

# Ship Source Pollution Regimes (Canada) – A Primer

Peter J. Cullen\*

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## INTRODUCTION

This paper serves as a brief introduction to a subject that has occupied ship owners, operators, directors, investors, lenders, insurers, shippers/charterers, trade groups, environmentalists, legislators and lawyers for some time. Much as the *Exon Valdez* grounding in Alaskan waters in 1989 gave rise to the *Brander-Smith Report*,<sup>1</sup> which focused on Canada's ability to handle major oil spills (and the need for more oversight into tanker operations in Canadian waters) and led to changes in Canada's pollution laws, similar major foreign incidents have laid the groundwork for international co-operation in advancing structured pollution regimes for shipping.

Such co-operation has resulted in a body of international conventions developed through the International Maritime Organization ("IMO")<sup>2</sup> assisted, amongst other interested parties, by the Comité Maritime International ("CMI")<sup>3</sup> and many national maritime law associations.<sup>4</sup> A number of these conventions will be discussed in greater detail below. At the same time, trade associations have developed platforms to drive policy issues and garner support for "green" initiatives in Canadian waters and in bilateral arrangements.<sup>5</sup>

Ship source pollution is not limited to oil pollution. It may encompass a series of events, mishaps, circumstances and substances in respect of fossil fuels (oil and related petroleum products), hazardous and noxious substances and ballast water, not to mention recycling practices and wreck removal. One may go farther and include air particles (emissions and bulk cargo residues) and waste (sewage, garbage, etc.). While a number of these matters are discussed in this paper, due to its persistent and particularly harmful environmental characteristics (in terms of substance, duration, impact and clean-up cost), oil remains the principal source of concern.

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<sup>1</sup> Public Review Panel on Tanker Safety and Marine Spills Response Capability, *Final Report: Protecting Our Waters* (Ottawa: Minister of Supply and Services Canada, 1990), online: Fisheries and Oceans Canada <http://www.dfo-mpo.gc.ca/Library/117791.pdf>.

<sup>2</sup> International Maritime Organization: <http://www.imo.org/>. The IMO is a United Nations specialized agency tasked with the responsibility to improve the safety and security of shipping, including the mitigation of pollution risks.

<sup>3</sup> Comité Maritime International: <http://comitemaritime.org/>.

<sup>4</sup> See, by way of example, the work of the Canadian Maritime Law Association at [www.cmla.org](http://www.cmla.org).

<sup>5</sup> See Green Marine, [www.green-marine.org](http://www.green-marine.org), an organization based in Québec City, QC and Seattle, WA, composed of leading Canadian and US associations that represent more than 500 companies in the maritime sector. It promotes a voluntary environmental certification program for sectors of the North American marine industry. See also Highway H2O, [www.hwylh2o.com](http://www.hwylh2o.com), an initiative supported by the St. Lawrence Seaway Management Corporation (Cornwall, Ont.) and the Saint Lawrence Seaway Development Corporation (Washington, C.D.) in their drive to encourage shipping as a viable alternate to road and rail traffic for the transport of bulk cargoes, including liquid bulk.

## BACKGROUND

Canada is a confederation whose jurisdictions and powers are limited by the *Constitution Act, 1867*.<sup>6</sup> Also limited by this Act are the powers of the federal authority which has sole jurisdiction over navigation and shipping throughout the country's navigable waters, both internal and external.

Canada's authority over its external waters is limited to its territorial sea (12 NM from Canada's jurisdictional coastline) and the adjoining Exclusive Economic Zone (which stretches 200 NM beyond the jurisdictional coastline).<sup>7</sup> Such waters may be further extended depending on the nature of the underlying continental shelf.

Generally speaking, Canada's pollution laws apply to contamination on navigable waters, be they on fresh water or sea water (whether ice covered or not). Provincial and territorial pollution laws apply to non-navigable waters and provincial/territorial shorelines. On occasion such jurisdictions may overlap depending on the nature and effect of the contamination. Thus, charges under both the federal and provincial/territorial pollution statutes may be laid in connection with marine contamination. In Canada's arctic regions, this would include the province of Quebec's (and to a lesser degree the province of Newfoundland & Labrador's) northern non-navigable waters and shorelines, and the non-navigable waters and shorelines of the three territories – Nunavut, the Northwest Territories and the Yukon Territory – in addition to Canada's large expanse of arctic waters.

