

Why Two Old Ferries went to India: A Critical Review of the Canadian Ship-Recycling Legal Regime

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MV Joseph and Clara Smallwood and MV Caribou

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"If we seek to improve the health of this planet we must look beyond our own shores." Shiels, 2013

About the Conference:

Students of the 2011-2012 **Marine Affairs Program (MAP)**, Dalhousie University and WWF were pleased to invite students, faculty and the public to participate in the Sustainable Ocean Management and Development (SO-MaD) Conference on March 30th and 31st at Dalhousie University. The conference centered on the goals and objectives related to oceans at the 2012 UN Conference on Sustainable Development (UNCSD), also known as RIO + 20.

The aim of the Sustainable Oceans Conference 2012 was to provide participants with the opportunity to critically assess how well previous commitments, goals and targets related to coasts, oceans and island states have been met by the world's community. Through key note speakers, panel discussions, poster and oral presentations, participants identified and addressed new and emerging challenges to sustainable ocean management. In this way, the Marine Affairs Program, Dalhousie and WWF can work together to find solutions that address a range of issues from the threats facing endangered species and habitats, to the impacts of climate change on ocean ecosystems, to the future of fishing and our coastal economies.

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The organising committees of the Sustainable Oceans 2012 Conference would also like to thank our other supporters:



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1.0 Introduction

The ship recycling industry has attained some infamy for its dangerous working conditions and environmentally harmful practices; attracting the disparaging title of “shipbreaking”. This negative attention is not warranted for industry participants engaged in responsible ship recycling. However, the label is understandable given conditions present in certain developing nations; particularly India, Pakistan, and Bangladesh. These States afford ship recyclers with a cheap labour force, lax environmental regulations and enforcement, and amenable coastal features, the combination of which makes for lucrative trade opportunities. Corrective efforts by national and foreign actors are complicated by local industries’ dependence on existing conditions. Government regulation which aims to improve working conditions tends to stifle the industry,¹ thereby depriving local economies of financial profits, employment opportunities, and material resources.

One trademark “shipbreaking” practice is that of beaching and dismantling vessels directly in the marine environment – specifically in shallow, expansive tidal zones such as mudflats. The practice of beaching causes harm because hazardous substances contained in ships (such as asbestos, ammonia, chlorofluorocarbons, oily residues and lead) are released into the coastal environment.² This phenomenon has been well documented³ and samples of beached ships are easily viewable by way of satellite imagery (i.e. Google Earth⁴).

In light of the environmental challenges associated with certain ship dismantling practices this paper seeks to evaluate both the status of Canada’s role in “shipbreaking” and also Canada’s international obligations in relation to ship recycling. This topic is related to the Rio +20 objectives of assessing progress toward international agreements and addressing new and emerging challenges. This paper will begin by reviewing Canada’s treaty obligations with respect to ship recycling and will then survey domestic legislation to determine the current status of Canadian laws. This survey will be followed by a case study involving two end-of-life ferries. The paper will conclude with recommendations as to how the existing legal framework might be improved.

¹ This phenomenon was recently described in an article in The Economist: “Ship breaking in Bangladesh: Hard to break up” (27 Oct 2012), online: The Economist <<http://www.economist.com/news/asia/21565265-controversial-industry-says-it-cleaning-up-its-activists-still-want-it-shut-hard-break>>.

² Amy E. Moen, “Breaking Basel: The elements of the Basel Convention and its application to toxic ships” (2008) 32 *Marine Policy* 1053-1062 at 1053.

³ Tony George Puthucherril, *From Shipbreaking to Sustainable Ship Recycling: Evolution of a Legal Regime* (Leiden: Martinus Nijhoff, 2010) at 36-37; Frederico Demaria, “Shipbreaking at Alang-Sosiya (India): An ecological distribution conflict” (2010) 70 *Ecological Economics* 250; Md. Saiful Karim, “Environmental Pollution from the Shipbreaking Industry: International Law and National Legal Response” (2009-2010) 22 *Geo. Int’l Envtl. L. Rev.* 185 at 188.

⁴ See for example, the shipbreaking yards near Alang, India.

2.0 Canadian Context

2.1 Shipping industry

Canada is framed by the longest coastline in the world and boasts an active and profitable shipping industry.⁵ According to Transport Canada, this country's international maritime trade was worth \$170 billion in 2010.⁶ As of January 3, 2006, there were 6,592 commercial vessels and 20 crown corporation vessels registered in Canada.⁷ The total number of registered ships was 46,119 (including government, crown corporation, pleasure crafts, commercial, non-fishing, and fishing).⁸ Canada is a founding member of the International Maritime Organization (IMO) and “is represented on all the IMO committees and subcommittees.”⁹

In May 2009, Canada signed the International Convention for the Safe and Environmentally Sound Recycling of Ships along with 58 other IMO members. At that time, Transport Minister John Baird was quoted as saying:

The Government of Canada welcomes the adoption of this international Convention which is a significant step forward in protecting workers involved in ship recycling [...] It also protects the environment by limiting the release of hazardous materials used in the building and dismantling of ships.¹⁰

In 2010, the IMO Assembly elected Canada as a member of the IMO Council for the 2010-2011 biennium as one of the “10 States with the largest interest in international seaborne trade.”¹¹

⁵ “Canada: Committed to the Goals of the International Maritime Community” *Transport Canada* (12 August 2011), online: <<http://www.tc.gc.ca/eng/marinesafety/tp-tp14916-menu-182.htm>>.

⁶ *Ibid.*

⁷ “Ships Statistics” (3 January 2006), Transport Canada, online: <<http://www.tc.gc.ca/media/documents/marinesafety/stats2006.pdf>>.

