36(1)(c)(i); and

(c) the requirements for double hulling referred to in Subdivision 7.

Piping Systems — Standard Discharge Connections and Sludge Oil Pumps

24. (1) A ship of 400 tons gross tonnage or more that is fitted with main or auxiliary propulsion machinery shall be equipped with at least one pump that is capable of discharging the oily residues and sludge oil from its machinery space bilges and sludge oil tanks through a piping system to a reception facility.

(2) The piping system referred to in subsection (1) shall have a stop valve and at least one outlet that is accessible from the weather deck and fitted with a standard discharge connection that meets the requirements of regulation 13 of Annex I to the Pollution Convention.

(3) The piping to and from sludge oil tanks shall have no direct connection overboard other than the standard discharge connection referred to in subsection (2).

Means for Stopping Discharge Pumps

25. A Canadian ship of 400 tons gross tonnage or more that is fitted with main or auxiliary propulsion machinery shall be equipped on the weather deck with a means for stopping each pump that is used to discharge oily residues and sludge oil.

Oil Filtering Equipment

26. (1) This section and section 28 apply to a ship that engages on voyages in Section II waters that is

(a) a self-propelled ship of 400 tons gross tonnage or more; or

(b) a non-self-propelled ship of 400 tons gross tonnage or more with a total auxiliary power of 400 kW or more.

(2) The ship shall be equipped with the oil filtering equipment referred to in section 28.

(3) If the ship is of 10,000 tons gross tonnage or more, it shall be provided with the alarm arrangements and automatic stopping arrangements referred to in section 28.

Equipment and System Requirements for Oil Tankers

27. (1) An oil tanker of 150 tons gross tonnage or more that engages on voyages in Section II waters shall be fitted and equipped with

(a) an oil discharge monitoring and control system that meets the requirements of regulations 31.2 and 31.3 of Annex I to the Pollution Convention;

(b) an oil-water interface detector that meets the requirements of regulation 32 of Annex I to the Pollution Convention;

(c) a slop tank, or a cargo tank that is designated as a slop tank, that meets the requirements of regulation 29 of Annex I to the Pollution Convention; and

(d) in the case of a crude oil tanker of 40,000 tonnes deadweight or more,

(i) segregated ballast tanks that meet the requirements set out in regulation 18.2 of Annex I to the Pollution Convention and that are constructed in accordance with the protective location requirements set out in regulations 18.12 to 18.15 of Annex I to the Pollution Convention, or

(ii) a crude oil washing system that meets the requirements of regulation 33.2 of Annex I to the Pollution Convention and an inert gas system that meets the requirements of paragraph 5.5 of regulation 4 of Chapter II-2 of the Safety Convention.

(2) A product carrier of 40,000 tonnes deadweight or more that was constructed before July 31, 1995 and that has not undergone a major conversion may operate with dedicated clean ballast tanks that meet the requirements set out in regulation 18.8 of Annex I to the Pollution Convention.

Equipment Standards

28. The equipment referred to in sections 17, 26 and 27 shall meet the following requirements:

(a) in the case of oil filtering equipment, alarm arrangements and automatic stopping arrangements referred to in regulation 14 of Annex I to the Pollution Convention, the specifications referred to in that regulation;

(b) in the case of a process unit for attachment to existing oily-water separating equipment, the specifications referred to in Appendix 1 to Resolution A.444(XI);

- (c) in the case of an oil content meter (cargo spaces of oil tankers), the specifications referred to in regulations 31.2 and 31.3 of Annex I to the Pollution Convention;
- (d) in the case of an oil-water interface detector, the specifications referred to in regulation 32 of Annex I to the Pollution Convention;
- (e) in the case of a crude oil washing system, the specifications referred to in regulation 33.2 of Annex I to the Pollution Convention;
- (f) in the case of an inert gas system, the specifications referred to in paragraph 5.5 of regulation 4 of Chapter II-2 of the Safety Convention; and
- (g) in the case of 5 ppm alarms, the specifications referred to in regulation 14 of Annex I to the Pollution Convention and the specifications for 5 ppm bilge alarms set out in Part 3.

Operations and Equipment Manuals for Canadian Oil Tankers

29. (1) The owner or master of a Canadian oil tanker of 150 tons gross tonnage or more shall submit four copies of the operations manual for the oil tanker's oil discharge monitoring and control system to the Minister in accordance with the requirements of regulation 31.4 of Annex I to the Pollution Convention.

(2) The owner or master of a Canadian crude oil tanker of 20,000 tonnes deadweight or more shall submit to the Minister four copies of

- (a) the operations and equipment manuals referred to in Circular MSC/Circ.353 for the oil tanker's inert gas system; and
- (b) the operations and equipment manual referred to in regulation 35.1 of Annex I to the Pollution Convention detailing the crude oil washing system.

Equipment on Oil Tankers and Other Ships

30. (1) An oil tanker of 150 tons gross tonnage or less shall be equipped with

- (a) installations that are capable of retaining on board oil residues, contaminated cargo washings and cargo wastes for the purpose of their subsequent discharge to a reception facility; or
- (b) equipment that meets the oily mixture discharge requirements set out in sections 41 and 42.

(2) A ship of less than 400 tons gross tonnage that carries oil as fuel or as cargo shall be equipped with

(a) installations that are capable of retaining on board oil residues for the purpose of their subsequent discharge to a reception facility; or

(b) equipment that meets the oily mixture discharge requirements set out in sections 41 and 42.

Subdivision 2

Inspections and Certificates

Initial Inspections and Periodic Inspections

31. (1) A ship shall be inspected by a steamship inspector or an approved classification society to ensure that the ship's construction, arrangement, equipment, fittings, installations and systems are in accordance with these Regulations before the ship is put into service for the first time or is issued its first Canadian Oil Pollution Prevention Certificate.

(2) The steamship inspector or an approved classification society shall issue to a ship that complies with these Regulations a Canadian Oil Pollution Prevention Certificate that is valid for a period of five years or less beginning on the day on which it was issued.

(3) A ship that is transferred to Canadian registry is subject to the provisions of subsections (1) and (2).

(4) If a steamship inspector or an approved classification society conducts an inspection of a ship similar to the initial inspection referred to in subsection (1) and finds that the ship is in compliance with these Regulations, the steamship inspector or an approved classification society may renew the ship's Canadian Oil Pollution Prevention Certificate within the three months before the expiration of the period for which it was issued.

Intermediate Inspections

32. (1) The owner or master of a ship may elect to have the ship undergo an intermediate inspection within the three months before or after the expiration of two

years or three years after the day on which the ship's Canadian Oil Pollution Prevention Certificate was issued.

(2) A ship shall undergo an intermediate inspection by a steamship inspector or an approved classification society to ensure that the ship's equipment and piping system, including the oil discharge monitoring and control system, crude oil washing system, oily-water separating equipment and oil filtering system, are operating and are being maintained in accordance with these Regulations.

(3) If, during an intermediate inspection, the equipment and systems are found to be operating and to be being maintained in accordance with these Regulations, the steamship inspector or an approved classification society shall attest to that by endorsing the ship's Canadian Oil Pollution Prevention Certificate.

Annual Inspections

33. (1) In order to ensure that the equipment, fittings, installations and systems of a ship are operating and are being maintained in accordance with these Regulations, the ship shall undergo an annual inspection by a steamship inspector or an approved classification society

(a) within the three months before or after the expiration of one year after the day on which its Canadian Oil Pollution Prevention Certificate was issued;

(b) within the three months before or after the expiration of

(i) three years after the day on which its Canadian Oil Pollution Prevention Certificate was issued, if an intermediate inspection referred to in subsection 32(1) takes place within the three months before or after the expiration of two years after the day on which its Canadian Oil Pollution Prevention Certificate was issued, or

(ii) two years after the day on which its Canadian Oil Pollution Prevention Certificate was issued, if an intermediate inspection referred to in subsection 32(1) takes place within the three months before or after the expiration of three years after the day on which its Canadian Oil Pollution Prevention Certificate was issued; and

(c) within the three months before or after four years after the day on which its Canadian Oil Pollution Prevention Certificate was issued.

(2) If, during an annual inspection, the equipment, fittings, installations and systems are found to be operating and to be being maintained in accordance with these Regulations, the steamship inspector or an approved classification society shall attest to that by endorsing the ship's Canadian Oil Pollution Prevention Certificate.

Enhanced Program of Inspections

34. (1) An oil tanker shall be subject to an enhanced program of inspections during periodic, intermediate and annual inspections.

(2) The scope and frequency of the inspections relating to the enhanced program of inspections shall comply with the provisions of the enhanced program of inspections referred to in regulation 2 of Chapter XI-1 of the Safety Convention.

Issuance of International Oil Pollution Prevention Certificates

35. (1) A steamship inspector or an approved classification society may, at the request of the owner or master of a Canadian ship, issue to that ship an International Oil Pollution Prevention Certificate if the ship complies with the applicable provisions of Annex I to the Pollution Convention.

(2) If an approved classification society issues the certificate to a Canadian ship, the approved classification society shall forward a certified copy of the certificate to the Board.

Subdivision 3

Shipboard Documents

Documents Kept on Board

36. (1) An oil tanker of 150 tons gross tonnage or more and any other ship of 400 tons gross tonnage or more that carries oil as cargo or as fuel shall keep on board an English or French version of

(a) one of the following documents:

(i) a Canadian Oil Pollution Prevention Certificate if the ship is a Canadian ship that engages only on voyages in waters under Canadian jurisdiction,

(ii) an International Oil Pollution Prevention Certificate if the ship is

(A) a Canadian ship that engages on voyages that do not take place exclusively in waters under Canadian jurisdiction, or

(B) a ship that is not a Canadian ship, that is registered in a state that is a signatory to the Pollution Convention and that is in waters under Canadian jurisdiction, or

(iii) a certificate of compliance certifying that the ship complies with the applicable provisions of Annex I to the Pollution Convention if the ship is registered in a state that is not a signatory to the Pollution Convention and is in waters under Canadian jurisdiction;

(b) a certificate of type approval, if applicable, for

(i) a 100 ppm oily-water separator and a process unit,

(ii) 15 ppm oil filtering equipment,

(iii) in the case of machinery spaces, an oil content meter,

(iv) in the case of cargo spaces of oil tankers, an oil content meter, and

(v) in the case of an oil tanker, an oil-water interface detector;

(c) an equipment operation manual for

(i) in the case of an oil tanker, an oil discharge monitoring and control system, and

(ii) in the case of a crude oil tanker of 20,000 tonnes deadweight or more, a crude oil washing system;

(d) in the case of an oil tanker, the information and data referred to in regulations 28.5.1 and 28.5.2 of Annex I to the Pollution Convention;

(e) in the case of a combination carrier, the simple supplementary operational procedures for liquid transfer operations referred to in regulation 27.2 of Annex I to the Pollution Convention;

(f) an emergency plan referred to in section 38; and

(g) a calibration certificate for the equipment referred to in subparagraphs (b)(iii) and (iv).

(2) In respect of a declaration referred to in paragraph 660.2(2)(c) of the Act that is required to be kept on board, the declaration shall be signed by the master or owner and shall be in the form set out in

(a) Schedule 2, for a ship that is in waters south of the 60th parallel of north latitude; and

(b) Schedule 3, for a ship that is in waters north of the 60th parallel of north latitude.

Survey Report File

37. An oil tanker that is more than five years of age shall keep on board the survey report file and supporting documentation, including the condition evaluation report, referred to in section 6 of Annex B to Resolution A.744(18).

Emergency Plan

38. (1) This section applies in respect of an oil tanker of 150 tons gross tonnage or more and any other ship of 400 tons gross tonnage or more that carries oil as cargo or as fuel.

(2) Subject to subsections (3) and (4), an oil tanker and any other ship referred to in subsection (1) shall keep on board an English or French version of a shipboard oil pollution emergency plan that meets the requirements of regulation 37.2 of Annex I to the Pollution Convention.

(3) A non-self-propelled ship fitted with internal combustion engines having a total output of less than 400 kW does not require a shipboard oil pollution emergency plan unless it is carrying 100 tonnes or more of oil in bulk or in other large means of containment.

(4) If subsection 73(1) applies to a ship referred to in subsection (1), the shipboard oil pollution emergency plan may be combined with the shipboard marine pollution emergency plan for noxious liquid substances, in which case the title of the plan shall be the "shipboard marine pollution emergency plan".

(5) An oil tanker of 5,000 tonnes deadweight or more shall have prompt access to computerized, shore-based damage stability and residual structural strength calculation programs.

Subdivision 4

Oil and Oily Mixture Discharges

Application

39. This Subdivision applies to

(a) a ship in Section I waters or Section II waters; and

(b) a Canadian ship in waters seaward of the outermost limits of Section II waters, except a Canadian ship that is in a special area referred to in section 9.

Prohibition

40. Subject to sections 8, 41 and 42, no ship shall discharge and no person shall discharge or permit the discharge of an oil or oily mixture.

Authorized Discharge — Section I Waters

41. The discharge of an oily mixture from machinery spaces is authorized from any ship in Section I waters if

- (a) the ship is en route;
- (b) none of the oily mixture
 - (i) originates in cargo pump room bilges, or
 - (ii) is mixed with oil cargo residues;
- (c) the discharge is processed through oil filtering equipment that
 - (i) produces an undiluted effluent that has an oil content of no more than 15 ppm, and
 - (ii) triggers an alarm and a discharge-stopping device as soon as the oil content in the effluent exceeds
 - (A) 5 ppm, where discharged in inland waters of Canada, or
 - (B) 15 ppm, where discharged in fishing zone 1, 2 or 3 or in those internal waters of Canada that do not include inland waters of Canada; and
- (d) the discharge does not contain chemicals or any other substance introduced for the purpose of circumventing the detection of concentrations of oil that exceed the oil content limits specified in this section.

Authorized Discharge — Section II Waters and Seaward of Section II Waters

42. (1) The discharge of an oily mixture from the machinery space bilges of a ship in Section II waters and a Canadian ship referred to in paragraph 39(b) is authorized if

- (a) the ship is en route;
- (b) in the case of an oil tanker, none of the oily mixture
 - (i) originates in cargo pump room bilges, or
 - (ii) is mixed with oil cargo residues;
- (c) the discharge is processed through oil filtering equipment that produces an undiluted effluent that has an oil content of no more than 15 ppm; and

(d) the discharge does not contain chemicals or any other substance introduced for the purpose of circumventing the detection of concentrations of oil that exceed the oil content limit specified in paragraph (c).

(2) The discharge of an oily mixture from cargo spaces of an oil tanker in Section II waters and a Canadian ship referred to in paragraph 39(b) that is an oil tanker is authorized if

(a) the oil tanker is en route;

(b) the oil tanker is more than 50 nautical miles from the nearest land;

(c) the instantaneous rate of discharge of the oil that is in the effluent does not exceed 30 L per nautical mile;

(d) the total quantity of oil discharged into the sea does not consist of

(i) in the case of an oil tanker that was put into service on or before December 31, 1979, more than 1/15,000 of the cargo of which the oily mixture forms part,

(ii) in the case of an oil tanker that is put into service after December 31, 1979, more than 1/30,000 of the cargo of which the oily mixture forms part, or

(iii) despite subparagraph (i), in the case of an oil tanker that is transferred to Canadian registry on or after February 16, 1993, more than 1/30,000 of the cargo of which the oily mixture forms part; and

(e) the oil discharge monitoring and control system is in operation and can stop the discharge of

(i) any effluent having an oil discharge rate greater than that allowed under paragraph (c), or

(ii) any oil in a quantity greater than that allowed under paragraph (d).