In 1985, Canada enacted the *Arctic Waters Pollution Prevention Act* ("AWPP")<sup>8</sup>, an Act that has since been made subject to Canada's principal oil pollution liability statute – the *Marine Liability Act* ("MLA")<sup>9</sup>. The AWPP prohibits the deposit of waste in arctic waters. The term "arctic waters" is defined<sup>10</sup> as the internal waters of Canada and the waters of the territorial sea of Canada and its exclusive economic zone, within the area enclosed by the 60<sup>th</sup> parallel of north latitude, the 141<sup>st</sup> meridian of west longitude and the outer limit of the exclusive economic zone, and essentially covers the arctic archipelago. As the international boundary between Canada and Greenland is less than 200 nautical miles from the baselines of Canada's territorial sea, the outer limit in that area is replaced by the international boundary. The term "waste" is broadly defined to cover any substance that, if added to water, would degrade or alter the quality of such water to an extent detrimental to their use by man or by any animal, fish or plant that is useful to man<sup>11</sup>. This definition parallels the definition of "pollutant" under the MLA<sup>12</sup>.

In 2014 the IMO completed its initial work on the Polar Code (*The International Code for Ships Operating in Polar Waters*)<sup>13</sup> by way of certain safety related requirements adopted by its

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<sup>6</sup> 30 & 31 Vict, c 3, ss. 91 and ff.

<sup>7</sup> *Oceans Act* SC 1996, c 31

<sup>8</sup> RSC 1985, c A-12.

<sup>9</sup> SC 2001, c 6.

<sup>10</sup> *Supra* note 8, s 2.

<sup>11</sup> *Ibid.*

<sup>12</sup> *Supra* note 9, s 47.

<sup>13</sup> International Maritime Organization, *International Code for Ships Operating in Polar Waters* (*Polar Code*), [2015] MEPC 68/21 at 3.

Maritime Safety Committee. In 2015 a number of environmental provisions were adopted by the IMO's Marine Environment Protection Committee (amendments to certain MARPOL and SOLAS provisions). The Polar Code is scheduled to come into force in 2017, with a transition period for current vessels (but mandatory for ships under construction). Transport Canada is currently studying how best to incorporate provisions of the Polar Code into domestic legislation. Under consideration is a proposed repeal and replacement of the regulations under the AWPP – essentially updating the regulations in accordance with the safety and environmental provisions of the Polar Code.

## **OIL POLLUTION**

Canada is a signatory to a number of international conventions relating to oil pollution, including the *International Convention for the Prevention of Pollution from Ships, 1973, Protocols of 1978 and 1997*, the *International Convention on Oil Pollution Preparedness Response and Cooperation, 1990*, and the *International Convention on Civil Liability for Bunker Oil Pollution Damage, 2001*. These Conventions have been incorporated into federal legislation in whole or in part under the *Canada Shipping Act* (“CSA”) and the MLA<sup>14</sup> – occasionally with some modifications (some of which are more fully described below) – and apply in Canada's navigable waters. In essence, they establish the principle that the ship (and its interests), as the polluter, sits on the front line of liability.

An important modification in the MLA is that the liability rules of the *Civil Liability Convention* apply to all ships that cause oil pollution, with special rules in Division 1 of the MLA in respect of "convention ships" – tankers carrying persistent oil in bulk as cargo. The liability of non convention ships is found in Division 2 of the MLA, where "oil" is defined in broader terms as meaning oil of any kind or in any form (including petroleum, fuel oil, sludge, oil refuse and oil mixed with wastes – but not dredged spoil). Also, a "ship" is defined as any vessel or craft designed, used or capable of being used (either solely or partly) for navigation, without regard to its method of propulsion or lack of propulsion (and includes stranded, sunk or wrecked vessels). The difference between Division 1 and 2 vessels is also relevant in terms of access to the IOPC Fund (limited to spills involving convention vessels under Division 1).