⁸ *Ibid.*

⁹ *Supra* note 5.

¹⁰ “Canada Signs International Ship Recycling Convention” *Transport Canada* (27 May 2009), online: <<http://www.tc.gc.ca/eng/mediaroom/releases-nat-2009-09-h073e-4336.htm>>.

¹¹ “Assembly elects new 40-Member Council” *IMO News*, (2010) Issue 1 at 7 online: <http://www.imo.org/mediacentre/newsmagazine/documents/2010/imo_news_no1_10.pdf>.

2.2 Ship recycling

The Canadian ship recycling industry has an annual throughput of 25,000 light displacement tons (LDT),¹² with a total annual capacity of 115,000 LDT and an estimated 90,000 LDT of underutilized capacity.¹³ Canada's ship recycling capacity is comparable to that of the United Kingdom, which is estimated at 150,000 LDT, but is significantly smaller than Turkey's, which is estimated at 900,000 LDT.¹⁴

The primary Canadian ship recycling facilities are located on the shores of the Great Lakes and are operated by Marine Recycling Corporation and its parent/sister company, International Marine Salvage Inc. According to its website, the Marine Recycling Corporation (MRC) “operates two vessel recycling/conversion facilities, both in Easter Lake Erie, at Port Colborne and Port Maitland, Ontario.”¹⁵ MRC boasts that it is “the world's first ISO 14001 Certified ship recycling company” and that its “personnel are well experienced at [...] ship recycling, [...] hazardous waste removal, transportation and disposal, PCB removal, CFC removal, asbestos and mould remediation/encapsulation, vessel remediation, fuel/oil/oily water cleanup & recycling, sectional dismantling and shore protection...”¹⁶ MRC is looking to expand its ship recycling operations to a location at the Sydport Marine Industrial Park in Cape Breton, Nova Scotia.¹⁷ According to Wayne Elliott, founder and business development officer for Marine Recycling, the company has been “talking to the military and to the coast guard and see[s] recycling opportunities as some of their vessels are put out of commission.”¹⁸

The Lake Erie facilities are accessible to vessels present in the Great Lakes west of Lake Ontario and to those small enough to pass through the Welland Canal lock system, which connects Lake Ontario with Lake Erie. The Basel Action Network found that “[a]ccording to records for 2011 total global scrap tonnage, 74% of all vessels

¹² According to Edward G. Hinkelman, “[o]ne displacement ton is equal to a long ton, or 2,240 pounds. [...] Light displacement tonnage is the displacement tonnage of an unloaded ship, while the dead weight tonnage is the weight that the ship can carry, or the difference between the loaded displacement and the light displacement tonnage.” (Source: *Dictionary of International Trade: Handbook of the Global Trade Community*, 6th ed. (Novato: World Trade Press, 2005) s.v. “displacement ton”.)

¹³ “Industrial Capabilities of North America: A Report on ‘Green’ Ship Recycling Capacity in the United States, Canada and Mexico” *Basel Action Network* (November 2012) at 13, online: <http://www.shipbreakingplatform.org/shipbrea_wp2011/wp-content/uploads/2012/11/North-American-Capacity_BAN_Final.pdf>.

¹⁴ *Ibid.* at 3.

¹⁵ “Marine Recycling Corporation: Recycling Obsolete Vessels in An Environmental Friendly Manner For Over 40 Years,” online: Marine Recycling Corporation <<http://www.marinerecycling.ca/>>.

¹⁶ *Ibid.*

¹⁷ Bill Power, “Sydport site eyed for recycling” (2 November 2011), online: *Herald Business* <<http://thechronicleherald.ca/business/28862-sydport-site-eyed-recycling>>.

¹⁸ *Ibid.*

scrapped globally could be accommodated safe passage through the locks.”¹⁹ If the Nova Scotia facilities develop as hoped it is possible they could accommodate vessels on the eastern side of the Canal and too large to pass through the locks.

3.0 International Regime: The Basel Convention and the Ban Amendment

3.1 The origins of the Basel Convention

Canada was one of the first signatories to the Basel Convention in 1989. According to its Introduction the treaty was adopted “in response to a public outcry following the discovery, in the 1980s, in Africa and other parts of the developing world of deposits of toxic wastes imported from abroad.”²⁰ In fact, the final draft came on the heels of 33 national bans on the import of hazardous wastes.²¹

Prior to 1989, a series of incidents had drawn attention to the need for international efforts to regulate the transboundary movement of hazardous wastes – particularly flowing from developed to developing countries. In what came to be known as the 1986 “Khian Sea” incident, thousands of tons of ash that had originated in the United States were deposited on a Haitian beach.²² The vessel the “Khian Sea” had entered the Haitian port with “a permit to unload fertilizer.”²³ After the Haitian government intervened, the waste was ultimately dumped in the Indian Ocean.²⁴ A similar event occurred in 1988 in the port city of Koko, Nigeria. In that case an Italian businessman “forged his cargo papers and bribed port officials” in order to deposit drums containing “3,800 tons of highly poisonous waste, including potentially lethal polychlorinated biphenyls (PCBs) at an open site.”²⁵ The waste, which had originated in Italy, was labelled as “relating to the business trade” and “residual and allied

¹⁹ “Industrial Capabilities,” *supra* note 12 at 13-14.

²⁰ *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal* 22 March 1989, 1673 U.N.T.S. 57 at 5 (Introduction), [Basel Convention], online: <<http://cop10.basel.int/Portals/4/Basel%20Convention/docs/text/BaselConventionText-e.pdf>>.