Subdivision 5

Transfer Operations

Exceptions

43. (1) Sections 44 and 48 and paragraphs 49(b) to (d) and (g) to (j) do not apply in respect of oil tankers of less than 150 tons gross tonnage or other ships of less than 400 tons gross tonnage.

(2) Sections 44, 45 and 48 and paragraphs 49(*b*) to (*d*) and (*g*) to (*i*) do not apply in respect of an unmanned oil tanker from which oil is being unloaded if the oil tanker is not attended by a manned ship and is in an isolated location.

Communications

44. A ship and an owner or operator of a loading facility or an unloading facility engaged in a transfer operation shall, before and during the transfer operation, have the means for two-way voice communication on a continuing basis that enables the supervisor on board the ship and the supervisor at the loading facility or the unloading facility or on board the other ship

- (*a*) to communicate immediately as the need arises; and
- (*b*) to direct the immediate shutdown of the transfer operation in case of an emergency.

Lighting

45. (1) If a transfer operation takes place between sunset and sunrise, a ship and an owner or operator of a loading facility or an unloading facility that is engaged in the transfer operation shall provide illumination that has

- (*a*) a lighting intensity of not less than 54 lx at each transfer connection point on the ship or facility; and
- (*b*) a lighting intensity of not less than 11 lx at each transfer operation work area around each transfer connection point on the ship or facility.

(2) The lighting intensity shall be measured on a horizontal plane 1 m above the walking surface of a loading facility or an unloading facility or the working deck of a ship, as applicable.

Transfer Conduits

- 46.** (1) A transfer conduit shall not be used in a transfer operation unless it
- (*a*) has a bursting pressure of not less than four times its maximum working pressure;
 - (*b*) is clearly marked with its maximum working pressure; and
 - (*c*) has successfully passed a hydrostatic test to a pressure equal to one and one-half times its maximum working pressure at least once during the year before its use.

(2) The master of the ship shall keep the test certificate for the hydrostatic test on board and it shall be made available for inspection at the request of a pollution prevention officer.

(3) A conduit shall be used, maintained, tested and replaced in accordance with the manufacturer's specifications.

(4) If any conduit or connection leaks during a transfer operation, the operation shall, as soon as practicable, be slowed down or stopped to remove the pressure from the conduit or connection.

Reception Facility — Standard Discharge Connections

47. An owner or operator of a reception facility that receives oily residues and sludge oil from a ship's machinery space bilges and sludge oil tanks shall equip the reception facility with a piping system that, at its ship side end, is fitted with a standard discharge connection that meets the requirements of regulation 19 of Annex I to the Pollution Convention.

Requirements for Supervisor of Transfer Operations on Board Ships

48. The owner of a ship shall ensure that a transfer operation carried out for the ship is supervised by the holder of

- (a) a certificate that meets the requirements of the Act for that type of ship; or
- (b) in the case of a non-self-propelled oil tanker, documentary evidence issued by a steamship inspector that certifies the person's competence to supervise a transfer operation.

Duties of Transfer Operations Supervisor on Board Ships

49. The supervisor of a transfer operation on board a ship shall ensure that

- (a) the ship is secured, having regard to the weather and the tidal and current conditions, and that the mooring lines are tended so that the movement of the ship does not damage the transfer conduit or its connections;
- (b) transfer procedures are established with the concurrence of the supervisor of the transfer operation at the loading facility or the unloading facility or on board the other ship, as the case may be, with respect to
 - (i) the rates of flow and pressures for the transferred liquid,
 - (ii) the reduction of rates of flow and pressures, where required to avoid an overflow of the tanks,

- (iii) the time required to stop the transfer operation under normal conditions,
- (iv) the time required to shut down the transfer operation under emergency conditions, and
- (v) the communication signals for the transfer operation, including
 - (A) stand by to start transfer,
 - (B) start transfer,
 - (C) slow down transfer,
 - (D) stand by to stop transfer,
 - (E) stop transfer,
 - (F) emergency stop of transfer, and
 - (G) emergency shutdown of transfer;
- (c) the supervisor of the transfer operation at the loading facility or the unloading facility or on board the other ship, as the case may be, has reported readiness for the commencement of the transfer operation;
- (d) the person who is on duty on the ship in respect of the transfer operation is fully conversant with the communication signals, maintains watch over the ship's tanks to ensure that they do not overflow and maintains continuous communication with that person's counterpart at the loading facility or the unloading facility or on board the other ship, as the case may be;
- (e) the manifold valves and tank valves on the ship are not closed until the relevant pumps are stopped if the closing of the valves would cause dangerous over-pressurization of the pumping system;
- (f) the rate of flow is reduced when topping off the tanks;
- (g) the supervisor of the transfer operation at the loading facility or the unloading facility or on board the other ship is given sufficient notice of the stopping of the transfer operation to permit them to take the necessary action to reduce the rate of flow or pressure in a safe and efficient manner;
- (h) the following measures are taken to prevent the discharge of oil

- (i) all cargo and bunker manifold connections that are not being used in the transfer operation are securely closed and fitted with blank flanges or other equivalent means of closure,
- (ii) all overboard discharge valves are securely closed and marked to indicate that they are not to be opened during the transfer operation, and
- (iii) all scuppers are plugged;
- (l) a supply of peat moss or other absorbent material is readily available near every transfer conduit to facilitate the clean-up of any minor spillage of oil that may occur on the ship or on the shore;
- (j) all transfer conduits that are used in the transfer operation are supported to prevent the conduits and their connections from being subjected to any strain that might cause damage to them or cause the conduits to become disconnected;
- (k) all reasonable precautions are taken to avoid the discharge of oil into the water;
- (l) the supervisor at the loading facility or the unloading facility or on board the other ship is competent in transfer operations; and
- (m) a sufficient number of persons are on duty at the loading facility or the unloading facility or on board the other ship during the transfer operation.

Emergency

50. In the event of an emergency during a transfer operation, the master of a ship or the supervisor on board the ship shall take all necessary measures to rectify or minimize the effects of the emergency.

Subdivision 6

Record-keeping

Oil Record Books

51. (1) A ship of 400 tons gross tonnage or more that carries oil as fuel or as cargo and an oil tanker of 150 tons gross tonnage or more shall keep on board an Oil Record Book, Part I (Machinery Space Operations) in the form set out in Appendix III to Annex I to the Pollution Convention.

(2) An oil tanker of 150 tons gross tonnage or more shall keep on board an Oil Record Book, Part II (Cargo/Ballast Operations) in the form set out in Appendix III to Annex I to the Pollution Convention.

(3) The master of a ship of 400 tons gross tonnage or more that carries oil as fuel or as cargo or of an oil tanker of 150 tons gross tonnage or more shall

(a) ensure that

- (i) the machinery space operations referred to in regulation 17.2 of Annex I to the Pollution Convention and the discharges referred to in paragraphs 8(a), (b) and (d) are recorded in English or French in the Oil Record Book, Part I (Machinery Space Operations) without delay each time the operations and discharges take place, and
- (ii) any failure of the oil filtering equipment is recorded in the Oil Record Book, Part I (Machinery Space Operations) without delay;

(b) ensure that each recorded entry in the Oil Record Book, Part I (Machinery Space Operations) is signed by the officer in charge of the operation; and

(c) sign each page of the Oil Record Book, Part I (Machinery Space Operations).

(4) The master of an oil tanker of 150 tons gross tonnage or more shall

(a) ensure that

- (i) the cargo/ballast operations referred to in regulation 36.2 of Annex I to the Pollution Convention and the discharges referred to in paragraphs 8(a), (b) and (d) are recorded in English or French in the Oil Record Book, Part II (Cargo/Ballast Operations) without delay each time the operations and discharges take place, and
- (ii) any failure of the oil filtering equipment is recorded in the Oil Record Book, Part II (Cargo/Ballast Operations) without delay;

(b) ensure that each recorded entry in the Oil Record Book, Part II (Cargo/Ballast Operations) is signed by the officer in charge of the operation; and

(c) sign each page of the Oil Record Book, Part II (Cargo/Ballast Operations).

(5) The Oil Record Book, Part I, and the Oil Record Book, Part II, shall be kept on board for a period of three years after the day on which the last entry was made and, during that time, shall be made available for inspection at the request of a pollution prevention officer.

(6) The Oil Record Book, Part I, and the Oil Record Book, Part II, may be part of the official log book.

Reception Facility Receipts for Ships

52. (1) The master of a ship shall obtain from the owner or operator of a reception facility receiving oily residues a receipt or certificate that sets out the date, time, type and amount of oily residues transferred to the reception facility.

(2) The master of the ship shall keep the receipt or certificate on board for a period of one year after the day on which it was issued and, during that time, it shall be made available for inspection at the request of a pollution prevention officer.

Bilge Alarms

53. (1) An alarm that is required under paragraph 28(a) or (g) to meet the specifications of Part 2 of the Annex to Resolution MEPC.107(49) shall be equipped with a recording device that records the date, time, and alarm status of the alarm and the operating status of the oil filtering equipment.

(2) The recording device shall store the data and be capable of displaying and printing a record of the data.

(3) The recorded data shall be kept on board for a period of 18 months and, during that time, shall be made available for inspection at the request of a pollution prevention officer.

Subdivision 7

Double Hulling for Oil Tankers

Construction Requirements

54. (1) This section applies to an oil tanker

(a) for which the building contract is placed on or after July 6, 1993;

(b) whose keel is laid or that is at a similar stage of construction on or after January 6, 1994, in the absence of a building contract;

(c) the delivery of which is on or after July 6, 1996; or

(d) that has undergone a major conversion

(i) for which the building contract is placed on or after July 6, 1993,

(ii) the construction work of which is begun on or after January 6, 1994, in the absence of a building contract, or

(iii) which is completed on or after July 6, 1996.

(2) An oil tanker referred to in subsection (1) shall comply with

(a) the design and construction requirements set out in regulation 19 of Annex I to the Pollution Convention unless the oil tanker is designed and constructed in accordance with the requirements of regulation 19.5 of Annex I to the Pollution Convention; and

(b) the cargo location requirements set out in regulation 19.8 of Annex I to the Pollution Convention.

(3) An owner or operator of an oil tanker that is referred to in subsection (1) shall ensure that the oil tanker complies with the requirements of this section.

International Requirements for Category 1 Oil Tankers, Category 2 Oil Tankers and
Category 3 Oil Tankers

55. (1) In this section, “Category 1 oil tanker”, “Category 2 oil tanker” and “Category 3 oil tanker” have the same meaning as in regulations 20.3.1, 20.3.2 and 20.3.3, respectively, of Annex I to the Pollution Convention.

(2) Subject to subsection (3), this section applies to

(a) an oil tanker operating in waters under Canadian jurisdiction that is not a Canadian oil tanker and that is referred to in regulation 20.1.1 of Annex I to the Pollution Convention; and

(b) a Canadian oil tanker that is issued an International Oil Pollution Prevention Certificate under subparagraph 36(1)(a)(ii).

(3) This section does not apply to

(a) an oil tanker to which section 54 applies;

(b) an oil tanker that complies with the provisions of regulation 19 of Annex I to the Pollution Convention;

(c) an oil tanker referred to in regulation 20.1.3 of Annex I to the Pollution Convention;

(d) an oil tanker registered in the United States operating in waters under Canadian jurisdiction; or

(e) an oil tanker engaged in the coasting trade as defined in the *Coasting Trade Act*.

(4) Subject to subsections (5) to (9), a category of oil tanker listed in column 1 of the table to this subsection having a delivery date specified in column 2 shall comply with the requirements of regulation 19 of Annex I to the Pollution Convention not later than the corresponding date of compliance specified in column 3:

TABLE

	Column 1	Column 2	Column 3
Item	Category of Oil Tanker	Delivery Date of Oil Tanker	Date of Compliance
1.	Category 1 oil tanker	On or before April 5, 1982	April 5, 2005
		After April 5, 1982	Anniversary of the date of delivery of the oil tanker in the year 2005
2.	Category 2 oil tanker and Category 3 oil tanker	On or before April 5, 1977	April 5, 2005
		After April 5, 1977 but before January 1, 1978	Anniversary of the date of delivery of the oil tanker in the year 2005
		In the year 1978 or 1979	Anniversary of the date of delivery of the oil tanker in the year 2006
		In the year 1980 or 1981	Anniversary of the date of delivery of the oil tanker in the year 2007
		In the year 1982	Anniversary of the date of delivery of the oil tanker in the year 2008
		In the year 1983	Anniversary of the date of delivery of the oil tanker in the year 2009
		In the year 1984 or a later year	Anniversary of the date of delivery of the oil tanker in the year 2010

(5) A Category 2 oil tanker or Category 3 oil tanker that reaches the age of 15 years or more after the date of its delivery shall comply with the requirements of the Condition Assessment Scheme referred to in regulation 20.6 of Annex I to the Pollution Convention.

(6) In the case of a Canadian Category 2 oil tanker or a Canadian Category 3 oil tanker fitted with double hull spaces that are not used for the carriage of oil and extend the entire cargo tank length but do not fulfil the conditions specified in regulation 20.1.3 of Annex I to the Pollution Convention or fitted with only double bottoms or double sides that are not used for the carriage of oil and extend the entire cargo tank length, the Minister may approve the continued operation of the oil tanker after the date specified in subsection (4) if

(a) the oil tanker was in service on July 1, 2001;

(b) the specifications of the oil tanker set out in this subsection remain unchanged; and

(c) the continued operation does not go beyond the date on which the oil tanker reaches the anniversary of the date of delivery of the oil tanker in the year 2015 or the date on which the oil tanker reaches 25 years of age after the date of its delivery, whichever is the earlier date.

(7) The Minister may approve the continued operation of a Canadian Category 2 oil tanker or a Canadian Category 3 oil tanker after the date specified in subsection (4) if

(a) in the opinion of the Minister, the results of the Condition Assessment Scheme referred to in subsection (5) indicate that the oil tanker is fit to continue to operate; and

(b) the continued operation of the oil tanker does not go beyond the date on which the oil tanker reaches the anniversary of the date of delivery of the oil tanker in the year 2015 or the date on which the oil tanker reaches 25 years of age after the date of its delivery, whichever is the earlier date.

(8) Subject to subsection (9), a Category 2 oil tanker or a Category 3 oil tanker that is not a Canadian oil tanker may operate in waters under Canadian jurisdiction after the date specified in subsection (4) if the government of the state whose flag the oil tanker is entitled to fly has allowed the oil tanker to continue to operate under regulation 20.5 or 20.7 of Annex I to the Pollution Convention.

(9) A Category 2 oil tanker or a Category 3 oil tanker that is not a Canadian oil tanker and is operating under regulation 20.5 of Annex I to the Pollution Convention after the anniversary date of the date of delivery of the oil tanker in the year 2015 may not enter a port or an offshore terminal in waters under Canadian jurisdiction.

