

PAME II-2015 Agenda Item 4.2 (c)

AMSA Recommendation I(B)

Summary of National Fishing Vessel Safety and the Prevention of Pollution from such Vessels in the Arctic

Background

AMSA Recommendation I(B) provides:

“[T]he Arctic states, in recognition of the unique environmental and navigational conditions in the Arctic, decide to cooperatively support efforts at the International Maritime Organization to strengthen, harmonize and regularly update international standards for vessels operating in the Arctic. These efforts include: Support the updating and the mandatory application of relevant parts of the Guidelines for Ships Operating in Arctic Ice-covered Waters (Arctic Guidelines); and, drawing from IMO instruments, in particular the Arctic Guidelines, augment global IMO ship safety and pollution prevention conventions with specific mandatory requirements or other provisions for ship construction, design, equipment, crewing, training and operations, aimed at safety and protection of the Arctic environment.”

The PAME I-2015 working group meeting adopted a record of decision “inviting member governments to submit overview papers to PAME II-2015 on their national legislation of fishing vessel safety and the prevention of pollution from such ships in the Arctic.” In response to this invitation Canada submits the following information for the consideration of PAME.

Data Sources & Disclaimers

For the purpose of the information contained within this paper, the boundaries used to define Canada’s Arctic are those defined by the *Arctic Waters Pollution Prevention Act* as “the internal waters of Canada and the waters of the territorial sea of Canada and the exclusive economic zone of Canada, within the area enclosed by the 60th parallel of north latitude, the 141st meridian of west longitude and the outer limit of the exclusive economic zone; however, where the international boundary between Canada and Greenland is less than 200 nautical miles from the baselines of the territorial sea of Canada, the international boundary shall be substituted for that outer limit.”

Additionally, the information in this paper is grouped as follows. Requirements applicable to:

- all fishing vessels, which includes;
- small fishing vessels; and
- large fishing vessels.

A small fishing vessel is defined here as being 24.4 meters or less in length and 150 gross tonnage or less, whereas a large fishing vessel exceeds either or these limits.

The applicability and requirements of fishing vessel legislation are contingent upon a variety of criteria including, but not limited to, distance from shore, vessel characteristics (such as length and tonnage), and the nature of the activity in which the vessel is engaged.

Moreover, unless otherwise noted, much of the Canadian legislation noted here is not necessarily unique to the Canadian Arctic, but rather applicable to fishing vessels (and in many instances other types of vessels) operating in waters elsewhere in Canada. What follows is therefore not to be interpreted as an exhaustive inventory.

All Fishing Vessels

[Arctic Waters Pollution Prevention Act \(R.S.C, 1985, c.A-12\)](#)

The *Arctic Waters Pollution Prevention Act* bans the discharge of waste while operating in Canadian Arctic waters, except as permitted by regulation. The regulations permit all ships to discharge untreated sewage that has been generated on board the vessel at all times, and oil and oily mixtures in certain circumstances, such as for the purposes of saving life or preventing the loss of the ship.

To prevent pollution resulting from ice damage, the [Arctic Shipping Pollution Prevention Regulations](#), applicable to all ships of 100 gross tonnage or more, set out zones and the periods during which a vessel may operate in each zone. Periods for each zone vary according to a vessel's level of ice strengthening. An alternate system for determining whether a vessel can operate in particular ice conditions, the Arctic Ice Regime Shipping System, based on actual ice conditions and the vessel's ice strengthening is also permitted. These regulations also require that vessel have sufficient fuel and fresh water, or means to produce sufficient fresh water, for the intended voyage or to reach a refueling place or a place where fresh water is obtainable.

Other regulations made under the *Arctic Waters Pollution Prevention Act* require that vessels operating in a shipping safety control zone (established under the Act) have charts for the areas

it will operate in, and, based on vessel size and area of operation, additional equipment, such as two gyrocompasses, one or two sets of echo-sounding equipment, one or two radar. These regulations are the [Navigation Safety Regulations](#), the [Steering Appliances and Equipment Regulations](#), the [Charts and Nautical Publications Regulations](#), 1995, and the [Ship Station \(Radio\) Regulations, 1999](#).

[Collision Regulations](#)

The *Collision Regulations* address rules including preventing collisions at sea, and steering and sailing conduct under conditions of visibility and restricted visibility. The regulations also include the standard requirements for lights, shapes and sounds used for communication, as well as provisions that:

- Help determine safe speeds, by taking into account ice that may not be detected on the radar; and
- Address fishing vessels and the lights and shapes they must exhibit under certain situations.