Pollution under the MLA (Division 1 or 2) essentially gives rise to strict liability (not dependent on proof of fault or negligence) for oil pollution damage (including any damage as a result of impairment to the environment and the costs of reasonable measures of reinstatement) as well as the costs and expenses incurred by the federal Minister of Fisheries and Oceans (an authorized response organization under the CSA,<sup>15</sup>) or others in respect of measures taken to prevent, repair, remedy or minimize oil pollution damage. This includes the Minister's reasonable costs of monitoring a spill and clean up efforts. As the Canadian Coast Guard (and its fleet of ice breakers, tenders and patrol vessels) and Fisheries Canada (and its fleet of patrol and inspection vessels) report to the Minister, it is these entities who are generally engaged in such matters.

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<sup>14</sup> *Canada Shipping Act*, SC 2001, C.26, for the MLA See *Supra* note 10, Schedules 5, 6, 7 and 8.

<sup>15</sup> *Supra* note 15

The CSA sets forth the frame work for pollution prevention and response measures and for enforcement <sup>16</sup>. In respect of oil, ships are required to have an arrangement in place with a recognized (certified) response organization that will adequately deal with the total quantity of oil (both as cargo and fuel) carried on board, and in respect of the waters navigated. The ship is also required to carry a declaration in due form which identifies the name and address of the ship's insurers (for liability – pollution insurance coverage) and confirms that the response arrangement (and identifies the persons authorized to implement the arrangement) is in place. The CSA requires oil handling facilities (operators) to have similar arrangements / declarations in place.

The authority and practice of pollution response officers is also set forth in the CSA <sup>17</sup>. The officer, on reasonable belief that a ship might discharge, or might have discharged, a pollutant may, inter alia, direct the ship to moor or anchor, may board and take samples, may declare an emergency zone, may direct any person to provide reasonable assistance or information (log books, etc.) and may use any computer system or data processing system to examine data, etc. The officer may also detain a ship.

The CSA empowers the Minister of Fisheries and Ocean, on reasonable belief that a ship has discharged, is discharging or is likely to discharge a pollutant, to take measures to repair, remedy, minimize or prevent pollution damage. The Minister may monitor measures taken by the ship's interests in respect of any pollution (actual or anticipated) and may direct such interests to take any needed measures. The Minister may also step in and take over the cleanup. Canada has also enacted portions of the *1992 International Oil Pollution Compensation Fund*, ("**IOPC Fund**") and the *1992 Civil Liability Convention and the 2003 Supplementary Fund Protocol*<sup>18</sup> through the MLA. Under Part 6 of the MLA shipping interests are entitled to limit their liability for pollution damage (including preventive and remedial measures) in certain instances. Thus where claims exceed such limitation amounts (which ordinarily are funded by the ship's interests, including its liability insurers) recourse may be had to the IOPC Fund or, in certain instances to Canada's Ship-source Oil Pollution Fund ("**SOPF**")<sup>19</sup> which is administered by a federally appointed Administrator. These Funds collect contributions from shippers to ensure that at the end of the day there is a fund of last recourse.

Canada's Admiralty Court, the Federal Court, has *in rem* jurisdiction in respect of navigation and shipping matters. It is a national admiralty court that sits across the country and it is the Admiralty Court <sup>20</sup> referred to in the MLA in respect of limitation proceedings and related claims for pollution matters under the Fund regimes.

Additional relevant pollution statutes, which have occasionally been applied where there are overlapping federal departments or overlapping jurisdiction with provincial/territorial non navigable waters or shorelines, include (by way of example) the federal *Migratory Birds*

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<sup>16</sup> *Supra* note 15, Part 8.

<sup>17</sup> *Supra* Note 15, Part 9.