Oil Tankers Carrying Heavy Grade Oil as Cargo

56. (1) In this section, "heavy grade oil" has the same meaning as in regulation 21.2 of Annex I to the Pollution Convention.

(2) Subject to subsection (3), this section applies to an oil tanker of 600 tonnes deadweight or more carrying heavy grade oil as cargo regardless of the date of delivery of the oil tanker.

(3) This section does not apply to

(a) a Canadian oil tanker that engages only on voyages in waters under Canadian jurisdiction;

(b) an oil tanker that complies with the provisions of regulation 19 of Annex I to the Pollution Convention; or

(c) an oil tanker referred to in regulation 21.1.2 of Annex I to the Pollution Convention.

(4) Subject to the provisions of subsections (5) to (10), an oil tanker to which this section applies shall

(a) in the case of an oil tanker of 5,000 tonnes deadweight or more, comply with the requirements of section 55 and regulation 19 of Annex I to the Pollution Convention; or

(b) in the case of an oil tanker of 600 tonnes deadweight or more but less than 5,000 tonnes deadweight, be fitted with

(i) double bottom tanks or spaces that comply with the provisions of regulation 19.6.1 of Annex I to the Pollution Convention not later than the anniversary of the date of delivery of the oil tanker in the year 2008, and

(ii) wing tanks or spaces arranged in accordance with regulation 19.3.1 of Annex I to the Pollution Convention that comply with the requirement for distance, *w*, referred to in regulation 19.6.2 of Annex I to the Pollution Convention not later than the anniversary of the date of delivery of the oil tanker in the year 2008.

(5) In the case of a Canadian oil tanker of 5,000 tonnes deadweight or more carrying heavy grade oil as cargo and fitted with double hull spaces that are not used for the

carriage of oil and extend to the entire cargo tank length but do not fulfil the conditions specified in regulation 21.1.2 of Annex I to the Pollution Convention or fitted with only double bottoms or double sides that are not used for the carriage of oil and extend the entire cargo tank length, the Minister may approve the continued operation of the oil tanker after the date specified in subsection (4) if

- (a) the oil tanker was in service on December 4, 2003;
- (b) the specifications of the oil tanker set out in this subsection remain unchanged; and
- (c) the continued operation of the oil tanker does not go beyond the date on which the oil tanker reaches 25 years of age after the date of its delivery.

(6) In the case of a Canadian oil tanker of 5,000 tonnes deadweight or more carrying crude oil having a density at 15°C that is higher than 900 kg/m³ but lower than 945 kg/m³, the Minister may approve the continued operation of the oil tanker after the date referred to in paragraph (4)(a) if

- (a) in the opinion of the Minister, the results of the Condition Assessment Scheme referred to in subsection 55(5) indicate that the oil tanker is fit to continue to operate; and
- (b) the continued operation does not go beyond the date on which the oil tanker reaches 25 years of age after the date of its delivery.

(7) In forming the opinion referred to in paragraph (6)(a), the Minister shall take into consideration the size, age, operational area and structural conditions of the oil tanker.

(8) In the case of a Canadian oil tanker of 600 tonnes deadweight or more but less than 5,000 tonnes deadweight carrying heavy grade oil as cargo, the Minister may approve the continued operation of the oil tanker after the date specified in paragraph (4)(b) if

- (a) in the opinion of the Minister, the oil tanker is fit to continue to operate; and
- (b) the continued operation does not go beyond the date on which the oil tanker reaches 25 years of age after the date of its delivery.

(9) In forming the opinion referred to in paragraph (8)(a), the Minister shall take into consideration the size, age, operational area and structural conditions of the oil tanker.

(10) An oil tanker that is not a Canadian oil tanker may operate in waters under Canadian jurisdiction after the date specified in subsection (4) if the government of the

state whose flag the oil tanker is entitled to fly has allowed the oil tanker to continue to operate under regulation 21.5 or 21.6 of Annex I to the Pollution Convention.

Requirements for Other Oil Tankers

57. (1) Subject to subsection (2), this section applies to any oil tanker other than an oil tanker to which sections 54 to 56 apply.

(2) This section does not apply to

(a) an oil tanker that complies with the provisions of regulation 19 of Annex I to the Pollution Convention;

(b) an oil tanker referred to in regulation 20.1.3 of Annex I to the Pollution Convention; or

(c) any non-self-propelled oil tanker that

(i) is of less than 2,000 tons gross tonnage,

(ii) has no cargo tanks that exceed 200 m³ capacity, and

(iii) operates solely on

(A) the Mackenzie River,

(B) those waters contiguous to the river that are not within shipping safety control zone 12, or

(C) a river or lake that feeds into the Mackenzie River.

(3) For the purposes of this section, the age of an oil tanker is determined from the later of either

(a) the day on which the oil tanker was delivered after original construction; and

(b) the day on which a major conversion was completed, if the conversion was completed before July 6, 1996.

(4) An oil tanker of less than 5,000 tons gross tonnage may not operate after January 1, 2015 unless the oil tanker is equipped with a double hull or a double containment system determined by the Minister to be as effective as a double hull for the prevention of a discharge of oil.

(5) An oil tanker shall comply with the requirements of regulation 19 of Annex I to the Pollution Convention if

(a) in the case of an oil tanker of 5,000 tons gross tonnage or more but less than 30,000 tons gross tonnage,

(i) the age of the oil tanker is 25 years or more and the oil tanker is constructed with a single hull, or

(ii) the age of the oil tanker is 30 years or more and the oil tanker is fitted with only double bottoms or double sides; and

(b) in the case of an oil tanker of 30,000 tons gross tonnage or more if

(i) the age of the oil tanker is 23 years or more and the oil tanker is constructed with a single hull, or

(ii) the age of the oil tanker is 28 years or more and the oil tanker is fitted with only double bottoms or double sides.

(6) Subject to subsection (4), an oil tanker that is constructed with a single hull may not operate after January 1, 2010.

(7) Subject to subsection (4), an oil tanker that is fitted with only double bottoms or double sides may not operate after January 1, 2015.

(8) For the purposes of subsections (5) and (7), double bottoms and double sides that are contiguous with cargo spaces shall meet the applicable design and construction requirements of regulation 19.3 or 19.6 of Annex I to the Pollution Convention.

[58 to 60 reserved]

DIVISION 2

NOXIOUS LIQUID SUBSTANCES AND DANGEROUS CHEMICALS

Subdivision 1

General — Liquid Substances

Provisional Assessment of Liquid Substances

61. No ship or owner or master of a ship shall carry a liquid substance in bulk that is not listed in chapter 17 or 18 of the IBC Code unless the liquid substance has been provisionally assessed in accordance with regulation 6.3 of Annex II to the Pollution Convention.

Subdivision 2

Construction and Equipment

Interpretation

62. A ship converted to a chemical tanker, irrespective of the date of construction, shall be treated as a chemical tanker constructed on the date on which the conversion commenced unless the ship

(a) is constructed before July 1, 1986; and

(b) is certified under the BCH Code to carry only those products identified by the Code as substances with pollution hazards only.

Construction and Equipment Standards

63. (1) Subject to subsection (2), an NLS ship shall be constructed and equipped with underwater discharge outlets in accordance with regulations 12.8 to 12.10 of Annex II to the Pollution Convention.

(2) An NLS ship that was constructed before January 1, 2007 and is certified to carry only Category Z noxious liquid substances is not required to comply with subsection (1).

(3) Any of the following ships that are constructed on or after July 1, 1986, or that are constructed before that date and registered in Canada on or after February 16, 1993, shall comply with the applicable design, construction, equipment and systems requirements of the IBC Code:

(a) ships that carry a noxious liquid substance listed in Chapter 17 of the IBC Code; and

(b) self-propelled chemical tankers that carry a dangerous chemical in bulk.

(4) Any of the following Canadian ships that were constructed before July 1, 1986 and registered in Canada before February 16, 1993 and any of the following ships that are not Canadian ships that were constructed before July 1, 1986 shall comply with the applicable design, construction, equipment and systems requirements of the BCH Code:

(a) ships that carry a noxious liquid substance; and

(b) self-propelled chemical tankers that carry a dangerous chemical in bulk.

Containers or Enclosed Deck Areas for NLS Ships

64. (1) A noxious liquid substance cargo loading or unloading manifold and a cargo transfer connection point on an NLS ship shall be fitted or equipped with a container or enclosed deck area

(a) that is capable of retaining noxious liquid substances that may leak or spill during transfer operations;

(b) that has a means for the removal of the noxious liquid substances retained in it; and

(c) that does not adversely affect the stability of the NLS ship or the safety of its crew.

(2) If the largest conduit serving a noxious liquid substance cargo loading or unloading manifold or a cargo transfer connection point on an NLS ship has an inside diameter set out in Column 1 of an item of the table to subsection 20(2), the container or enclosed deck area shall, under even-keel conditions, have the volume set out in Column 2 of that item.

Plans and Specifications

65. (1) The owner of a Canadian NLS ship shall submit to the Minister four copies of the plans and specifications for the ship. The plans and specifications shall contain a description of

(a) containers or enclosed deck areas referred to in section 64;

(b) the pumping, piping and unloading arrangements, the underwater discharge outlet location and size, and the slop tanks or other arrangements referred to in regulation 12 of Annex II to the Pollution Convention; and

(c) in the case of a ship that uses ventilation procedures referred to in regulation 13.3 of Annex II to the Pollution Convention, the ventilation equipment set out in Appendix 7 of Annex II to the Pollution Convention.

(2) The owner of a Canadian ship referred to in subsections 63(3) and (4) shall submit to the Minister four copies of the plans and specifications for the ship, which plans and specifications shall contain a description of

(a) the general arrangement of cargo tanks, cofferdams, slop tanks, ballast tanks, double bottom tanks and pump rooms and other hull constructional arrangements in and adjacent to the cargo tank area;

(b) the location of accommodation spaces and service spaces, main propulsion space and auxiliary machinery spaces in relation to the cargo tank area, including openings to them such as doors, windows and access and ventilation openings;

(c) the cargo tank piping system, cargo tank gauging devices, bilge pumping systems, cargo tank venting systems, ventilation systems, vapour detection instruments and systems, cargo temperature control systems, environmental control systems, fire protection, electrical installations and equipment, and provisions and equipment for personnel safety and protection; and

(d) the capability of the ship to sustain and survive damage due to collision and stranding, in accordance with the provisions of the IBC Code or BCH Code, as applicable.

(3) The plans and specifications referred to in subsection (2) shall include

(a) particulars of proposed materials to be used; and

(b) the calculations used to determine physical sizes, capacities, loads, pressures and temperatures.

(4) The plans and specifications referred to in subsections (1) and (2) shall be submitted before hull construction or before the carrying out of major repairs to a ship.

Emergency Plan

66. The owner of a Canadian NLS ship of 150 tons gross tonnage or more shall submit to the Minister four copies of the shipboard marine pollution emergency plan for noxious liquid substances, unless a shipboard marine pollution emergency plan has been submitted under subsection 38(4).

Procedures and Arrangements Manual

67. (1) The owner of a Canadian NLS ship shall submit four copies of the ship's procedures and arrangements manual to the Minister in the format set out in Appendix 4 of Annex II to the Pollution Convention.

(2) The procedures and arrangements manual shall identify the physical arrangements and all the operational procedures with respect to cargo handling, tank cleaning, slops handling and cargo tank ballasting and deballasting that must be followed in order to comply with the requirements of these Regulations.

Subdivision 3

Inspections and Certificates

Initial Inspections and Periodic Inspections

68. (1) A ship shall be inspected by a steamship inspector or an approved classification society to ensure that the ship's construction, arrangement, equipment, fittings, installations and systems are in accordance with these Regulations before the ship is put into service for the first time or is issued its first Canadian Noxious Liquid Substance Certificate or Certificate of Fitness.

(2) The steamship inspector or an approved classification society shall issue to a ship that complies with these Regulations a Canadian Noxious Liquid Substance Certificate or a Certificate of Fitness that is valid for a period of five years or less beginning on the day on which it was issued.

(3) A ship that is transferred to Canadian registry is subject to the provisions of subsections (1) and (2).

(4) If a steamship inspector or an approved classification society conducts an inspection of a ship similar to the initial inspection referred to in subsection (1) and finds that the ship is in compliance with these Regulations, the steamship inspector or an approved classification society may renew the ship's Canadian Noxious Liquid Substance Certificate or Certificate of Fitness within the three months before the expiration of the period for which it was issued.

Intermediate Inspections

69. (1) The owner or master of a ship may elect to undergo an intermediate inspection within three months before or after the expiration of either two years or three years after the day on which the ship's Canadian Noxious Liquid Substance Certificate or Certificate of Fitness was issued.

(2) A ship shall undergo an intermediate inspection by a steamship inspector or an approved classification society to ensure that the ship's equipment and piping system are operating and are being maintained in accordance with these Regulations.

(3) If, during an intermediate inspection, the equipment and piping systems are found to be operating and to be being maintained in accordance with these Regulations, the steamship

inspector or an approved classification society shall attest to that by endorsing the ship's Canadian Noxious Liquid Substance Certificate or Certificate of Fitness.

Annual Inspections

70. (1) In order to ensure that the equipment, fittings, installations and systems of a ship are operated and being maintained in accordance with these Regulations, the ship shall undergo an annual inspection by a steamship inspector or an approved classification society

(a) within the three months before or after the expiration of one year after the day on which its Canadian Noxious Liquid Substance Certificate or Certificate of Fitness was issued;

(b) within the three months before or after the expiration of

(i) three years after the day on which its Canadian Noxious Liquid Substance Certificate or Certificate of Fitness was issued, if an intermediate inspection referred to in subsection 69(1) takes place within the three months before or after the expiration of two years after the day on which its Canadian Noxious Liquid Substance Certificate or Certificate of Fitness was issued, or

(ii) two years after the day on which its Canadian Noxious Liquid Substance Certificate or Certificate of Fitness was issued, if an intermediate inspection referred to in subsection 69(1) takes place within the three months before or after the expiration of three years after the day on which its Canadian Noxious Liquid Substance Certificate or Certificate of Fitness was issued; and

(c) within the three months before or after four years after the day on which its Canadian Noxious Liquid Substance Certificate or Certificate of Fitness was issued.

(2) If, during an annual inspection, the equipment, fittings, installations and systems are found to be operating and to be being maintained in accordance with these Regulations, the steamship inspector or an approved classification society shall attest to that by endorsing the ship's Canadian Noxious Liquid Substance Certificate or Certificate of Fitness.

Issuance of International Certificates

71. (1) A steamship inspector or an approved classification society may, at the request of the owner or master of a Canadian ship, issue to that ship

(a) an International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in Bulk if the ship complies with the applicable provisions of Annex II to the Pollution Convention; or

(b) a Certificate of Fitness if the ship complies with the applicable provisions of the IBC Code or BCH Code.

(2) If an approved classification society issues a certificate to a Canadian ship, the approved classification society shall forward a certified copy of the certificate to the Board.