²¹ Jim Puckett, “The Basel Ban: A Triumph Over Business-As-Usual” *Basel Action Network* (1 October 1997), online: <http://www.ban.org/about_basel_ban/jims_article.html>.

²² Daniel Jaffe, “The International Effort to Control the Transboundary Movement of Hazardous Waste: The Basel and Bamako Conventions” (1995-1996) 2 ILSA J. Int'l & Comp. L. 123 at 123.

²³ Deanna L. Lewis and Ron Chepesiuk, “The International Trade in Toxic Waste: A Selected Bibliography of Sources” (1994) 1:2 Electronic Green Journal at 1.

²⁴ “About the Basel Ban/Chronology of the Basel Ban” *Basel Action Network (BAN)*, (2011), online: <http://www.ban.org/about_basel_ban/chronology.html>.

²⁵ *Supra* note 22.

chemicals.”²⁶ Italy ultimately sent two ships to retrieve the waste after an Italian freighter was seized by Nigerian authorities “pending a resolution of the waste issue.”²⁷

The Koko event prompted Nigeria to enact the Harmful Waste Decree 42 which “made it a criminal act, punishable by life imprisonment, to carry, deposit, transport, import, sell, buy or negotiate in trade of harmful waste within Nigeria territory.”²⁸ In spite of this legislation, efforts to import additional hazardous wastes have continued. According to Odubela et al., “there have been many attempts since 1988 to ship waste, toxic chemicals, and contraband chlorofluorohydrocarbons into the country.”²⁹ Odubela et al. provide several reasons for this trend:

- (1) the down turn in the economy, which is compelling industrialists to seek for cheap secondary raw materials and goods;
- (2) poor awareness of existing enforcement agencies and bottlenecks in the enforcement of the regulations; and
- (3) porous borders³⁰

In 1992, the same year the Basel Convention came into force, more than 3,000 tons of fertilizer containing “1,000 tons of ash from copper smelting furnaces” were sold to the Bangladesh government by an American chemical company.³¹ The lead-and-cadmium-containing fertilizer was subsequently “sold throughout Bangladesh and used on farms.”³² This final incident exemplifies the type of transaction the Convention is designed to address.

²⁶ *Supra* note 23.

²⁷ “Italy Agrees It Will Retrieve Toxic Waste Sent to Nigeria” *The New York Times* (24 July 1988), online: <<http://www.nytimes.com/1988/07/24/world/italy-agrees-it-will-retrieve-toxic-waste-sent-to-nigeria.html>>.

²⁸ Modoupe Taiwo Odubela, Soyombo, Oluronke, Adegbite, Femi, and Ogungbuyi, Kitan, “Transboundary Illegal Shipments of Hazardous Waste, Toxic Chemicals (Pesticides) Contraband Chlorofluorohydrocarbons: The Nigerian Experience” presented at the 4th International Conference on Environmental Compliance and Enforcement (April 1996) at 2, online: International Network for Environmental Compliance and Enforcement <<http://www.inece.org/4thvol2/odubela.pdf>>.

²⁹ *Ibid.*

³⁰ *Ibid.* at 1.

³¹ *Supra* note 22.

³² *Supra* note 23.

3.2 The text of the Basel Convention & parties' obligations

The primary goal of the Basel Convention is “[t]o protect, by strict control, human health and the environment against the adverse effects which may result from the generation and management of hazardous wastes and other wastes.”³³ The Convention has incorporated a number of mechanisms by which to achieve this goal. Laura Thompson, Legal Expert for the Secretariat of the Basel Convention, has summarized these mechanisms as follows:

- i. The control of the transboundary movement of hazardous wastes and other waste
- ii. Environmentally sound management (ESM) of hazardous wastes and other wastes
- iii. The prohibition to export wastes to non-Parties to the Convention unless bilateral, multilateral, or regional agreements or arrangements with non-Parties stipulate provisions which are not less environmentally sound than those provided for by the Convention.³⁴

As summarized by Ms. Thompson, “control” includes notification, written consent, confirmation of specified ESM in the contract with the disposer of wastes, a movement document, confirmed receipt of wastes, and disposal in accordance with terms of the contract.³⁵ Otherwise, the transfer is illegal.³⁶ For clarity, this means that Parties to the Convention (such as Canada) are bound to ensure that if hazardous wastes are transferred outside of the country they are subsequently disposed of in an environmentally sound fashion. This point is articulated in the Preamble to the Convention, which commits parties to the principle that the “[t]ransboundary movement of hazardous wastes and other wastes should be permitted only when the transport and the ultimate disposal of such wastes is environmentally sound.³⁷ The definitions of “waste”, “environmentally sound management” (“ESM”), and “state of export” are provided in Article 2 of the Convention:

³³ *Supra* note 19 (Preamble).

³⁴ Laura Thompson “Overview of the Basel Convention and Basel Protocol: History and Goals” Warsaw, Poland (18-20 January 2006), (PowerPoint Presentation) online: <<http://www.basel.int/Implementation/LegalMatters/LiabilityProtocol/RegionalWorkshops/PolandWorkshop/tabid/1536/language/en-GB/Default.aspx>>.

³⁵ *Ibid.*

³⁶ *Ibid.*

³⁷ *Supra* note 19 at 15.