[Marine Personnel Regulations \(SOR/2007-115\)](#)

These regulations address certificates and endorsements of individuals, eligibility, examinations, fees for examinations and documents, masters and mates certification requirements (including Fishing Masters and Watchkeeping Engineer on a Motor-driven Fishing Vessel), and crewing regulations. Specific provisions are noted for certificates required by masters onboard fishing vessels for various types of voyages.

[Vessel Pollution and Dangerous Chemicals Regulations \(SOR/2012-69\)](#)

Pursuant to the *Canada Shipping Act, 2001*, these regulations apply to vessels in water under Canadian jurisdiction and Canadian vessels everywhere concerning pollutants which may be discharged by ships into the marine or atmospheric environment, and rules for ships operating with such pollutants on board or as resulting from mechanical processes on board. Specific provisions note that:

- Canadian vessels (including fishing vessels) operating in Arctic waters or waters that are not under Canadian jurisdiction and are not within an emission control area have exceptions from section 110.3 on the topic of NO_x emission limits;

- The percentage of Sulphur Oxides (SO_x) emitted depends on operations within or outside of the Arctic (Section 111.(1));
- In the case of ice, a holding tank must be equipped with a ventilation device which is designed to minimize clogging by climatic conditions.

[Charts and Nautical Publications Regulations](#), 1995,

Requires that there be on board, in respect of each area in which the ship is to be navigated, the most recent editions of the charts, documents and publications that are required to be used.

The master and owner of a ship of less than 100 tons are not required to have on board the charts, documents and publications) if the person in charge of navigation has sufficient knowledge of the area where the ship is to be navigated that safe and efficient navigation in is not compromised.

[Navigation Safety Regulations](#) (SOR/2005-134)

These regulations include principles relating to bridge design, design and arrangement of navigational equipment, bridge procedures, equipment used for navigation, specific equipment required for certain situations, and standards for equipment. Requirements are generally applicable to vessels according to size and voyage.

[Ship Station \(Radio\) Regulations](#), 1999(SOR/2000-265)

Pursuant to the *Arctic Waters Pollution Prevention Act* and the *Canada Shipping Act, 2001*, these regulations cover requirements for ships to provide and use radios for communications in all situations, including while operating within Canada's Arctic Shipping Safety Control Zones. Certain vessels are required to be equipped with a radio facsimile terminal capable of receiving transmissions of ice formation from radio stations and ice reconnaissance aircraft in the area.

[Ship Station \(Radio\) Technical Regulations](#), 1999(SOR/2000-265)

Under the *Canada Shipping Act, 2001*, these regulations apply in respect of a ship station, including radio equipment, documentation and other equipment for the station required to be on board.

[Vessel Certificates Regulations](#) (SOR/2007-31)

These regulations list required vessel certificates for various vessels and purposes, applicable to Canadian ships everywhere and foreign vessels in Canadian waters.

Small Fishing Vessels

[Small Fishing Vessel Inspection Regulations \(SOR/83-810\)](#)

These Regulations concern the construction, equipment and inspection of fishing vessels not exceeding 24.4 m in length that do not exceed 150 tons, gross tonnage and include rules for:

- For vessels more than 15 gross tonnage that are of closed construction and employed in catching herring or capelin, Developing inclining experiments to indicate the stability of the vessel under the worst operating conditions with accumulated ice on topsides and rigging and at port, after discharge of cargo with 10% fuel, fresh water and stores remaining and accumulated ice on topsides and rigging; and
- For fishing vessels intending to operate in areas subject to icing, requirements for protective devices capable of being easily removed to restrict or reduce ice accretion.

Note: These regulations are currently under revision.

Large Fishing Vessels

[Large Fishing Vessel Inspection Regulations](#)

These regulations set out requirements for plan approval, all aspects of construction, stability, lifesaving equipment and periodic inspections.

[Cargo, Fumigation and Tackle Regulations \(SOR/2007-128\)](#)

Regulations following the loading, securing, carrying and unloading of various cargoes including bulk cargo, solid bulk cargo, dangerous goods, concentrates, grains, timber deck cargoes, etc. These regulations also include the procedures when ships unexpectedly and expectedly fumigate while not alongside, alongside, and while in transit. These regulations also cover the requirements that apply to tackle and rigging on a ship.