Subdivision 4

Shipboard Documents

Documents Kept on Board

72. An NLS ship and a chemical tanker shall keep on board an English or French version of

(a) one of the following documents:

(i) a Canadian Noxious Liquid Substance Certificate if the ship is a Canadian ship that engages only on voyages in waters under Canadian jurisdiction and carries only a noxious liquid substance that is not a dangerous chemical,

(ii) an International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in Bulk in accordance with the provisions of regulation 9 of Annex II to the Pollution Convention,

(A) if the ship is a Canadian ship that engages on voyages that do not take place exclusively in waters under Canadian jurisdiction and carries only a noxious liquid substance that is not a dangerous chemical, or

(B) if the ship is not a Canadian ship, is registered in a state that is a signatory to the Pollution Convention, is in waters under Canadian jurisdiction and carries only a noxious liquid substance that is not a dangerous chemical,

(iii) a Certificate of Fitness

(A) if the ship is a Canadian ship that carries a dangerous chemical, or

(B) if the ship is not a Canadian ship, is registered in a state that is a signatory to the Pollution Convention, is in waters under Canadian jurisdiction and carries a dangerous chemical, or

- (iv) a certificate of compliance certifying that the ship complies with the applicable provisions of Annex II to the Pollution Convention, the IBC Code or the BCH Code, as the case may be, if the ship is registered in a state that is not a signatory to the Pollution Convention and is in waters under Canadian jurisdiction;
- (b) in the case of an NLS ship, a procedures and arrangements manual that meets the requirements of regulation 14 of Annex II to the Pollution Convention; and
- (c) in the case of a chemical tanker, a copy of the IBC Code or the BCH Code, as applicable.

Emergency Plan

73. (1) Subject to subsection (2), an NLS ship of 150 tons gross tonnage or more shall keep on board an English or French version of a shipboard marine pollution emergency plan for noxious liquid substances that meets the requirements of regulation 17.2 of Annex II to the Pollution Convention.

(2) If subsection 38(1) applies to the NLS ship, the shipboard marine pollution emergency plan for noxious liquid substances may be combined with the shipboard oil pollution emergency plan, in which case the title of the plan shall be the “shipboard marine pollution emergency plan”.

Subdivision 5

Control of Cargo Operations

Operational Procedures

74. The master of a ship shall ensure that the operational procedures with respect to cargo handling, tank cleaning, slop handling and cargo tank ballasting and deballasting are carried out in accordance with the ship’s procedures and arrangements manual and with this Subdivision and Subdivision 6.

Operational Requirements

75. (1) The master of a chemical tanker that is constructed on or after July 1, 1986, or that is constructed before that date and registered in Canada on or after February 16, 1993, shall comply with the operational requirements set out in the IBC Code.

(2) The master of a chemical tanker referred to in subsection (1) shall refuse the cargo mentioned in subsection 16.2.2 of the IBC Code if the analysis of the cargo has not been certified by the manufacturer or a marine chemist.

(3) The master of a chemical tanker other than a chemical tanker referred to in subsection (1) shall comply with the operational requirements set out in Chapter V of the BCH Code.

Ventilation Procedures

76. Only substances that have a vapour pressure greater than 5 kPa at 20°C may be ventilated to remove residues, in which case the ventilation procedures followed shall be those referred to in paragraphs 79(1)(c) and 80(2)(c) and shall be carried out in accordance with sections 2 and 4 of Appendix 7 of Annex II to the Pollution Convention.

Tank Washing Operations

77. Tank washing operations referred to in sections 79 and 80 shall be carried out

(a) in accordance with the provisions of Appendix 6 of Annex II to the Pollution Convention; and

(b) in such a way that the effluent resulting from the washing is discharged to a reception facility and not discharged into the water.

Stripping Operations

78. (1) If cargo stripping operations that involve a Category Y noxious liquid substance are carried out at an unloading facility, the owner or operator of the unloading facility shall ensure that the facility is capable of receiving the cargo at an average flow rate of 6 m³ per hour without creating back pressure of more than 100 kPa at the ship's manifold.

(2) The ship's manifold shall be no more than 3 m above the waterline at low mean tide.

(3) Cargo hoses and piping systems that contain noxious liquid substances shall not be drained back into the ship after the completion of cargo stripping operations.

Procedures — Category X

79. (1) A tank from which a Category X noxious liquid substance has been unloaded shall be washed before the ship leaves the port of unloading unless

(a) the tank is reloaded with the same substance or a substance that is compatible with it and the tank is neither ballasted before loading nor washed after the ship leaves the port of unloading;

(b) the master of the ship notifies the Board in writing that the tank will be washed at another port that has adequate reception facilities; or

(c) cargo residues are removed by a ventilation procedure.

(2) Subject to subsection (3), the tank washing operation shall be carried out by washing the tank and discharging the effluent to a reception facility until the concentration of the substance in the effluent has fallen to 0.1% by weight and thereafter by continuing to discharge the remaining effluent until the tank is empty.

(3) If it is not practicable to measure the concentration of the substance in accordance with subsection (2) without causing undue delay to the ship, the tank washing operation shall be carried out by washing the tank and discharging the effluent to a reception facility in accordance with section 77.

(4) The tank washing operation shall be carried out in the presence of a pollution prevention officer who shall endorse the appropriate operational entries in the ship's Cargo Record Book for Ships Carrying Noxious Liquid Substances in Bulk.

Procedures — Categories Y and Z

80. (1) A tank from which a Category Y or Z noxious liquid substance has been unloaded shall be washed before the ship leaves the port of unloading if

(a) the unloaded substance is a Category Y noxious liquid substance that is a high viscosity substance or a solidifying substance; or

(b) the unloading operation is not carried out in accordance with the ship's procedures and arrangements manual.

(2) Subsection (1) does not apply if

(a) the tank is reloaded with the same substance or a substance that is compatible with it and the tank is neither ballasted before loading nor washed after the ship leaves the port of unloading;

(b) the master of the ship notifies the Board in writing that the tank will be washed at another port that has adequate reception facilities; or

(c) cargo residues are removed by a ventilation procedure.

Subdivision 6

Discharge of Noxious Liquid Substances

Application

81. This Subdivision applies to

- (a) a ship in Section I waters or Section II waters; and
- (b) a Canadian ship in waters seaward of the outermost limits of Section II waters, except a Canadian ship that is in a special area referred to in section 9.

Prohibition — Section I Waters

82. Subject to section 8, no ship shall discharge and no person shall discharge or permit the discharge of a noxious liquid substance into Section I waters.

Prohibition — Section II Waters and Seaward of Section II Waters

83. Subject to sections 8 and 84 to 87,

- (a) no ship shall discharge and no person shall discharge or permit the discharge of a noxious liquid substance into Section II waters; and
- (b) no Canadian ship shall discharge and no person shall discharge or permit the discharge of a noxious liquid substance into waters seaward of the outermost limits of Section II waters.

Authorized Discharge — Category X

84. Ballast water introduced into a tank that last contained a Category X noxious liquid substance may be discharged from an NLS ship into Section II waters or from a Canadian ship referred to in paragraph 81(b) that is an NLS ship if

- (a) the tank was washed in accordance with subsection 79(2);
- (b) the discharge is made in accordance with the ship's procedures and arrangements manual;
- (c) the ship is en route at a speed of at least 7 knots, in the case of a self-propelled ship, or at least 4 knots, in the case of a non-self-propelled ship;
- (d) the discharge is made below the waterline through an underwater discharge outlet at a rate not exceeding the maximum rate for which the underwater discharge outlet was designed;

(e) the discharge is made at a distance of at least 12 nautical miles from the nearest land; and

(f) the discharge is made into waters whose depth is at least 25 m.

Authorized Discharge — Category Y

85. A Category Y noxious liquid substance may be discharged from an NLS ship into Section II waters or from a Canadian ship referred to in paragraph 81(b) that is an NLS ship if

(a) the discharge is made in accordance with the ship's discharge procedures and arrangements manual;

(b) the ship is en route at a speed of at least 7 knots, in the case of a self-propelled ship, or at least 4 knots, in the case of a non-self-propelled ship;

(c) the discharge is made below the waterline through an underwater discharge outlet at a rate not exceeding the maximum rate for which the underwater discharge outlet was designed;

(d) the discharge is made at a distance of at least 12 nautical miles from the nearest land; and

(e) the discharge is made into waters whose depth is at least 25 m.

Authorized Discharge — Category Z

86. A Category Z noxious liquid substance may be discharged from an NLS ship into Section II waters or from a Canadian ship referred to in paragraph 81(b) that is an NLS ship if

(a) the discharge is made in accordance with the ship's discharge procedures and arrangements manual;

(b) the ship is en route at a speed of at least 7 knots, in the case of a self-propelled ship, or at least 4 knots, in the case of a non-self-propelled ship;

(c) in the case of a ship constructed on or after January 1, 2007, the discharge is made below the waterline through an underwater discharge outlet at a rate not exceeding the maximum rate for which the underwater discharge outlet was designed;

(d) the discharge is made at a distance of at least 12 nautical miles from the nearest land; and

(e) the discharge is made into waters whose depth is at least 25 m.

Authorized Discharge — Ballast Water

87. (1) Ballast water introduced into a cargo tank that has been washed to such an extent that the ballast water contains less than 1 ppm of the noxious liquid substance previously carried in the NLS ship may be discharged into the sea without regard to the discharge rate, ship speed and discharge outlet location, provided that the discharge is made at a distance of at least 12 nautical miles from the nearest land and into waters whose depth is at least 25 m.

(2) In the case of a NLS ship built before July 1, 1994, the ballast is deemed to contain less than 1 ppm of the noxious liquid substance previously carried if the cargo tank is washed

(a) with a water quantity not less than that required by section 20 of Appendix 6 of Annex II to the Pollution Convention using a factor of k equal to 1.0 in the formula; or

(b) in accordance with the provisions set out in Appendix 6 of Annex II to the Pollution Convention and subsequently washed with a complete cycle of the cleaning machine.

(3) In the case of an NLS ship other than a ship referred to in subsection (2), the ballast water is deemed to contain less than 1 ppm of the substance previously carried if the cargo tank is washed in accordance with provisions set out in Appendix 6 of Annex II to the Pollution Convention.

Subdivision 7

Transfer Operations

Communications

88. A ship and an owner or operator of a loading facility or an unloading facility engaged in a transfer operation shall comply with the communications requirements of section 44.

Lighting

89. (1) If a transfer operation takes place between sunset and sunrise, a ship and an owner or operator of a loading facility or an unloading facility that is engaged in the transfer operation shall provide illumination that has

(a) a lighting intensity of not less than 54 lx at each cargo transfer connection point on the ship or facility; and

(b) a lighting intensity of not less than 11 lx at each transfer operation work area around each cargo transfer connection point on the ship or facility.

(2) The lighting intensity shall be measured on a horizontal plane 1 m above the walking surface of a loading facility or an unloading facility or the working deck of a ship, as applicable.

Transfer Conduits

90. (1) A transfer conduit shall not be used in a transfer operation unless it

(a) has a bursting pressure of not less than five times its maximum working pressure;

(b) is clearly marked with its maximum working pressure; and

(c) has successfully passed a hydrostatic test to a pressure equal to one and one-half times its maximum working pressure at least once during the year immediately before the day on which it is used.

(2) The master of the ship shall keep the test certificate for the hydrostatic test on board and it shall be made available for inspection at the request of a pollution prevention officer.

(3) A conduit shall be used, maintained, tested and replaced in accordance with the manufacturer's specifications.

(4) If any conduit or connection leaks during a transfer operation, the operation shall, as soon as practicable, be slowed down or stopped to remove the pressure from the conduit or connection.

Requirements for Supervisor of Transfer Operations on Board Ships

91. The owner of a ship shall ensure that a transfer operation carried out for the ship is supervised by the holder of

(a) a certificate that meets the requirements of the Act for that type of ship; or

(b) in the case of a non-self-propelled chemical tanker or non-self-propelled NLS ship, documentary evidence issued by the steamship inspector that certifies the person's competence to supervise a transfer operation.

Duties of Transfer Operations Supervisor on Board Ships

- 92.** The supervisor of a transfer operation on board a ship shall ensure that
- (a) the ship is secured, having regard to the weather and the tidal and current conditions, and that the mooring lines are tended so that the movement of the ship does not damage the transfer conduit or its connections;
 - (b) transfer procedures are established with the concurrence of the supervisor of the transfer operation at the loading facility or the unloading facility or on board the other ship, as the case may be, with respect to
 - (i) the rates of flow and pressures for the transferred liquid,
 - (ii) the reduction of rates of flow and pressures where required to avoid an overflow of the tanks,
 - (iii) the time required to stop the transfer operation under normal conditions,
 - (iv) the time required to shut down the transfer operation under emergency conditions, and
 - (v) the communication signals for the transfer operation, including
 - (A) stand by to start transfer,
 - (B) start transfer,
 - (C) slow down transfer,
 - (D) stand by to stop transfer,
 - (E) stop transfer,
 - (F) emergency stop of transfer, and
 - (G) emergency shutdown of transfer;
 - (c) the supervisor of the transfer operation at the loading facility or the unloading facility or on board the other ship, as the case may be, has reported readiness for the commencement of the transfer operation;
 - (d) the person who is on duty on the ship in respect of the transfer operation is fully conversant with the communication signals, maintains watch over the ship's tanks to ensure that they do not overflow and maintains continuous communication with that

person's counterpart at the loading facility or the unloading facility or on board the other ship, as the case may be;

(e) the manifold valves and tank valves on the ship are not closed until the relevant pumps are stopped if the closing of the valves would cause dangerous over-pressurization of the pumping system;

(f) the rate of flow is reduced when topping off the tanks;

(g) the supervisor of the transfer operation at the loading facility or the unloading facility or on board the other ship is given sufficient notice of the stopping of the transfer operation to permit them to take the necessary action to reduce the rate of flow or pressure in a safe and efficient manner;

(h) the following measures are taken to prevent a noxious liquid substance or dangerous chemical discharge:

(i) all cargo manifold connections that are not being used in the transfer operation are securely closed and fitted with blank flanges or other equivalent means of closure,

(ii) all overboard discharge valves are securely closed and marked to indicate that they are not to be opened during the transfer operation, and

(iii) all scuppers are plugged;

(j) a supply of absorbent material is readily available near every transfer conduit to facilitate the clean-up of any minor spillage of noxious liquid substances or dangerous chemicals that may occur on the ship or on the shore;

(k) all transfer conduits that are used in the transfer operation are supported to prevent the conduits and their connections from being subjected to any strain that might cause damage to them or cause the conduits to become disconnected;

(l) all systems, equipment, personnel and information necessary for the safe transfer of cargo are in readiness before the transfer operation begins;

(m) towing-off wires are positioned fore and aft and are ready for use without adjustment if it is necessary to tow the ship away;

(n) the transfer of flammable cargoes and the gas-freeing following the unloading of flammable cargoes is stopped when electrical storms are in the immediate vicinity of the ship;

- (n) work in the cargo tank area is not carried out unless authorized by the master;
- (o) the valves in the vent system are checked for the correct setting and the flame arresters are examined for cleanliness and proper installation;
- (p) articulated loading booms, if used, are checked for undue strain;
- (q) the pump room ventilation is running and all precautions for that area are observed;
- (r) a tank that is required to be kept in an inert state, where the oxygen content of the tanks must be below a specified level and a small positive pressure must be maintained in the tanks at all times, has available a supply of inert gas to maintain its inert state during the transfer operation;
- (s) when loading,
 - (i) the tank concerned is free of flammable and toxic vapours and residues,
 - (ii) the free end of the loading hose is securely lashed to the inside of the tank to prevent movement,
 - (iii) all flanges and gaskets are suitable for the purpose, and
 - (iv) all tank openings, other than those that are in use, are closed;
- (t) all reasonable precautions are taken to avoid the discharge of a noxious liquid substance or dangerous chemical into the water;
- (u) the supervisor at the loading facility or the unloading facility or on the other ship is competent in transfer operations; and
- (v) a sufficient number of persons is on duty at the loading facility or the unloading facility or on the other ship during the transfer operation.