1. “Wastes” are substances or objects which are disposed of or are intended to be disposed of or are required to be disposed of by the provisions of national law
...
8. “Environmentally sound management of hazardous wastes or other wastes” means taking all practicable steps to ensure that hazardous wastes or other wastes are managed in a manner which will protect human health and the environment against the adverse effects which may result from such wastes.
...
10. “State of export” means a Party from which a transboundary movement of hazardous wastes or other wastes is planned to be initiated or is initiated. (Emphasis added)

Examples of the material contents of ships that would qualify as hazardous waste for the purposes of the Basel Convention include asbestos, lead, mercury, copper, zinc, waste oils, etc. Categories of waste to be controlled are listed in Annex I and Annex VIII of the Basel Convention. A ship may not be entirely toxic in its entirety but may have constituent toxic parts. The determination of whether a particular substance qualifies as “waste” is critical in deciding whether the Convention is applicable. As will be discussed later in this paper, the question of whether an end-of-life ship constitutes “waste” has posed certain challenges.

The general obligations of Convention parties are provided in Article 4. Parties are obligated to minimize the generation of waste, to ensure that adequate disposal facilities are available, to minimize pollution related to waste management, to disallow the export of wastes to countries with bans in place, to provide information to concerned States, to prevent the import of wastes which are unlikely to be managed in an environmentally sound manner, and to cooperate with other parties to improve the ESM of wastes and to prevent illegal traffic. In addition, subsection 4(2)(d) requires that parties reduce the transboundary movement of hazardous wastes to a minimum:

2. Each Party shall take the appropriate measures to:

....

- (d) Ensure that the Transboundary movement of hazardous wastes and other wastes is reduced to a minimum consistent with the environmentally sound and efficient management of such wastes, and is conducted in a manner which will protect human health and the environment against the adverse effects which may result from such movement;

Article 4(3) states that illegal traffic in hazardous or other wastes is criminal. Under Article 4(4), parties are required to “take appropriate legal, administrative and other measures to implement and enforce the provisions of this Convention, including measures to prevent and punish conduct in contravention of the Convention.” Adherence to this section in predominantly dualist³⁸ countries like Canada requires the enactment of national legislation so as to bind domestic actors.

The Convention explicitly limits Parties’ freedom to trade and dispose of hazardous wastes. According to Article 4(5), Parties must not import or export waste to non-Parties:

5. A Party shall not permit hazardous wastes or other wastes to be exported to a non-Party or to be imported from a non-Party. (Emphasis added)

Further, as provided in Article 4(7)(a), each Party must “[p]rohibit all persons under its jurisdiction from transporting or disposing of hazardous wastes or other wastes unless such persons are authorized or allowed to perform such types of operations.” (Emphasis added) This means that Canada must prohibit the unauthorized transportation or disposal of hazardous wastes by Canadian persons.

Prior to exporting waste states are bound to exhaust domestic disposal options. This obligation is made clear by Article 4(9):

9. Parties shall take the appropriate measures to ensure that the transboundary movement of hazardous wastes and other wastes only be allowed if:

(a) The State of export does not have the technical capacity and the necessary facilities, capacity or suitable disposal sites in order to dispose of the wastes in question in an environmentally sound and efficient manner; or

(b) The wastes in question are required as a raw material for recycling or recovery industries in the State of import; or

³⁸ Dualism is a theoretical model that distinguishes international law from domestic law. According to dualism, international rules do not apply within a national context until they are first “transformed”; i.e. adopted by national and/or provincial legislatures through the passing of relevant legislation. For a lengthier discussion of this topic, see John H. Currie, *Public International Law*, 2^d ed. (Toronto: Irwin Law, 2008) at 220-224.

(c) The transboundary movement in question is in accordance with other criteria to be decided by the Parties, provided those criteria do not differ from the objectives of this Convention. (Emphasis added)

States have a duty to re-import exported wastes which are not managed in accordance with the Convention (Article 8). Illegal traffic is defined to include the transboundary movement of wastes “that results in deliberate disposal (e.g. dumping) of hazardous wastes or other wastes in contravention of this Convention and of general principles of international law” (Article 9(1)(e)). States must ensure that waste “deemed to be illegal traffic as the result of conduct on the part of the exporter or generator” is either returned or disposed of in accordance with terms of the Convention (Article 9(2)). If the fault lies with the importing State, it is that State’s responsibility to ensure the waste is disposed of properly (Article 9(3)).

Parties are expected to cooperate with each other to achieve the objectives of the Convention (Article 10). Meetings of the Conference of the Parties are to be held at regular intervals (Article 15). Should any party wish to withdraw from the Convention, the requirements for doing so are provided in Article 27.

3.3 The ban amendment to the Basel Convention

Following the introduction of the Basel Convention there was a growing awareness of the need to further limit the trade of hazardous wastes to developing countries. The Ban Amendment was therefore adopted at the third meeting of the Conference of the Parties (“COP”) in 1995 to provide for the “prohibition of exports of all hazardous wastes covered by the Convention [...] intended for final disposal, reuse, recycling and recovery from countries listed in annex VII to the Convention (Parties and other States which are members of the OECD, EC, Liechtenstein) to all other countries. (Emphasis added)”³⁹ By prohibiting the export of hazardous wastes to non-OECD countries, the Ban has the potential to decrease the amount of toxic wastes sent to these countries. It may also ease external pressures encountered by developing countries striving to maintain import bans. In the context of ship recycling, the Ban is significant because it could restrict trade in end-of-life ships to developing States including India, Pakistan, and Bangladesh.

Initial resistance to the Ban was followed by a period of inactivity; thus generating skepticism about whether it would ever enter into force:

³⁹ *Supra* note 19 at 6.

As of 20 August 2009, only 65 out of the 172 Parties to the Convention had ratified the Ban. [...]