<sup>18</sup> The International Oil Pollution Compensation Funds: <http://www.iopcfunds.org/about-us/legal-framework/>. See also the MLA, *Supra* note 10, Parts 6 and 7 and Schedules 5, 6, 7 and 8.

<sup>19</sup> Ship-source Oil Pollution Fund: <http://www.ssopfund.ca/>.

<sup>20</sup> *Supra* note 10, s.2

*Convention Act, 1994*<sup>21</sup>, the *Canadian Environment Protection Act, 1999*<sup>22</sup>, Newfoundland and Labrador's *Environmental Protection Act*<sup>23</sup> and *Nova Scotia's Environment Act*<sup>24</sup>. These statutes generally provide that oil pollution constitutes a strict liability offence (without proof of fault or negligence) and (like the MLA) generally target the owner, custodian or person who had the charge, management or control of the polluting substance (such as the shipowner or bareboat charterer). Some reach further and hold that the directors or officers of a company that commits an offence may be presumed to have participated in the offence unless they can establish that they exercised due diligence and took all necessary precautions to prevent such offence.

## HAZARDOUS AND NOXIOUS SUBSTANCES

To cover those products not subject to the "oil conventions", the IMO has developed a similar strict liability regime for noxious or dangerous substances. These include liquefied gases, liquid substances with certain flash points, harmful products carried in containers and bulk solid materials possessing chemical hazards. Recent studies have demonstrated increased traffic in the number of container ships carrying packaged HNS as well as growth in the number of chemical tankers and LNG and LPG tankers. The IMO reports that some 2,000 different "types of HNS" are regularly transported by sea, and some 200 million tonnes of chemicals are traded annually.<sup>25</sup> Typically known as the "*HNS Convention*"<sup>26</sup>, this regime provides a structure to compensate parties damaged through the international or domestic carriage by sea of qualifying substances not covered by the *Civil Liability Convention* or the *Bunker Convention*. Once the Convention comes into force (only eight countries have signed the convention to date – 12 are required), receivers of "contributing cargo" will be required to contribute to the HNS Fund. As with the oil conventions, The HNS Convention upholds the principle that the "polluter pays".

The Convention sets out a prevention, preparedness and response regime (as we see in the CSA), and a frame work for liability and compensation (as in the MLA). The ship's interests are the first to pay (under a similar strict liability regime up to a maximum limit, supported by compulsory insurance) with a compensation fund sitting atop financed through contributions paid by receivers of HNS.

While the Convention has yet to come into force, (it is anticipated that Canada will be in a position to ratify the Convention in 2018) the MLA currently obliges receivers of certain HNS cargoes to report to the Minister of Transport and to the SOPF Administrator. New reporting requirements were recently published by Transport Canada in draft form and are under review by stakeholders.

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<sup>21</sup> SC 1994, c 22.

<sup>22</sup> SC 1999, c 33.

<sup>23</sup> SNL2002, c E-14.2.

<sup>24</sup> NS 1994-99, C.1

<sup>25</sup> See The HNS Convention – Why it is Needed, IOPC Funds – [www.hnsconvention.org](http://www.hnsconvention.org).

<sup>26</sup> The International Oil Pollution Compensation Funds, *The HNS Convention*, [2010] online: <http://www.hnsconvention.org/>. The full title is *The International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, 1996*.

## BALLAST WATER

In 2004, the IMO adopted *The International Convention for the Control and Management of Ships Ballast Water and Sediments*.<sup>27</sup> Recently, with the ratification of the Convention by Finland (Canada ratified the Convention in 2010), the required thresholds to trigger entry into force (30 states with 35% of the world shipping tonnage) were achieved. Thus it will come into force in September, 2017.

The Convention is designed to control the spread of invasive aquatic species picked up in ballasting operations in foreign waters and subsequently transferred to domestic waters. In Canada this has led to a conflagration of "zebra mussels" and other invasive species, particularly in the Great Lakes. With few known predators such species, if left unchecked, can interfere (at times destroy) elements of such waters' ecosystems.