Notices

93. The master of a ship shall ensure that

- (a) permanent notices are displayed in conspicuous places on board, indicating the areas in which smoking and naked lights are prohibited;
- (b) on the ship's arrival in a port area, the following notices are posted near every access to the ship, as appropriate:
 - (i) "NO NAKED LIGHTS / PAS DE FLAMMES NUES",
 - (ii) "NO SMOKING / DÉFENSE DE FUMER", and

(iii) “NO UNAUTHORIZED PERSONS / ACCÈS INTERDIT AUX PERSONNES NON AUTORISÉES”; and

(c) in addition to the notices referred to in paragraphs (a) and (b), when the cargo being handled presents a health hazard, the notice “WARNING HAZARDOUS CHEMICALS / ATTENTION PRODUITS CHIMIQUES DANGEREUX” shall be displayed near every access to the ship.

Emergency

94. In the event of an emergency during a transfer operation, the master of a ship or the supervisor on board the ship shall take all necessary measures to rectify or minimize the effects of the emergency.

Subdivision 8

Record-keeping

Cargo Record Book

95. (1) In this section, “Cargo Record Book” means the Cargo Record Book for Ships Carrying Noxious Liquid Substances in Bulk in the form set out in Appendix 2 of Annex II to the Pollution Convention.

(2) An NLS ship shall keep on board a Cargo Record Book.

(3) The master of a ship referred to in subsection (2) shall

(a) ensure that the operations set out in regulation 15.2 of Annex II to the Pollution Convention, the tank washing operations referred to in sections 77 and 79 and the discharges referred to in sections 84 to 87 are recorded in English or French in the Cargo Record Book without delay each time they take place;

(b) ensure that each recorded entry in the Cargo Record Book is signed by the officer in charge of the operation; and

(c) sign each page of the Cargo Record Book.

(4) The Cargo Record Book shall be kept on board for a period of three years after the day on which the last entry was made and, during that time, shall be made available for inspection at the request of a pollution prevention officer.

(5) The Cargo Record Book may be part of the official log book.

Reception Facility Receipts for Ships

96. (1) The master of a ship shall obtain from the owner or operator of a reception facility receiving noxious liquid substance residues or mixtures a receipt or certificate that sets out the date, time, type and amount of noxious liquid substance residues or mixtures transferred to the reception facility.

(2) The master of the ship shall keep the receipt or certificate on board for a period of one year after the day on which it was issued and, during that time, it shall be made available for inspection at the request of a pollution prevention officer.

[97 to 106 reserved]

DIVISION 3

POLLUTANT SUBSTANCES

Subdivision 1

Application

107. This Subdivision applies to a ship in Section I waters or Section II waters.

Subdivision 2

Prohibition and Exception

Prohibition

108. Subject to sections 8 and 109, no ship shall discharge and no person shall discharge or permit the discharge of a pollutant listed in Schedule 1.

Exception

109. A pollutant listed in Schedule 1 that is a noxious liquid substance may be discharged from a ship into Section II waters if the discharge is made in accordance with Division 2 of these Regulations and Annex II to the Pollution Convention.

[110 to 114 reserved]

DIVISION 4

SEWAGE

Subdivision 1

General

Interpretation

115. The following definitions apply in this Division.

“designated sewage area” means an area set out in Schedule 4. (*zone désignée pour les eaux usées*)

“holding tank” means a tank that is used solely for the collection and storage of sewage or sewage sludge and includes a tank that is an integral part of a toilet. (*citerne de retenue*)

“inland waters of Canada” means all the rivers, lakes and other navigable fresh waters within Canada, and includes the St. Lawrence River as far seaward as a straight line drawn from Pointe-au-Père to Pointe Orient. (*eaux internes du Canada*)

Application

116. (1) The following definitions apply in this section.

“new ship” means a ship on an international voyage

(a) for which the building contract is placed or, in the absence of a building contract, the keel of which is laid, or which is at a similar stage of construction, on or after September 27, 2003; or

(b) the delivery of which is after September 27, 2006. (*navire neuf*)

“existing ship” means a ship on an international voyage that is not a new ship. (*navire existant*)

(2) Subject to section 118, an existing ship shall comply with the requirements of this Division no later than September 27, 2008 if it

(a) is of 400 tons gross tonnage or more; or

(b) is of less than 400 tons gross tonnage and certified to carry more than 15 persons.

(3) Subject to section 118, an existing ship other than one referred to in subsection (2) shall comply with the requirements of this Division within five years after the day on which these Regulations come into force.

(4) Subject to section 118, a new ship constructed before the day on which these Regulations come into force that is less than 400 tons gross tonnage and is not certified to carry more than 15 persons shall comply with the requirements of this Division within five years after the day on which these Regulations come into force.

117. (1) The following definitions apply in this section.

“new ship” means a ship that is not on an international voyage

(a) for which the building contract is placed or, in the absence of a building contract, the keel of which is laid, or which is at a similar stage of construction, on or after the day on which these Regulations come into force; or

(b) the delivery of which is three years or more after the day on which these Regulations come into force. (*navire neuf*)

“existing ship” means a ship that is not on an international voyage and is not a new ship. (*navire existant*)

(2) Subject to section 118, an existing ship shall comply with the requirements of this Division within five years after the day on which these Regulations come into force.

Discharge Requirements

118. A ship shall comply with the requirements

(a) of paragraph 129(1)(a) if it is operating in the Great Lakes Basin; or

(b) of paragraph 129(1)(b) if it is operating in a designated sewage area.

Subdivision 2

Equipment

Equipment — Marine Sanitation Devices, Holding Tanks and Facilities for Temporary Storage

119. (1) Subject to subsections (2) to (4), a ship in Section I or Section II waters that has a toilet facility shall be fitted with a marine sanitation device or a holding tank.

(2) If a ship referred to in subsection (1) that has been fitted with a marine sanitation device operates in an area where the discharge of sewage from the marine sanitation device is not authorized under section 129, the ship shall be fitted with facilities for the temporary storage of sewage.

(3) For the purpose of complying with subsection (1), a Canadian ship may not be fitted with a marine sanitation device referred to in paragraph 124(1)(d).

(4) A ship referred to in subsection (1) that is less than 15 tons gross tonnage, is certified to carry 15 persons or less and is not operating in inland waters of Canada or designated sewage areas may be fitted with facilities for the temporary storage of sewage if it is not practicable for the ship to comply with subsection (1) and the ship has measures in place to ensure that no discharge is made except in accordance with section 129.

Fitting of Toilets

120. A toilet fitted on a ship shall be secured in a manner that ensures its safe operation in any environmental conditions liable to be encountered.

Holding Tanks

121. A holding tank shall

- (a) be constructed in a manner such 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 such that the potable water system or other systems cannot become contaminated;
- (d) be resistant to corrosion by sewage;
- (e) have an adequate volume for the ship's human-rated capacity on a normal voyage;
- (f) be provided with a discharge connection and piping system for the removal of the tank contents at a sewage reception facility;
- (g) be designed so that the level of sewage in the tank may 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 ships that operate solely on the Great Lakes, other than a pleasure craft, be equipped with an alarm that indicates when the tank is 75% full by volume; and
- (i) be equipped with ventilation device that

- (i) has its outlet located on the exterior of the ship 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 either the contents of the tank or 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.

Standard Discharge Connections

122. A ship shall be fitted with a standard discharge connection that meets the requirements of regulation 10 of Annex IV to the Pollution Convention.

Transfer Conduits

123. (1) A transfer conduit shall be used, maintained and secured in a manner that ensures its safe operation.

(2) If any conduit or connection leaks during a transfer operation, the operation shall, as soon as practicable, be slowed down or stopped to relieve the pressure from the conduit or connection.

Marine Sanitation Devices

124. (1) Subject to subsection (2), a marine sanitation device shall meet the requirements of

- (a) a sewage treatment plant referred to in Annex IV to the Pollution Convention;
- (b) paragraph 129(1)(b);
- (c) a Type II marine sanitation device referred to in section 159.3 of the *Code of Federal Regulations* of the United States, Title 33, Part 159, Subpart A; or
- (d) a sewage comminuting and disinfectant system referred to in regulation 9(1.2) of Annex IV to the Pollution Convention.

(2) A marine sanitation device that was approved as an approved device under the *Great Lakes Sewage Pollution Prevention Regulations* and continues to meet the

requirements of those regulations as they read on the coming into force of these Regulations may continue to be used as a marine sanitation device.

Subdivision 3

International Sewage Pollution Prevention Certificates

Inspection

125. (1) A steamship inspector or an approved classification society may, at the request of the owner or master of a Canadian ship, issue to that ship an International Sewage Pollution Prevention Certificate, provided the ship complies with the applicable provisions of Annex IV to the Pollution Convention.

(2) Where an approved classification society issues a certificate referred to in subsection (1) to a Canadian ship, the approved classification society shall forward a certified copy of the certificate to the Board.

Documents Kept on Board

126. (1) A ship of 400 tons gross tonnage or more or a ship that is certified to carry more than 15 persons shall keep on board an English or French version of one of the following documents:

- (a) an International Sewage Pollution Prevention Certificate, if the ship is
 - (i) a Canadian ship that engages on voyages that do not take place exclusively in waters under Canadian jurisdiction, or
 - (ii) a ship, that is not a Canadian ship, that is registered in a state that is a signatory to Annex IV to the Pollution Convention and that is in waters under Canadian jurisdiction; or
- (b) a certificate of compliance certifying that the ship complies with the applicable provisions of Annex IV to the Pollution Convention, if the ship is registered in a state that is not a signatory to Annex IV of the Pollution Convention and is in waters under Canadian jurisdiction.

(2) A ship that is fitted with a marine sanitation device referred to in subsection 124(1) shall keep on board one of the following certificates of type approval:

(a) in the case of a marine sanitation device referred to in paragraph 124(1)(a), a certificate certifying that the device meets the effluent, construction and testing standards of regulation 9(1.1) of Annex IV to the Pollution Convention;

(b) in the case of a marine sanitation device referred to in paragraph 124(1)(b), a certificate certifying that the device is substantially similar to that referred to in paragraph (a), except that the device shall meet the effluent standard set out in paragraph 129(1)(b);

(c) in the case of a marine sanitation device referred to in paragraph 124(1)(c), a certificate certifying that the device meets the effluent, construction and testing standards as provided for in section 159.3 of the *Code of Federal Regulations* of the United States, Title 33, Part 159, Subpart A;

(d) in the case of a marine sanitation device referred to in paragraph 124(1)(d), a certificate certifying that the device has been approved in accordance with regulation 9(1.2) of Annex IV to the Pollution Convention; or

(e) in the case of a marine sanitation device referred to in subsection 124(2), a certificate bearing the approval number and certifying that the marine sanitation device was approved as an approved device under the *Great Lakes Sewage Pollution Prevention Regulations*.

Subdivision 4

Sewage Discharges

Application

127. This Subdivision applies to

(a) a ship in Section I waters or Section II waters; and

(b) a Canadian ship in waters seaward of the outermost limits of Section II waters.

Prohibition

128. Subject to sections 8 and 129, no ship shall discharge and no person shall discharge or permit the discharge of sewage or sewage sludge.

Authorized Discharge — Sewage

129. (1) The discharge of sewage from a ship is authorized if

(a) in the case of a ship in an area other than a designated sewage area, the discharge is passed through a marine sanitation device and the effluent has a fecal coliform count that is equal to or less than 250/100 mL;

(b) in the case of a ship in a designated sewage area, the discharge is passed through a marine sanitation device and the effluent has a fecal coliform count that is equal to or less than 14/100 mL;

(c) in the case of a ship in Section I or Section II waters, but not in inland waters of Canada or a designated sewage area, that is of 400 tons gross tonnage or more or that is certified to carry more than 15 persons,

(i) the discharge is made at a distance of at least 12 nautical miles from shore,

(ii) the discharge is made from a holding tank or from facilities for the temporary storage of sewage and

(A) the discharge is made at a distance of at least 12 nautical miles from shore,

(B) the ship is en route at a speed of at least 4 knots, and

(C) the sewage is discharged at a moderate rate, or

(iii) the sewage is comminuted and disinfected using a marine sanitation device and the discharge is made at a distance of at least 3 nautical miles from shore;

(d) in the case of a Canadian ship in waters seaward of the outermost limits of Section II waters that is of 400 tons gross tonnage or more or that is certified to carry more than 15 persons,

(i) the discharge is made at a distance of at least 12 nautical miles from the nearest land,

(ii) the discharge is made from a holding tank or from facilities for the temporary storage of sewage and

(A) the discharge is made at a distance of at least 12 nautical miles from the nearest land,

(B) the ship is en route at a speed of at least 4 knots, and

(C) the sewage is discharged at a moderate rate, or

(iii) the sewage is comminuted and disinfected using a marine sanitation device and the discharge is made at a distance of at least 3 nautical miles from the nearest land; or

(e) in the case of a ship in Section I or Section II waters, but not in inland waters of Canada or a designated sewage area, that is less than 400 tons gross tonnage and is not certified to carry more than 15 persons,

(i) the sewage is comminuted and disinfected using a marine sanitation device and the discharge is made at a distance of at least 1 nautical mile from shore,

(ii) the discharge is made at a distance of at least 3 nautical miles from shore while the ship is en route at the fastest practicable speed, or

(iii) if it is not practicable to comply with subparagraph (ii) because the ship is located in waters that are less than 6 nautical miles from shore to shore, the discharge is made while the ship is en route at a speed of at least 4 knots or, if it is not practicable at that speed, at the fastest practicable speed

(A) into the deepest waters that are located the farthest from shore during an ebb tide, or

(B) into the deepest and fastest moving waters that are located the farthest from shore.

(2) The discharge of sewage authorized in accordance with paragraphs (1)(a) and (b) and subparagraphs (1)(c)(iii), (d)(iii) and (e)(i) shall not

(a) cause a film or sheen to develop on or cause a discoloration of the water or its adjoining shorelines;

(b) cause sewage sludge or an emulsion to be deposited beneath the surface of the water or upon its adjoining shorelines; and

(c) be such that the sewage contains any visible solids.

(3) The discharge of sewage authorized in accordance with subparagraphs (1)(c)(i) and (ii), (d)(i) and (ii) and (e)(ii) and (iii) shall not cause visible solids to be deposited upon the shoreline.

(4) In the case of a ship referred to in subparagraph 1(e)(iii), the discharge is not authorized if a reception facility is available to receive the sewage.