The issue of the non-ratification of the Ban has become ‘emotional and over politicised’ to the extent that it is doubtful that it will ever be resolved.⁴⁰

However, notwithstanding this resistance, the Ban was transposed by the EU member states into their national legislation.⁴¹

After sixteen years of suspense, prospects for the Ban Amendment were revived at the tenth meeting of the COP. In Cartagena in October 2011, 178 Parties agreed to an early entry into force of the Ban pending its ratification by “68 of the 90 countries that were Parties to the Convention in 1995.”⁴² With 51 ratifications thus far, only 17 additional signatures are required and it is estimated that this requirement may be satisfied within two to three years.⁴³ Canada was amongst the signatories to the Ban Amendment, thus throwing its weight behind a prohibition on trade of hazardous wastes to non-OECD countries.

3.4 The Hong Kong Convention

According to Puthucherril, in spite of a “vast body of international hazardous waste management law that has relevance for ship dismantling [...] the shipping industry has consistently held the view that the Basel Convention tools are inappropriate to the business of dismantling ships.”⁴⁴ There has been, therefore, a sustained interest in developing instruments specific to the demands of the ship recycling industry. Happily, and quite distinctly from efforts to regulate ‘toxic trade’, strides have been taken toward the goal of developing just such a regulatory framework. Most significantly, the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships (“HK Convention”) was adopted in 2009 and is intended to provide a comprehensive regulatory regime to address the “design, construction, operation and preparation of ships so

⁴⁰ Alan Andrews, “Beyond the Ban – can the Basel Convention adequately Safeguard the Interests of the World’s Poor in the International Trade of Hazardous Waste?” (2009) 5:2 Law, Environment and Development Journal (2009) at 171, online: <<http://www.lead-journal.org/content/09167.pdf>>.

⁴¹ “Guidance Manual for the Control of Transboundary Movements of Recoverable Wastes” (2009) at 8, online: OECD <<http://www.oecd.org/dataoecd/57/1/42262259.pdf>>.

⁴² “Press Release: 178 Countries Agree to Let the Ban on Exports of Toxic Wastes to Developing Countries Become Law” (21 October, 2011), online: <Basel Action Network http://www.ban.org/wp-content/uploads/2011/10/COP_10_PR_A4.pdf>.

⁴³ *Ibid.*

⁴⁴ Tony George Puthucherril, *From Shipbreaking to Sustainable Ship Recycling: Evolution of a Legal Regime* (Leiden: Martinus Nijhoff, 2010) at 113.

as to facilitate environmentally sound recycling without compromising the safety and operational efficiency of ships.”⁴⁵ This Convention has not yet entered into force.

It is possible that the HK Convention may fill the gap – the question of whether to treat ships as waste – because *unlike* the Basel Convention, it specifically establishes a system for ship recycling.⁴⁶ There will be no question as to whether a ship (at least in basic form) is covered by the HK Convention. However, as highlighted by Puthucherril, the HK Convention “evades the most contentious issue in shipbreaking, *i.e.*, the prior removal of hazardous wastes before the ship is sent for recycling.”⁴⁷ The absence of this element in the treaty could permit hazardous materials forming part of the ship to remain intact until final dismantling. In other words, hazardous materials could be left as part of the ship, not to be removed prior to reaching their final destination. It appears, then, that the HK Convention’s treatment of issues associated with ship recycling is not exhaustive; there are lingering uncertainties with respect to hazardous wastes.

3.5 The interplay between the Hong Kong Convention and the Basel Convention

A preliminary assessment of the environmentally sound dismantling of ships was prepared by an Open-ended Working Group and presented at the tenth meeting of the COP.⁴⁸ The results of this assessment were distributed to the meeting of the COP and the draft decision was taken up by a Contact Group at the conference.⁴⁹ The parties disagreed as to whether the HK Convention established a level of control and enforcement equivalent to that of the Basel regime.

The International Maritime Organization (IMO) Platform for Ship Breaking noted in plenary that “the Hong Kong Convention does not reflect the primary obligation of the Basel Convention and does not prevent the transboundary movement of asbestos and hazardous materials.” Similarly, BAN noted that the HK Convention

⁴⁵ “Recycling of ships: the development of the Hong Kong Convention” (2011), online: International Maritime Organization <<http://www.imo.org/OurWork/Environment/ShipRecycling/Pages/Default.aspx>>.

⁴⁶ Nikos Mikelis “The Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships” (9 December 2010) (PowerPoint Presentation), online: International Maritime Organization <<http://www.imo.org/OurWork/Environment/ShipRecycling/Documents/2010-12-09%20%20UNCTAD%20On%20the%20Hong%20Kong%20Convention.pdf>>.

⁴⁷ *Supra* note 43 at 174.

⁴⁸ *Ibid.* at 112.

⁴⁹ “Summary of the Tenth Meeting of the Conference of the Parties to the Basel Convention” (24 October 2011) Volume 20:37, online: Earth Negotiations Bulletin <<http://www.iisd.ca/vol20/enb2037e.html>>.

allowed for the export of a “ship full of asbestos and PCBs.”⁵⁰ Concerns were expressed respecting a “fundamental disconnect” between support for the Ban Amendment and the HK Convention.⁵¹

The parties ultimately disagreed about whether the HK Convention provided “an equivalent level of control and enforcement to that established under the Basel Convention.” Therefore, while the COP encouraged parties to ratify the HK Convention “to enable its early entry into force” it also acknowledged “that the Basel Convention should continue to assist countries to apply the Basel Convention as it relates to ships”⁵² (Emphasis added). This decision affirms that the Basel Convention is still relevant with respect to ship recycling.