Canada currently has a strong Water Ballast Program<sup>28</sup>, and the implementation of the Convention places Canadian shipping interests in a delicate position. The U.S. has not signed the Convention, and its several border states (and Ports) on the Great Lakes have adopted different criteria to handle such ballast water issues. A further challenge has risen on the technical side. The fresh water and cold temperatures of the Great Lakes may not permit the tested technology used in other parts of the marine world to properly function. Thus Canadian shipping interests face the prospect of reporting to several masters with uncertain requirements or solutions.

International shipping's major concerns with this Convention have aptly led their leaders to urge uniformity and for governments to act on the "ballast water chaos".<sup>29</sup> Locally, Transport Canada is trying to find a solution that achieves the Convention's goals.

## SHIP RECYCLING AND WRECK REMOVAL

To ensure a secure (from a safety perspective) and environmentally sound regime to recycle ships at the end of their operational lives, in 2009 the IMO adopted the *Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships*<sup>30</sup>. The goal is to reduce unnecessary risk to human health, safety and the environment in the scrapping of vessels, including oil rigs and related oil platforms. Typically older ships contain quantities of environmentally hazardous substances including asbestos, heavy metals, hydro carbons, ozone-depleting chemicals and related toxins. The Convention provides guidelines to inventory hazardous materials and to develop suitable ship recycling plans and recycling facilities to mitigate health and pollution hazards and document recycling steps and adherence to best

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<sup>27</sup> International Maritime Organization, *International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea 1996, with Protocol of April*, [2010].

<sup>28</sup> Transport Canada, *Discussion Paper : Canadian Implementation of the Ballast Water Convention* (Ottawa: Transport Canada, 2012). See also the *Ballast Water Control Management Regulations*, SOR/2011-237 (under the CSA).

<sup>29</sup> See International Chamber of Shipping, *Press Release* (<http://www.ics-shipping.org/news/press-releases/view-article/2016/09/08/urgent-need-for-governments-to-act-on-ballast-water-chaos>).

<sup>30</sup> International Maritime Organization, *The Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships*, [2009] SR/CONF/45.



environmental practices. In addition, parallel guidelines have been established in respect of the inspection, survey and certification of ships (to disclose and record hazardous materials).

The Convention requires adoption by 15 States, representing 40% of the world merchant shipping tonnage, before it enters into force. While it has yet to come into force its guidelines have increasingly been adopted by shipowners, and compliant recycling facilities are developing. Although not strictly part of such "recycling" efforts, the IMO has also turned its sights onto "wreck removal" issues. *The Nairobi International Convention on the Removal of Wrecks, 2007*<sup>31</sup> provides a structure for the prompt and effective removal of shipwrecks (and cargoes) located beyond territorial seas that may otherwise adversely impact marine and coastal environments.

*The Nairobi Convention* establishes wreck reporting requirements, criteria for determining hazards to the environment and to navigation, measures to facilitate the removal of ships and cargo, liability provisions and insurance requirements in respect of damages and compensation (essentially strict liability, with certain exceptions, on the part of the ship's interests for the cost of locating, marking and removing wrecks and for remedial efforts).

These Conventions have yet to be adopted in Canada. Nevertheless they are on the radar screen and shipping interests are reviewing potential implications from an operational, environmental and insurance point of view.

## CONCLUSION

Global trade increasingly requires the carriage of hazardous commodities / materials by sea over long distances potentially putting the marine venture, human health and the environment at risk. Diligence, new technology and practical co-operation through better practices are mitigating factors but without uniform standards and co-ordinated enforcement, will only go so far. Industry leaders, stakeholders and governments, through the IMO and other supporting institutions, must continue to take the lead in advancing broad uniformity and enforcement efforts to ensure that an elevated standard of pollution prevention and environmental safety is continuously sought, in balance with trade necessities, on a priority basis. While enormous advancements have been made, the "greening" of the shipping industry to achieve and maintain best practices and common standards at large remains an ongoing work in progress.

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<sup>31</sup> International Maritime Organization, *Nairobi International Convention on the Removal of Wrecks*, [2007].