Subdivision 5

Operational Testing

130. The Board may require testing of effluent from a marine sanitation device to ensure that the effluent meets the following standards, as determined by Standard Methods:

(a) in the case of a ship in an area other than a designated sewage area, the fecal coliform count of the samples of effluent is equal to or less than 250/100 mL;

(b) in the case of a ship in a designated sewage area, the fecal coliform count of the samples of effluent is equal to or less than 14/100 mL;

(c) the total suspended solids content of the samples of effluent is equal to or less than 50 mg/L;

(d) the 5-day biochemical oxygen demand of the samples of effluent is equal to or less than 50 mg/L; and

(e) in the case of chlorine used as a disinfectant, the total residual chlorine content of the samples of effluent is equal to or less than 0.5 mg/L.

[131 to 136 reserved]

DIVISION 5

GARBAGE

Subdivision 1

General

Interpretation

137. The following definitions apply in this Division.

“plastics” means products that contain plastics including

(a) synthetic ropes, synthetic fishing nets and plastic garbage bags; and

(b) incinerator ash from plastics that may contain toxic or heavy metal residues.

(matières plastiques)

“Six Fathom Scarp Mid-Lake Special Protection Area” means the area enclosed by rhumb lines connecting the following coordinates, beginning at the northernmost point and proceeding clockwise:

- (a) 44°55'N, 82°33'W;
- (b) 44°47'N, 82°18'W;
- (c) 44°39'N, 82°13'W;
- (d) 44°27'N, 82°13'W;
- (e) 44°27'N, 82°20'W;
- (f) 44°17'N, 82°25'W;
- (g) 44°17'N, 82°30'W;
- (h) 44°28'N, 82°40'W;
- (i) 44°51'N, 82°44'W;
- (j) 44°53'N, 82°44'W;
- (k) 44°54'N, 82°40'W. (*zone de protection spéciale du milieu du lac Six Fathom Scarp*)

“Lake Superior Special Protection Areas” means the following areas:

- (a) Caribou Island; and
- (b) the area enclosed by rhumb lines connecting the following coordinates, beginning at the northernmost point and proceeding clockwise:
 - (i) 47°30.0'N, 85°50.0'W,
 - (ii) 47°24.2'N, 85°38.5'W,
 - (iii) 47°04.0'N, 85°49.0'W,
 - (iv) 47°05.7'N, 85°59.0'W,
 - (v) 47°18.1'N, 86°05.0'W. (*zones de protection spéciale du lac Supérieur*)

Application

138. This Division applies to

- (a) a ship in Section I waters or Section II waters; and
- (b) a Canadian ship in waters seaward of the outermost limits of Section II waters, except a Canadian ship that is in a special area referred to in section 9.

Prohibition

139. Subject to sections 8, 9 and 140 to 142, no ship shall discharge and no person shall discharge or permit the discharge of garbage from a ship.

Subdivision 2

Discharge of Garbage

Authorized Discharge — Garbage

140. Subject to sections 9 and 141, ships in Section II waters and Canadian ships in waters seaward of the outermost limits of Section II waters are authorized to discharge garbage if

(a) in the case of dunnage, lining material or packing material that does not contain plastics and is capable of floating, the discharge is made as far as practicable from the nearest land but under no circumstances shall the distance of the ship from the nearest land be less than 25 nautical miles at the time of discharge;

(b) subject to paragraph (c), in the case of garbage other than plastics and garbage that is referred to in paragraph (a) the discharge is made as far as practicable from the nearest land but under no circumstances shall the distance of the ship from the nearest land be less than 12 nautical miles at the time of discharge; and

(c) in the case of garbage that is referred to in paragraph (b) that has been passed through a comminuter or grinder such that the comminuted or ground garbage is capable of passing through a screen with openings no greater than 25 mm, the discharge is made as far as practicable from the nearest land but under no circumstances shall the distance of the ship from the nearest land be less than 3 nautical miles at the time of discharge.

Special Requirements

141. (1) Subject to subsection (2), the discharge of garbage is prohibited from a ship that is alongside or within 500 m of a fixed or floating platform located more than 12 nautical miles from the nearest land and engaged in the exploration, exploitation and associated offshore processing of seabed mineral resources.

(2) A ship that is alongside or within 500 m of a fixed or floating platform located more than 12 nautical miles from the nearest land and engages in the exploration, exploitation and associated offshore processing of seabed mineral resources is authorized to discharge food wastes only if the food wastes have been passed through a comminuter or grinder such that the comminuted or ground food wastes are capable of passing through a screen with openings no greater than 25 mm.

Authorized Discharge

142. (1) A ship in Section I waters is authorized to discharge cargo residues in small quantities other than a cargo residue that is a pollutant referred to in paragraphs 4(a) to (c) if

(a) for a ship in Lake Ontario or in the area of Lake Erie east of a line that runs due south from Point Pelee,

(i) the cargo residues are discharged from the ship at a distance of more than 12 nautical miles from shore, or

(ii) in the case of iron ore cargo residues, the cargo residues are discharged from the ship at a distance of more than 5.2 nautical miles from shore;

(b) for a ship that is in the area of Lake Erie west of a line running due south from Point Pelee and that immediately loads new cargo into the ship from a Lake Erie port after unloading iron ore, coal or salt at that port, the cargo residues of iron ore, coal or salt are discharged from the ship into the dredged navigation channels running between Toledo Harbor Light and Detroit River Light;

(c) for a ship in Lake Huron, other than a ship in the Six Fathom Scarp Mid-Lake Special Protection Area,

(i) the cargo residues are discharged from the ship at a distance of more than 12 nautical miles from shore,

(ii) in the case of iron ore, coal or salt cargo residues on a ship upbound along the Michigan thumb between 5.04 nautical miles northeast of entrance buoys 11 and 12 and the track line turn abeam of Harbor Beach, the cargo residues are discharged from the ship at a distance of more than 2.6 nautical miles from shore, and

(iii) in the case of iron ore cargo residues, the cargo residues are discharged from the ship at a distance of more than 5.2 nautical miles from shore;

(d) for a ship in Lake Superior, other than the Lake Superior Special Protection Areas,

(i) the cargo residues are discharged from the ship at a distance of more than 12 nautical miles from shore, and

(ii) in the case of iron ore cargo residues, the cargo residues are discharged from the ship at a distance of more than 5.2 nautical miles from shore;

(e) for a ship in waters referred to in paragraphs (a) to (d) and their connecting and tributary waters, the cargo residues are limestone or other clean stone;

(f) for a ship in the St. Lawrence River west of Les Escoumins, the cargo residues are not cargo sweepings and the ship is en route;

(g) for a ship in the inland waters of Canada in the St. Lawrence River east of Les Escoumins, the ship is en route and the cargo residues are discharged from it at a distance of more than 6 nautical miles from shore; and

(h) for a ship in the St. Lawrence River or Gulf of St. Lawrence that is not in the inland waters of Canada, the ship is en route and the cargo residues are discharged from it at a distance of more than 12 nautical miles from shore.

(2) For the purposes of paragraphs (1)(f) to (h), the authorized discharge of cargo residues is restricted to alumina, bauxite, bentonite, cement, chrome ore, clay, dolomite, ferromanganese, gypsum, ilmenite, iron ore, iron ore concentrate, lead ore concentrate, limestone, manganese ore, manganese concentrate, nepheline syenite, perlite, quartz, salt, sand, talc, urea, vermiculite and zinc ore concentrate.

(3) For the purposes of this section, the master of the ship shall ensure that no discharge of cargo residues is made if, through visual observation, a marine mammal is within 0.5 nautical miles of the ship.

Subdivision 3

Placards and Garbage Management Plans

143. (1) A ship of 12 m or more in length shall display placards that notify the crew and passengers of the garbage discharge requirements of sections 6, 9 and 139 to 142, as applicable.

(2) The placards shall

(a) in the case of a Canadian ship, be written in English or French or in both, according to the needs of the crew and passengers; and

(b) in the case of a ship that is not a Canadian ship, be written in the working language of the crew and in English, French or Spanish.

(3) A ship of 400 tons gross tonnage or more and a ship that is certified to carry 15 persons or more shall keep on board a garbage management plan that meets the format requirements of regulation 9(2) of Annex V to the Pollution Convention.

(4) Every member of the crew shall comply with the requirements of the garbage management plan.

(5) The garbage management plan shall specify the person in charge of carrying out the plan and set out written procedures for collecting, storing, processing and disposing or discharging of garbage, including the use of the equipment on board.

(6) The garbage management plan shall

(a) in the case of a Canadian ship, be written in English or French; and

(b) in the case of a ship that is not a Canadian ship, be written in the working language of the crew.

Subdivision 4

Record-keeping

Interpretation

144. In this Subdivision, “garbage record book” has the same meaning as Garbage Record Book and includes the Record of Garbage Discharges in the form set out in the Appendix to Annex V to the Pollution Convention.

Application

145. (1) Subject to subsection (2), a ship of 400 tons gross tonnage or more and a ship that is certified to carry 15 persons or more shall keep on board a garbage record book.

(2) The requirements respecting a garbage record book do not apply to any ship that is certified to carry 15 persons or more and engages on voyages of one hour or less.

Requirements

146. (1) The master of a ship referred to in subsection 145(1) shall

(a) ensure that each disposal or discharge referred to in regulation 9(3) of Annex V to the Pollution Convention and the discharges referred to in paragraphs 8(a), (b) and (d) are recorded in the garbage record book without delay each time the disposal or discharge takes place;

(b) ensure that each recorded entry is signed by the officer in charge of the disposal or discharge; and

(c) sign each page of the garbage record book.

(2) The garbage record book shall be kept on board for a period of two years after the day on which the last entry in it is made and, during that time, shall be made available for inspection at the request of a pollution prevention officer.

(3) An entry in the garbage record book

(a) in the case of a Canadian ship, shall be written in English or French; and

(b) in the case of a ship that is not a Canadian ship, shall be at least in English, French or Spanish.

(4) For the purposes of the garbage record book, the garbage shall be grouped into the following categories:

(a) plastics (Category 1);

(b) dunnage, lining material or packing material referred to in paragraph 140(a) (Category 2);

(c) garbage referred to in paragraph 140(c), other than food waste and incinerator ash (Category 3);

(d) garbage referred to in paragraph 140(b), other than food waste and incinerator ash (Category 4);

(e) food waste (Category 5); and

(f) incinerator ash, except incinerator ash from plastics that may contain toxic or heavy metal residues (Category 6).

(5) Garbage that is discharged into the sea shall be categorized as Category 2, 3, 4, 5 or 6.

(6) Garbage that is transferred to a reception facility shall be categorized as either Category 1 garbage or grouped together as "other garbage" in the case of Category 2, 3, 4, 5 or 6 garbage.

(7) The master of a ship shall obtain from the owner or operator of a reception facility receiving garbage a receipt or certificate that sets out the date, time and estimated amount of garbage transferred to the reception facility.

(8) The master of the ship shall retain the receipt or certificate for a period of two years after the day on which it was issued and, during that time, it shall be made available for inspection at the request of a pollution prevention officer.

(9) The garbage record book may be part of the official log book.

[147 to 151 reserved]

DIVISION 6

AIR

Subdivision 1

General

Prohibition

152. Subject to section 8, no ship shall emit and no person shall permit the emission from a ship of a substance regulated by this Division except in accordance with the requirements of this Division.

Subdivision 2

Requirements for Control of Emissions from Ships

Ozone-depleting Substances

153. (1) For the purposes of this section, “new installation” means the installation of systems, equipment, including new portable fire-extinguishing units, insulation, or other material on a ship after May 17, 2005. This definition does not include the repair or recharge of systems, equipment, insulation or other material installed before that date or the recharge of portable fire-extinguishing units.

(2) Subject to subsection (3) and section 8, no ship shall emit and no person shall permit the emission from a ship of an ozone-depleting substance from an installation on a ship.

(3) For the purposes of this section, an emission of an ozone-depleting substance does not include a minimal release associated with the recapture or recycling of an ozone-depleting substance.

(4) A new installation that contains an ozone-depleting substance is prohibited on all ships, but a new installation that contains an ozone-depleting substance that is a hydrochlorofluorocarbon is authorized until January 1, 2020.

Nitrogen Oxides (NO_x) — Diesel Engines

154. (1) This section applies to a diesel engine with a power output of more than 130 kW that

(a) is installed on a ship constructed on or after January 1, 2000 that engages on voyages that do not take place exclusively in waters under Canadian jurisdiction;

(b) undergoes a major conversion on or after January 1, 2000 and is installed on a ship that engages on voyages that do not take place exclusively in waters under Canadian jurisdiction;

(c) is installed on a Canadian ship constructed on or after the day on which these Regulations come into force that engages only on voyages in waters under Canadian jurisdiction; or

(d) undergoes a major conversion on or after the day on which these Regulations come into force and is installed on a Canadian ship that engages only on voyages in waters under Canadian jurisdiction.

(2) This section does not apply to

(a) an emergency diesel engine;

(b) an engine installed in a lifeboat; or

(c) any device or equipment intended to be used solely in case of emergency.

(3) Subject to subsections (4) and (5) and section 8, the operation of a diesel engine is prohibited if the quantity of nitrogen oxides emitted from the engine, calculated as the total weighted emission of NO₂, exceeds the following limits, where n represents the rated engine speed (crankshaft revolutions per minute) of the diesel engine:

(a) 17.0 g/kW h, where n is less than 130 revolutions per minute;

(b) $45.0n^{0.2}$ g/kW h, where n is 130 revolutions per minute or more but less than 2,000 revolutions per minute; and

(c) 9.8 g/kW h where n is 2,000 revolutions per minute or more.

(4) When using fuel composed of blends from hydrocarbons derived from petroleum refining, test procedures and measurement methods shall be in accordance with the NO_x Technical Code, taking into consideration the test cycles and weighting factors outlined in Appendix II to Annex VI to the Pollution Convention.

(5) The operation of a diesel engine is permitted if

(a) an exhaust gas cleaning system that meets the requirements of regulation

13(3)(b)(i) of Annex VI to the Pollution Convention is applied to the engine to reduce onboard NO_x emissions at least to the limits specified in subsection (3); or

(b) any other equivalent method that meets the requirements of regulation 13(3)(b)(ii) of Annex VI to the Pollution Convention is applied to the engine to reduce onboard NO_x emissions at least to the limits specified in subsection (3).

Sulphur Oxides (SO_x)

155. Subject to section 10, the sulphur content of any fuel oil used on board a ship shall not exceed 4.5 per cent by mass.

Volatile Organic Compounds

156. (1) Subject to subsection (2), an oil tanker, an NLS ship or a gas carrier using a vapour collection system for volatile organic compounds shall be fitted with a vapour collection system that meets the requirements of regulation 15(5) of Annex VI to the Pollution Convention.

(2) This section applies to gas carriers only when the type of loading and containment systems allow safe retention of non-methane volatile organic compounds on board, or their safe return ashore.

Shipboard Incineration — Prohibition

157. Shipboard incineration of the following substances is prohibited:

(a) cargo residues referred to in Annexes I to III to the Pollution Convention and related contaminated packing materials;

(b) polychlorinated biphenyls;

(c) garbage containing more than traces of heavy metals; and

(d) refined petroleum products containing halogen compounds.

Shipboard Incineration — Restriction

158. (1) Subject to subsection (2), shipboard incineration is permitted only in a shipboard incinerator.

(2) Shipboard incineration of sewage sludge or sludge oil generated during the normal operation of a ship is permitted in the main or auxiliary power plant or boilers but, in those cases, shall not take place inside ports, harbours and estuaries.