4.0 National Regime: Canadian Implementation of Basel and the Ban

4.1 Responsibility of implementation

The federal government has the responsibility to implement Canada’s treaty obligations. This responsibility is aptly described as follows:

In Canada, the federal government has the authority to negotiate and enter into international agreements. Cabinet approval is required to sign, ratify or accede to a new agreement. Generally, signature indicates the party’s intent to consider ratification in good faith. Canada typically does not ratify until all legal measures are in place domestically to ensure the agreement’s implementation at the time of entry into force. In some cases, this means developing and introducing new regulations under the Canadian Environmental Protection Act 1999 (CEPA 1999) or other existing legislation to comply with requirements of the agreement.⁵³ (Emphasis added).

Accordingly, several pieces of domestic legislation were introduced following Canada’s ratification of the Basel Convention in 1989.

⁵⁰ *Ibid.*

⁵¹ *Ibid.*

⁵² *Ibid.*

⁵³ “Related International Agreements” *Environment Canada* (23 August 2011) online: <<http://www.ec.gc.ca/lcpe-cepa/default.asp?lang=En&n=F6BE7154-1>>.

4.2 Relevant acts and regulations

As explained by Amy E. Moen, “[t]he only true legal obligation taken on by States in agreeing to the [Basel] Convention is that they will [...] develop and implement domestic legislative frameworks and economic capacity to minimize waste generation, restrict trade in hazardous wastes, and manage waste disposal.”⁵⁴ As mentioned previously in this paper, Canada’s general obligations as a party to the Basel Convention are provided at Article 4 of the Convention text. Domestic legislation currently representing Canada’s obligations under the Basel Convention includes the following:

Canadian Environmental Protection Act, 1999, SC 1999, c 33

Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations, SOR/2005-149

Transportation of Dangerous Goods Act, 1992, SC 1992, c 34

Transportation of Dangerous Goods Regulations, SOR/2001-286

PCB Waste Export Regulations, 1996, SOR/97-109

The relevance of these laws and regulations is summarized below:

(i) The *Canadian Environmental Protection Act* affords the Governor in Council, on the recommendation of the Ministers, discretion to make regulations with respect to the countries from which toxic substances may be exported and the manner under which such export may occur (Section 93(1)(j), (k)).⁵⁵ Under Section 101 of *CEPA*, no person shall export a substance listed in the Export Control List in Schedule 3 without providing notice to the Minister. Examples of such substances include DDT, mercury compounds, and tetraethyl lead. Under Section 100(b) of *CEPA*, the Minister may modify the list of substances requiring notification or consent of an importing country in accordance with international agreements governing the substance(s) in question.

(ii) Canada enacted the *Export and Import of Hazardous Waste Regulations* (EIHWR) in 1992, which was replaced by the *Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations* (EIHWHRMR) in 2005. During consultations held in January 2003 Environment Canada

⁵⁴ *Supra* note 2 at 1055.

⁵⁵ *CEPA* at 93(1)(j), (k).

proposed that the EIHWRR should be revised to “ban exports to non-OECD countries of hazardous wastes for final disposal.”⁵⁶ At this time, the objective of the regulation was framed as follows:

to protect Canada’s environment from the potential risks posed by transboundary movement in hazardous wastes and hazardous recyclable materials and to implement Canada’s international obligations to protect the environment from other countries from uncontrolled exports of these wastes and recyclable materials from Canada. (Emphasis added)

According to Environment Canada, the new Regulations “work toward ensuring that hazardous wastes and hazardous recyclable materials are managed safely and in a manner that protects the environment and human health.”⁵⁷ Section 9 of the Regulations provides the criteria by which an exporter may export hazardous waste and hazardous recyclable material (as defined in sections 1 and 2). The Regulations are directly linked to the Basel Convention. In its 2009-2010 Annual Report, Environment Canada confirmed that through these Regulations, “Canada implements its international obligations as a party to the Basel Convention.”⁵⁸

Included are materials such as refrigerant gas, compressed coal gas, chlorine, compressed oil gas, liquefied petroleum gases, “coating solution (includes surface treatments or coatings used for industrial or other purposes such as vehicle undercoating, drum or barrel lining),” paint, paint related material, coated aluminum powder, liquid wood preservatives, lithium, lead acetate, lead cyanide, mercury bromides, mercury iodide, compressed methane, compressed argon, etc. (These examples are drawn from Schedule 1 of the *Consolidated Transportation of Dangerous Good Regulations including Amendment SOR/2011-239* in accordance with section 1(1)(b) of the EIHWRR.) Amongst other things, the importing country must be a party to the Basel Convention, the Canada-USA Agreement or OECD Decision C(2001)107/Final.⁵⁹

⁵⁶ “Suggested Amendments to EIHWRR – National Stakeholder Consultations Summary Report” Environment Canada. Consultations occurred in 2003. Paper last updated online: 12 January 2011 at 4.1, online: <<http://www.ec.gc.ca/lcpe-cepa/default.asp?lang=En&n=FA0481FE-1&offset=1&toc=show>>.

⁵⁷ “Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal” (20 May 2010), online: Environment Canada <<http://www.ec.gc.ca/gdd-mw/default.asp?lang=En&n=1C6F3B4C-1>>.

⁵⁸ “CEPA 1999 Annual Report for April 2009 to March 2010” Environment Canada (23 August 2011), online: <<http://www.ec.gc.ca/lcpe-cepa/default.asp?lang=En&n=39419FFB-1&offset=8&toc=show>>.

⁵⁹ Regulations at Section 9(a)(ii).

The OECD Decision only applies to transboundary movements of waste where both the importing and exporting states are OECD member countries and the wastes are “destined for recovery operations.”⁶⁰

(iii) The *Transportation of Dangerous Goods Act* and Regulations provide for the safe transportation and handling of dangerous goods. This federal legislation operates in conjunction with provincial statutes such as the *Dangerous Goods Transportation Act*, RSNS 1989, c 119.

(iv) The *PCB Waste Export Regulations* provide that PCB waste can only be exported to the United States and only for the purpose of disposal.⁶¹ PCB waste includes “any PCB liquid, PCB solid, PCB mixture, PCB equipment, PCB-contaminated soil or electrical equipment, that is no longer being used in Canada.”⁶²

Taken together, these regulations encompass the types of hazardous materials present in end-of-life ships. However, no one regulation is sufficiently broad to cover an entire ship. Therefore, at present, none of these regulations are directly applicable to ships containing hazardous materials.

4.3 Application to shipping

(i) Is a ship “waste” under Canadian law?

The notion that a ship could be deemed something other than a ship is legally problematic. This is because of the special legal status enjoyed by ships of all nationalities. According to Canadian maritime law, “[a] ship that is moored and awaiting dismantling continues to qualify as a ship until the ship breaking takes place.”⁶³ The Federal Court has held that “once qualified as a ‘ship’ because it was designed for such use, the property never loses its classification as a ship within the meaning of the *Federal Court Act*, regardless of changes to it unless it be taken apart to the extent that the separated components would merely be individual objects which were used in the construction of the ship.”⁶⁴ Therefore, under Canadian law, even if a ship has reached the end of its lifetime, its legal identity as a ship remains intact.

⁶⁰ Guidance Manual (OECD) at 11.

⁶¹ PCB Waste Export Regulations, 1996, SOR/97-109 at section 3.

⁶² PCB Waste Export Regulations, 1996, SOR/97-109 at section 1.

⁶³ Edgar Gold, Aldo Chircop and Hugh Kindred, *Maritime Law*, (Toronto: Irwin Law, 2003) at 152.

⁶⁴ *Hamilton Harbour Commissioners v. The A.M. German*, [1973] F.C. 1254.

The challenge this raises in the context of the Basel Convention is how to characterize a ship's material as waste without offending the legal identity of the ship itself. The solution adopted by the European Community has been to allow for a ship to take on dual identities. This is indicated in the Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste:

(35) It is necessary to ensure the safe and environmentally sound management of ship dismantling in order to protect human health and the environment. Furthermore, it should be noted that a ship may become waste as defined in Article 2 of the Basel Convention and that at the same time it may be defined as a ship under other international rules. It is important to recall that work is ongoing, involving interagency cooperation between International Labour Organisation (ILO), International Maritime Organisation (IMO) and the Secretariat of the Basel Convention, to establish mandatory requirements at the global level ensuring an efficient and effective solution to the problem of ship dismantling.⁶⁵

(Emphasis added).

This dual-identity approach makes it possible to characterize a ship as waste before it has been completely dismantled.

The European approach accords with the decision reached at the seventh meeting of the COP. By decision VII/26, it was held that “a ship may become waste as defined in Article 2 of the Convention and that at the same time it may be defined as a ship under other international rules.”⁶⁶

As far as the author is aware the dual-identity approach has not yet been adopted by Canadian authorities. Therefore, an end-of-life ship cannot presently be classified as waste under Canadian law.

(ii) Ship-specific legislation

At present, there is no Canadian federal legislation that specifically addresses ship recycling.

⁶⁵ “Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste” Official Journal of the European Union (12 July 2006), online: <<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:190:0001:0098:EN:PDF>>.

⁶⁶ “Matters related to the implementation of the Convention: legal, compliance and governance matters: environmentally sound dismantling of ships” UNEP/CHW.10/18 at 4, online: <<http://basel.int/cop10/data/COP10-Pre-Session/documents/18e.pdf>>.

5.0 National Practice

5.1 What has been happening in Canada?

Environment Canada has defined hazardous wastes and hazardous recyclable materials as “those with properties such as flammability, corrosiveness, or inherent toxicity[;] …wastes and materials [that] can pose a variety of risks, from skin damage on contact to the contamination of ground water, surface water, and soil as a result of leaching into the environment.”⁶⁷ According to Environment Canada, “it is with OECD member countries that most Canadian hazardous waste transactions destined for recovery/recycling take place.”

Maersk,⁶⁸ an international shipping company with subsidiary operations in Canada, claims it builds ships “to ensure a very high recycling ratio” and it has “developed procedures for safe and environmentally responsible ship recycling [... that] require a ship to be rigorously checked – via radiation surveys, hazardous material audits and sampling and other measures.”⁶⁹ According to its website, Maersk ensures chosen ship recycling facilities have “professionally trained staff and appropriate safety and environmental protection procedures in place.” At present, Maersk uses a facility in China that is ISO 14001 and OHSMS 18001 certified.⁷⁰ Maersk acknowledges that its practice has been to sell ships “long before the end of their service life, and consequently recycling ships has not been necessary.”⁷¹ However, Maersk claims that it endeavours to educate members of the industry about “ship recycling and ship materials.”⁷²

The information provided by Maersk highlights the challenge of the current regime. Companies with recycling policies that, by all appearances, meet the criteria of Canada’s international agreements may sell their ships to third parties before they are officially labelled as waste. Once the ships have left the hands of the original company, it is no longer that company’s responsibility to ensure that the ship or its materials are recycled responsibility. If the ships are in the hands of non-Canadian agents, it will be difficult for Canada to affect their ultimate fate.