(3) Shipboard incineration of polyvinyl chlorides is permitted only in a shipboard incinerator that meets the requirements of regulation 16(2)(a) of Annex VI to the Pollution Convention.

Shipboard Incinerator — Requirements

159. (1) This section applies to a shipboard incinerator that

(a) in the case of a ship that is not a Canadian ship, is installed on board on or after January 1, 2000;

(b) in the case of a Canadian ship that engages on voyages that do not take place exclusively in waters under Canadian jurisdiction, is installed on board on or after January 1, 2000; or

(c) in the case of a Canadian ship that engages only on voyages in waters under Canadian jurisdiction, is installed on or after the day on which these Regulations come into force.

(2) A shipboard incinerator shall meet the requirements of regulation 16(2)(a) of Annex VI to the Pollution Convention.

(3) Personnel responsible for the operation of a shipboard incinerator shall be trained and capable of implementing the guidance provided in the manufacturer's operating manual.

(4) The combustion flue gas outlet temperature of a shipboard incinerator shall be monitored at all times and waste or other matter shall not be fed into a continuous-feed shipboard incinerator when the temperature is below the minimum allowed temperature of 850°C. For batch-loaded shipboard incinerators, the unit shall be designed so that the temperature in the combustion chamber shall reach 600°C within five minutes after start-up.

Fuel Oil Quality

160. (1) Fuel oil used on board a ship for combustion purposes shall not contain inorganic acid and shall meet the following requirements:

(a) in the case of fuel oil derived from petroleum refining, the fuel oil shall be a blend of hydrocarbons, including the incorporation of small amounts of additives, if any, that

are intended to improve performance and shall not contain any added substance or chemical waste that

- (i) jeopardizes the safety of the ship or its personnel,
- (ii) adversely affects the performance of the ship's machinery, or
- (iii) contributes overall to additional air pollution; or

(b) in the case of fuel oil derived by methods other than petroleum refining, the fuel oil shall not

- (i) jeopardize the safety of the ship or its personnel,
- (ii) adversely affect the performance of the ship's machinery, or
- (iii) contribute overall to additional air pollution.

(2) This section does not apply to coal in its solid form or nuclear fuels.

Subdivision 3

Smoke

Application

161. This Subdivision applies in respect of the emission of smoke by a ship while it is in Canadian waters within 1 nautical mile of land.

Exception

162. This Subdivision does not apply to ships during start-up and maintenance of smoke producing systems.

Density of Smoke

163. (1) The smoke chart to be used in determining the density of black smoke for the purpose of these Regulations is the Department of Transport Smoke Chart set out in Schedule 5 or a comparable chart upon which fine black dots or lines evenly spaced on a white ground space are so arranged as to indicate

- (a) density number 1, by having approximately 20 per cent of the space black;
- (b) density number 2, by having approximately 40 per cent of the space black;
- (c) density number 3, by having approximately 60 per cent of the space black;
- (d) density number 4, by having approximately 80 per cent of the space black; and
- (e) density number 5, by having approximately 100 per cent of the space black.

- (2) The density of black smoke shall be determined by visual observation by
- (a) holding a smoke chart at arm's length;
 - (b) viewing the smoke at approximately right angles to the line of travel of the smoke; and
 - (c) matching the shade of the smoke to the nearest shade of smoke density that it most closely resembles on the smoke chart.

(3) When a determination of the density of black smoke is made in accordance with the provisions of subsections (1) and (2), the black smoke is deemed to be of the density and to have the density number indicated by the shade of smoke density that it most closely resembles on the smoke chart.

(4) Smoke that is not black smoke is deemed to be of the same density and to have the same density number as black smoke that is of approximately the same degree of opacity.

Limits of Smoke Emission

164. (1) No person shall operate or permit the operation of any fuel-burning installation on a ship so that smoke is emitted in greater density than the maximum density authorized by this section.

(2) Subject to subsection (3), no fuel-burning installation, except an installation utilizing hand-fired boilers, shall at any time emit smoke of a density greater than density number 1.

(3) A fuel-burning installation may emit smoke of density number 2 for an aggregate of not more than four minutes in any 30-minute period.

(4) Subject to subsection (5), no fuel-burning installation utilizing hand-fired boilers shall emit smoke of a density greater than density number 2.

(5) Any fuel-burning installation utilizing hand-fired boilers may

(a) while in the Detroit River, emit smoke of a density not greater than density number 3 for an aggregate of not more than nine minutes in any 30-minute period; and

(b) while elsewhere than in the Detroit River, emit smoke

(i) of a density not greater than density number 3 for an aggregate of not more than nine minutes in any 30-minute period, and

- (ii) of a density not greater than density number 4 for an aggregate of not more than three minutes in any 30-minute period.

Subdivision 4

Inspection and Certificates

Canadian and International Air Pollution Prevention Certificates

165. (1) A steamship inspector or an approved classification society may, at the request of the owner or master of a Canadian ship, issue to that ship an International Air Pollution Prevention Certificate if the ship complies with the applicable provisions of Annex VI to the Pollution Convention.

(2) A steamship inspector or an approved classification society may, at the request of the owner or master of a Canadian ship, issue to that ship a Canadian Air Pollution Prevention Certificate if the ship complies with the applicable provisions of Annex VI to the Pollution Convention but

(a) in the case of a diesel engine installed on or after January 1, 2000 and before the day on which these Regulations come into force, the engine is not required to meet the requirements of regulation 13 of Annex VI to the Pollution Convention;

(b) in the case of a diesel engine that undergoes a major conversion on or after January 1, 2000 and before the day on which these Regulations come into force, the engine is not required to meet the requirements of regulation 13 of Annex VI to the Pollution Convention; or

(c) in the case of a shipboard incinerator installed on or after January 1, 2000 and before the day on which these Regulations come into force, the incinerator is not required to meet the requirements of regulation 16 of Annex VI to the Pollution Convention.

(3) If an approved classification society issues a certificate referred to in subsections (1) or (2) to a Canadian ship, the approved classification society shall forward a certified copy of the certificate to the Board.

Subdivision 5

Shipboard Documents

Documents Kept on Board

166. A ship of 400 tons gross tonnage or more shall keep on board an English or French version of

(a) one of the following documents:

(i) a Canadian Air Pollution Prevention Certificate, if the ship is a Canadian ship that engages only on voyages in waters under Canadian jurisdiction,

(ii) an International Air Pollution Prevention Certificate if the ship is

(A) a Canadian ship that engages on voyages that do not take place exclusively in waters under Canadian jurisdiction, or

(B) not a Canadian ship and is registered in a state that is a signatory to Annex VI to the Pollution Convention and is in waters under Canadian jurisdiction, or

(iii) a certificate of compliance certifying that the ship complies with the applicable provisions of Annex VI to the Pollution Convention, if the ship is registered in a state that is not a signatory to Annex VI to the Pollution Convention and is in waters under Canadian jurisdiction;

(b) a certificate of type approval for

(i) a diesel engine referred to in section 154, if applicable, and

(ii) a shipboard incinerator referred to in section 159, if applicable;

(c) a Technical File that is referred to in section 2.3.6 of the NO. Technical Code for a diesel engine referred to in section 154, if applicable; and

(d) an equipment operation manual for a shipboard incinerator referred to in section 159, if applicable, that specifies how to operate the incinerator within the limits set out in paragraph (2) of Appendix IV of Annex VI to the Pollution Convention.

Subdivision 6

Record-keeping

Record Book of Engine Parameters

167. A ship that is fitted with a diesel engine referred to in section 154 shall keep on board a record book of engine parameters and maintain the record book of engine parameters in accordance with section 6.2.3 of the NO_x Technical Code.

Bunker Delivery Note

168. (1) The details of fuel oil for combustion purposes delivered to and used on board a ship referred to in subparagraphs 166(a)(ii) and (iii) shall be recorded by means of a bunker delivery note that contains at least the information specified in Appendix V of Annex VI to the Pollution Convention.

(2) The master of the ship shall keep the bunker delivery note on board for a period of three years after the day on which the fuel oil was delivered on board and, during that time, it shall be made available for inspection at the request of a pollution prevention officer.

[169 to 172 reserved]

DIVISION 7

ANTI-FOULING SYSTEMS

Subdivision 1

Controls on Anti-Fouling Systems

Application

173. This Division applies to

(a) Canadian ships; and

(b) ships that are not Canadian ships operating in waters under Canadian jurisdiction, effective the day on which the Anti-Fouling Systems Convention comes into force.

Control Measures

174. For an anti-fouling system listed in Schedule 6, the application, re-application, installation or use of the anti-fouling system on a ship shall comply with the requirements set out in that schedule.

Subdivision 2

Shipboard Documents

Documents Kept on Board

175. (1) A ship of 400 tons gross tonnage or more shall keep on board an English or French version of one of the following documents:

(a) an International Anti-Fouling System Certificate in the form set out in Appendix 1 to Annex 4 to the Anti-Fouling Systems Convention if the ship is

(i) a Canadian ship, or

(ii) not a Canadian ship and is registered in a state that is a signatory to the Anti-Fouling Systems Convention and is in waters under Canadian jurisdiction; or

(b) a certificate of compliance certifying that the ship complies with the applicable provisions of the Anti-Fouling Systems Convention, if the ship is registered in a state that is not a signatory to the Anti-Fouling Systems Convention and is in waters under Canadian jurisdiction.

(2) A steamship inspector or an approved classification society may, at the request of the owner or master of a Canadian ship, issue to that ship an International Anti-Fouling System Certificate if the ship complies with the applicable provisions of the Anti-Fouling Systems Convention.

(3) Where an approved classification society issues a certificate referred to in subsection (2) to a Canadian ship, the approved classification society shall forward a certified copy of the certificate to the Board.

Subdivision 3

Anti-Fouling Systems Declaration

Declaration Kept on Board and Form of Declaration

176. (1) In this section, "length" has the same meaning as "length" in the International Convention on Load Lines, 1966, as modified by the Protocol of 1988 relating thereto, as adopted and published by the IMO.

(2) A ship that is 24 m or more in length but is less than 400 tons gross tonnage and engages on voyages that do not take place exclusively in waters under Canadian jurisdiction shall keep on board a declaration regarding the anti-fouling system.

(3) The owner or owner's agent shall ensure that the anti-fouling system applied to the ship complies with Annex 1 to the Anti-Fouling Systems Convention.

(4) The owner or owner's agent shall sign a declaration confirming that the anti-fouling system applied to the ship complies with Annex 1 to the Anti-Fouling Systems Convention.

(5) The declaration shall be in the form set out in Schedule 7 and written at least in English or French.

(6) The declaration shall contain an appropriate endorsement of the anti-fouling system applied to the ship or be accompanied by appropriate documentation, such as a paint receipt or a contractor invoice.

[177 to 186 reserved]

PART 3

5 PPM BILGE ALARMS

REQUIREMENTS FOR 5 PPM BILGE ALARMS

187. (1) A 5 ppm bilge alarm that is required under paragraph 28(g) to meet the specifications of Part 2 of the Annex to Resolution MEPC.107(49) shall

(a) have an oil content meter that is capable of detecting and measuring 5 ppm or less of oil in a ship's machinery space bilge water overboard discharge;

(b) have automatic stopping arrangements; and

(c) comply with the requirements of the *Standard for 5 ppm Bilge Alarms for Canadian Inland Waters*, TP 12301, published by Transport Canada, other than Part 4 of that standard.

(2) The *Standard for 5 ppm Bilge Alarms for Canadian Inland Waters* referred to in paragraph 1(c) applies

(a) to a 5 ppm bilge alarm installed on a ship the keel of which is laid or that is at a similar stage of construction on or after January 1, 2005; and

(b) to a new 5 ppm bilge alarm installed on a ship the keel of which was laid or that was at a similar stage of construction before January 1, 2005.

(3) A 5 ppm bilge alarm, other than a 5 ppm bilge alarm referred to in subsection (2), that was approved as a bilge alarm under the *Oil Pollution Prevention Regulations* and continues to meet the requirements of those regulations as they read on the coming into force of these Regulations may continue to be used as a 5 ppm bilge alarm.

[188 to 199 reserved]

PART 4

REPEAL AND COMING INTO FORCE

REPEALS

200. The *Air Pollution Regulations* are repealed.

201. The *Garbage Pollution Prevention Regulations* are repealed.

202. The *Great Lakes Sewage Pollution Prevention Regulations* are repealed.

203. The *Pollutant Substances Pollution Prevention Regulations* are repealed.

204. The *Non-Pleasure Craft Sewage Pollution Prevention Regulations* are repealed.

205. The *Pleasure Craft Sewage Pollution Prevention Regulations* are repealed.

206. The *Oil Pollution Prevention Regulations* are repealed.

207. The *Dangerous Chemicals and Noxious Liquid Substances Regulations* are repealed.

COMING INTO FORCE

208. (1) These Regulations come into force on the day on which they are registered.

(2) Item 22 of Schedule 4 comes into force four years after the day on which these Regulations are registered.

SCHEDULE 1

(Paragraph 4(c) and sections 108 and 109)

POLLUTANTS

Acetaldehyde

Acetic acid

Acetic anhydride

Acetone cyanohydrin

Acetyl bromide

Acetyl chloride

Acid mixtures, hydrofluoric and sulphuric

Acid mixtures, nitrating acid

Acrolein

Acrylonitrile

Adipic acid

Aldrin

Alkyl benzene sulphonate (Branched chain)

Alkyl benzene sulphonate (Straight chain)

Alkyl benzene sulphonic acid

Allyl alcohol

Allyl chloride

Aluminum sulphate

Ammonia

Ammonium acetate

Ammonium arsenate

Ammonium benzoate

Ammonium bicarbonate

Ammonium bichromate

Ammonium bifluoride

Ammonium bisulphite

Ammonium carbamate

Ammonium carbonate

Ammonium chloride

Ammonium chromate

Ammonium citrate

Ammonium fluoborate

Ammonium fluoride

Ammonium hydroxide

Ammonium oxalate

Ammonium silicofluoride

Ammonium sulphamate

Ammonium sulphide

Ammonium sulphite

Ammonium tartrate

Ammonium thiocyanate

Ammonium thiosulphate

Amyl acetate

Amyl mercaptan

Aniline

Antimony compounds, not otherwise specified

Antimony lactate

Antimony pentachloride

Antimony potassium tartrate

Antimony tribromide

Antimony trichloride

Antimony trifluoride

Antimony trioxide

meta-Arsenic acid

ortho-Arsenic acid

Arsenical flue dust

Arsenic bromide

Arsenic compounds, not otherwise specified (liquid and solid)

Arsenic disulphide

Arsenic pentoxide

Arsenic trichloride

Arsenic trioxide

Arsenic trisulphide

Atrazine

Azinphos methyl (guthion)

Barium cyanide

Benzene

Benzidine

Benzoic acid

Benzonitrile

Benzoyl chloride

Benzyl chloride

Beryllium chloride

Beryllium fluoride

Beryllium nitrate

Beryllium powder

Bordeaux arsenite

Bromine

Bromine penta or trifluoride

Bromoacetic acid, solid or solution

Bromoacetone

Bromobenzyl cyanide

Brucine

n-Butyl acetate

sec-Butyl acetate

Butylamine

Butyl benzyl phthalate

n-Butyl phthalate

n-Butyric acid

Cacodylic acid

Cadmium acetate

Cadmium bromide

Cadmium chloride

Calcium arsenate

Calcium arsenite

Calcium carbide

Calcium chromate

Calcium cyanide

Calcium dodecylbenzene sulphonate

Calcium hydroxide

Calcium hypochlorite

Calcium oxide

Captan

Carbaryl (sevin)

Carbofuran

Carbon disulphide

Carbon tetrachloride

Chlordane

Chlorine

Chloroacetaldehyde

Chloroacetone

m-,o-,p-Chloroanilines

Chlorobenzene

Chloro-dinitrobenzene

Chlorofenvinphos

Chloroform

Chloronitrobenzenes

Chlorophenyl trichlorosilane

Chloropicrin and mixtures

Chloroprene

Chlorosulphonic acid

Chlorpyrifos

Chromic acetate

Chromic acid

Chromic sulphate

Chromous chloride

Cobaltous bromide

Cobaltous formate

Cobaltous sulphamate

Copper cyanide

Coumaphos

Cresol (mixed isomers)

Cresylic acid

Crotonaldehyde

Cupric acetate

Cupric acetoarsenite

Cupric arsenite

Cupric chloride

Cupric nitrate

Cupric oxalate

Cupric sulphate

Cupric sulphate, ammoniated

Cupric tartrate

Cupriethylene diamine

Cyanogen bromide

Cyanogen chloride

Cyclohexane

2,4-D acid and esters

DDT

Diazinon

Dicamba

Dichlobenil

Dichlone

Dichloroanilines

Dichlorobenzenes

Dichlorophenyltrichlorosilane

Dichloropropane

Dichloropropene

Dichloropropene—Dichloropropane (mixed)

2,2-Dichloropropionic acid

Dichlorvos

Dieldrin

Diethylamine

Diethyl sulphate

Dimethoate

Dimethyl acetamide

Dimethylamine

Dimethyl sulphate

Dinitroaniline

Dinitrobenzene

4,6-Dinitro-o-cresol

Dinitrophenols

Dinitrotoluenes

1,4-Dioxane

Diphenylchloroarsine

Diphenyl/Diphenyl oxide mixtures

Diphenyl methane

Diphenylamine chloroarsine

Diquat

Disulfoton

Diuron

Dodecyl benzene sulphonic acid

EDTA

Endosulfan

Endrin

Epichlorohydrin

Ethion

Ethyl benzene

Ethyl dichloroarsine

Ethylene chlorohydrin

Ethylene diamine

Ethylene dibromide

Ethylene dichloride

Ethyleneimine

Fentin acetate

Ferric ammonium citrate

Ferric ammonium oxalate

Ferric arsenate

Ferric arsenite

Ferric chloride

Ferric fluoride

Ferric nitrate

Ferric sulphate

Ferrous ammonium sulphate

Ferrous arsenate

Ferrous chloride

Ferrous sulphate

Formaldehyde

Formic acid

Fumaric acid

Furfural

Heptachlor

Hexachlorobutadiene

Hexachlorocyclopentadiene

Hexaethyltetraphosphate

Hydrazine

Hydrochloric acid

Hydrofluoric acid

Hydrogen cyanide

Hydrogen sulphide

Isoprene

Isopropanolamine dodecylbenzenesulphonate

Kelthane

Kepone

Lead acetate

Lead arsenate

Lead arsenite

Lead chloride

Lead cyanide

Lead fluoborate

Lead fluoride

Lead iodide

Lead nitrate

Lead stearate

Lead sulphate

Lead sulphide

Lead thiocyanate

Lindane

Lithium chromate

London purple

Magnesium arsenate

Malathion

Maleic acid

Maleic anhydride

Mercaptodimethur

Mercuric acetate

Mercuric arsenate

Mercuric chloride

Mercuric cyanide

Mercuric nitrate

Mercuric potassium cyanide

Mercuric sulphate

Mercuric thiocyanate

Mercurous nitrate

Mercurous sulphate

Mercury alkyl

Mercury ammonium chloride

Mercury benzoate

Mercury bisulphate

Mercury bromide

Mercury compounds, organic

Mercury gluconates

Mercury iodide

Mercury oxycyanide

Mercury potassium iodide

Methoxychlor

Methyl bromide and ethyl amyl dibromide mixtures

Methyl mercaptan

Methyl methacrylate

Methyl parathion

Mevinphos

Mexacarbate

Monoethylamine

Monomethylamine

Mononitrobenzene

Naled

Naphthalene (molten)

beta-Naphthylamines

Naphthenic acids

Naphthylthiourea

Nickel ammonium sulphate

Nickel chloride

Nickel cyanide

Nickel hydroxide

Nickel nitrate

Nickel sulphate

Nickel tetracarbonyl

Nicotine

Nicotine compounds and preparations

Nitric acid

Nitroanilines

o-Nitrobenzenes

Nitrogen dioxide

Nitrophenol

Nitrotoluene

Nitroxylens

Osmium tetroxide

Paraformaldehyde

Paraquat

Parathion

Pentachloroethane

Pentachlorophenol

Perchloromethyl mercaptan

Phenol

Phorate

Phosgene

Phosphamidon

Phosphoric acid

Phosphorus

Phosphorus oxychloride

Phosphorus pentasulphide

Phosphorus trichloride

Polychlorinated biphenyls

Potassium arsenate

Potassium arsenite

Potassium bichromate

Potassium chromate

Potassium cyanide

Potassium hydroxide (caustic potash)

Potassium permanganate

Propargite

beta-Propiolactone

Propionic acid

Propionic anhydride

Propylene oxide

Pyrethrins

Quinoline

Resorcinol

Selenium oxide

Silver nitrate

Sodium

Sodium arsenate

Sodium arsenite

Sodium bichromate solution

Sodium bifluoride

Sodium bisulphite

Sodium chromate

Sodium cyanide

Sodium dodecylbenzene sulphonate

Sodium fluoride

Sodium hydrosulphide

Sodium hydroxide (caustic soda)

Sodium hypochlorite

Sodium methylate

Sodium nitrite

Sodium pentachlorophenate

Sodium phosphate (dibasic)

Sodium phosphate (tribasic)

Sodium selenite

Strontium chromate

Strychnine

Styrene

Styrene monomer

Sulphuric acid

Sulphur monochloride

2,4,5-T acid

2,4,5-T amines

2,4,5-T esters

2,4,5-T salts

2,4,5-TP acid

2,4,5-TP acid esters

TDE

Tetraethyl dithiopyrophosphate

Tetraethyl lead

Tetraethyl pyrophosphate

Tetramethyl lead

Thallium sulfate

Toluene

Toluene diisocyanate

Toxaphene

Trichlorfon

1,2,4-Trichlorobenzene

Trichloroethylene

Trichlorophenol

Tricresyl phosphate

Triethanolamine dodecylbenzene sulphonate

Triethylamine

Trimethylamine

Trixylenyl phosphate

Uranyl acetate

Uranyl nitrate

Vanadium pentoxide

Vanadium sulphate

Vinyl acetate

Vinyl chloride

Vinylidene chloride

Warfarin

Xylenes (mixed isomers)

Xylenols

Zinc acetate

Zinc ammonium chloride

Zinc borate

Zinc bromide

Zinc carbonate

Zinc chloride

Zinc cyanide

Zinc fluoride

Zinc formate

Zinc hydrosulphite

Zinc nitrate

Zinc phenol sulphonate

Zinc phosphide

Zinc silicofluoride

Zinc sulphate

Zirconium nitrate

Zirconium potassium fluoride

Zirconium sulphate

Zirconium tetrachloride

SCHEDULE 2

(Paragraph 36(2)(a))

DECLARATION FOR A SHIP THAT IS IN WATERS SOUTH OF THE 60TH PARALLEL
OF NORTH LATITUDE

Under subparagraph 660.2(2)(c)(i) of the *Canada Shipping Act*, I declare that

(a) with respect to pollution insurance coverage, the ship's insurer is:

(Name, address, phone number)

(b) for the purposes of paragraph 660.2(2)(b) of the *Canada Shipping Act*, I have an arrangement with the response organization known as:

(Name of response organization)

(c) the arrangement is in respect of tonnes of oil and in respect of the following waters:

(waters in which the ship is operating)

(d) for the purposes of subparagraph 660.2(2)(c)(iii) of the *Canada Shipping Act*

(i) the following persons are authorized to implement the arrangement described in paragraph (b):

(Name, telephone, fax or telex number)

(Name, telephone, fax or telex number)

(If required, attach additional pages)

(ii) the following persons are authorized to implement the shipboard oil pollution emergency plan or the shipboard marine pollution emergency plan:

(Name, telephone, fax or telex number)

(Name, telephone, fax or telex number)

(If required, attach additional pages)

(Signed by the master or owner) (Date)

SCHEDULE 3

(Paragraph 36(2)(b))

DECLARATION FOR A SHIP THAT IS IN WATERS NORTH OF THE 60TH PARALLEL
OF NORTH LATITUDE

Under subparagraph 660.2(2)(c)(i) of the *Canada Shipping Act*, I declare that, with respect to pollution insurance coverage, the ship's insurer is:

(Name, address telephone, and fax or telex number)

(Signed by the master or owner) (Date)

SCHEDULE 4

(Section 115)

DESIGNATED SEWAGE AREAS

Item	Name and Location Reference of Body of Water (<i>Gazetteer of Canada</i> reference system)
<i>British Columbia</i>	
1.	Shuswap Lake (50°56'N, 119°17'W), north of Salmon Arm
2.	Mara Lake (50°47'N, 119°00'W), east of Salmon Arm
3.	Okanagan Lake (49°45'N, 119°44'W), west of Kelowna
4.	Christina Lake (49°07'N, 118°15'W), east of Grand Forks
5.	Horsefly Lake (52°23'N, 121°10'W), east of Horsefly
6.	Kalamalka Lake (50°10'N, 119°21'W), south of Vernon
7.	Pilot Bay (49°38'20"N, 116°52'15"W), Kootenay Lake east of Nelson
8.	Stuart Lake (54°36'N, 124°40'W), northwest of Fort St. James. Portion of the lake south of Jennie Chow Island (District Lot 7114, Coast Land District), including a three-kilometer buffer from the mouth of the Tachie River
9.	Carrington Bay (50°09'N, 125°00'W), on the northwest coast of Cortes Island, in the Strait of Georgia. All water east of a line extending from the southern point of land to the northern point of land at the mouth of Carrington Bay, including Carrington lagoon
10.	Cortes Bay (50°04'N, 124°55'W), on the east coast of Cortes Island, in the Strait of Georgia. All water west of a line drawn across the narrowest point of the harbour entrance
11.	Manson's Landing and Gorge Harbour (50°04'N, 124°59'W), on the southwest coast of Cortes Island, in the Strait of Georgia. All water east of a line extending from the southern boundary of Manson's Landing Provincial Park to the western headland defining the entrance to Gorge Harbour, including Manson's Landing Provincial Marine Park, Deadman Island and Gorge Harbour
12.	Montague Harbour (48°53'N, 123°24'W), on the southwest coast of Galiano Island, in the Strait of Georgia. Northern approach: all water south of a line southeast from Ballingall Islet to Galiano Island and east of a line from Ballingall Islet to Wilmot Head on Parker Island. Western approach: all water east of a line connecting Parker Island to Philmore Point on Galiano Island, including Julia Island. Montague Harbour includes Montague Harbour Marine Provincial Park

Item	Name and Location Reference of Body of Water (<i>Gazetteer of Canada</i> reference system)
13.	Pilot Bay (49°12'N, 123°51'W), Gabriola Island, on the north coast of Gabriola Island, in the Strait of Georgia, east of Nanaimo. All water south of a line extending east from Tinson Point to the main shoreline of Gabriola Island, including the marine area within Gabriola Sands Provincial Park
14.	Prideaux Haven (50°09'N, 124°41'W), in Desolation Sound, northeast of Lund. All marine waters in the area within the following boundaries: from a point located at a bearing of 263° and a distance of 2,080 m from the southwest corner of District Lot 4354, Group One, New Westminster District, along a line drawn directly north at a distance of 350 m to the southeasterly shores of Eveleigh Island, thence along the said southeasterly shores to the most easterly point of said Island, at Lucy Point, thence on a bearing of 77° and a distance of 1,180 m to Copplestone Point, thence along the shores of Laura Cove, Melanie Cove, the southeasterly shores of Prideaux Haven and Eveleigh Anchorage to the point of commencement
15.	Roscoe Bay (50°10'N, 124°46'W). All marine waters of a bay on the east side of West Redonda Island, including all water west of a line drawn due north from Marylebone Point to the opposite shore on West Redonda Island
16.	Smuggler Cove (49°31'N, 123°58'W). The cove lies to the southwest of Secret Cove. All marine water east of a line drawn from the westernmost point of Isle Capri to the westernmost point of Wibraham Point enclosed within the boundaries of Smuggler Cove Marine Park
17.	Squirrel Cove (50°08'N, 124°55'W), on the east coast of Cortes Island, in the Strait of Georgia. All water in the basin northwest of Protection Island
<i>Manitoba</i>	
18.	Red River, from Canada - USA border to Lake Winnipeg
19.	Assiniboine River, from Red River upstream to St. James Bridge in the city of Winnipeg
20.	Shoal Lake, Manitoba portion (49°37'N, 95°10'W)
21.	Gimli Harbour within limits of the breakwater (50°38'N, 96°59'W)
<i>Nova Scotia</i>	
22.	Bras d'Or Lake (45°50'N, 60°50'W) and all connected waters inside a line joining Carey Point to Noir Point in Great Bras d'Or, southwards of Alder Point in Little Bras d'Or and northwards of the seaward end of St. Peters Canal

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SCHEDULE 5

(Subsection 163(1))

SMOKE CHART



SCHEDULE 6

(Section 174)

CONTROLS ON ANTI-FOULING SYSTEMS

	Column 1	Column 2	Column 3
Item	Anti-Fouling System	Control Measures	Effective Date
1.	Organotin compounds which act as biocides in anti-fouling systems	Ships shall not apply or re-apply such compounds	January 1, 2003
2.	Organotin compounds which act as biocides in anti-fouling systems	Ships either (a) shall not bear such compounds on their hulls or external parts or surfaces; or (b) shall bear a coating that forms a barrier to such compounds leaching from the underlying non-compliant anti-fouling systems	January 1, 2008

SCHEDULE 7

(Subsection 176(5))

DECLARATION ON ANTI-FOULING SYSTEM

DECLARATION ON ANTI-FOULING SYSTEM

Drawn up under the

International Convention on the Control of

Harmful Anti-Fouling Systems on Ships, 2001

(Anti-Fouling Systems Convention)

Name of ship

Distinctive number or letters

Port of registry

Length

Gross tonnage

IMO number (if applicable)

I declare that the anti-fouling system used on this ship complies with Annex 1 to the Anti-Fouling Systems Convention.

(Date) (Signature of owner)

Endorsement of anti-fouling systems applied

Types of anti-fouling systems used and dates of application

(Date) (Signature of owner)

Types of anti-fouling systems used and dates of application

(Date) (Signature of owner)