⁶⁷ “The Canadian Environmental Protection Act, 1999 and Hazardous Waste and Hazardous Recyclable Materials” (26 Jan 2011), Environment Canada, online: <<http://www.ec.gc.ca/lcpe-cepa/default.asp?lang=En&n=2A241D76-1>>.

⁶⁸ Maersk is part of the worldwide conglomerate A.P. Moller – Maersk Group. For more information, see online: <<http://www.maersk.com/AboutMaersk/WhoWeAre/Pages/WhoWeAre.aspx>>.

⁶⁹ “Ship Recycling” online: Maersk <<http://www.maersk.com/Sustainability/EnvironmentAndClimate/Pages/ShipRecyclingAndWasteHandling.aspx>>.

⁷⁰ *Ibid.*

⁷¹ *Ibid.*

⁷² *Ibid.*

5.2 Case Study: MV Caribou and MV Joseph and Clara Smallwood

In 2011 two Canadian ferries that had been used to carry passengers between Nova Scotia and Newfoundland were retired. Marine Atlantic, the company that owned the ferries, claims it turned to an international broker (ICAP Shipping Ltd.) after no viable Canadian bids were received.⁷³ The ferries were subsequently purchased by buyers from the Marshall Islands and St. Vincent & Grenadines and then immediately resold to an Indian ship breaking company.⁷⁴ According to information provided on Marine Atlantic's website, “[t]he vessels were sold to two separate owners, one from the Republic of the Marshall Islands [and] the other from Saint Vincent and the Grenadines, for a total of \$7.675 million.”⁷⁵ Both the Republic of the Marshall Islands and Saint Vincent and the Grenadines are parties to the Basel Convention, but neither are OECD members. The money from the sale was to be returned to Marine Atlantic's shareholder, the Government of Canada.⁷⁶

The vessels left North Sydney, Nova Scotia in September, 2011 and the CBC reported that the vessels were beached in Alang in late October, 2011. The vessels were dismantled within several months of the Canadian sale.⁷⁷ According to Marine Atlantic, “one of the main conditions of condition of sale included a commitment that should either buyer decide to recycle the vessels, it be done at a yard with full green recycling facilities in compliance with IMO guidelines.”⁷⁸ In an interview with CBC Radio, Wayne Follett, President and CEO of Marine Atlantic, claimed that through a broker, the company was “having some monitoring conducted of that yard to see [...] how they do proceed to recycle the vessel and [...] whether they follow the green recycling rules.”⁷⁹ Mr. Follett acknowledged there was no evidence at the time he gave the interview (Nov 29, 2011) to suggest the shipbreaking yard in Alang did *not* meet the green recycling rules.⁸⁰

Two government ministers gave statements to the media concerning the sale. Stephen Fletcher, Minister of State for Transport claimed the sale of the ferries was an operational decision of Marine Atlantic and the

⁷³ “Information Note: Sale of the MV Caribou and MV Joseph and Clara Smallwood” Marine Atlantic (2011) at 1, online: <<http://www.marine-atlantic.ca/eng/pdfs/Information%20note%20vessel%20sale%20oct%202011%20final.pdf>>.

⁷⁴ Davene Jeffrey, “Ship recycler bemoans ferries’ fate” *Herald News* (2 November 2011), online: Chronicle Herald <<http://thechronicleherald.ca/novascotia/28704-ship-recycler-bemoans-ferries%20%99-fate>>.

⁷⁵ *Supra* note 72.

⁷⁶ *Ibid.*

⁷⁷ Daniel MacEachern, “Dismantling a legacy” Daily Business Buzz (20 March 2012), online: Daily Business Buzz <<http://www.dailybusinessbuzz.ca/Construction-%26amp-Transportation/2012-03-20/article-2934823/Dismantling-a-legacy/1>>.

⁷⁸ *Supra* note 72.

⁷⁹ “Marine Atlantic and the ship breaking yards of India” (29 November 2011) CBC Radio, online: <<http://www.cbc.ca/thecurrent/episode/2011/11/29/marine-atlantic-and-the-ship-breaking-yards-of-india>>.

⁸⁰ *Ibid.*

company had complied with international maritime organization guidelines. Mr. Fletcher stated: “the disposal of ships are operational decisions of Marine Atlantic...they complied with the international marine organization guidelines and once you’ve sold a ship it gets resold and resold.” He said that the primary responsibility of Marine Atlantic was to operate a reliable ferry service from the Mainland to Newfoundland and the company had achieved that in “spectacular form.” In response to a question about whether the federal government saw any responsibility for the ultimate fate of the ferries, Mr. Fletcher said “No.” In a dissenting position, Megan Leslie, NDP Environment Critic, voiced concern over the incident and said the government was responsible for not having “a policy to prevent this from happening.”⁸¹

Assuming that the two ferries contained hazardous waste, the occurrence of the third-party sales was in violation of the *Basel Convention*; nevertheless, the sale did not violate any Canadian laws. This is because Canada’s domestic legislation is not sufficiently broad to capture hazardous substances contained in vessels. In order for Canada’s domestic legislation to align with Canada’s treaty obligations, the legislation must be sufficiently flexible to capture all manners by which hazardous wastes are transferred to developing countries.

6.0 Assessment of national practice against national and international law

6.1 Analysis of the present regime

As provided by Article 26 of the 1969 Vienna Convention on the Law of Treaties: “Every treaty in force is binding upon the parties to it and must be performed by them in good faith.” Canada, as a signatory to the Vienna Convention, must therefore honour obligations flowing from the Basel Convention and endeavour to perform them in good faith.

If the Marine Atlantic ferries contained hazardous waste as defined under Basel, then the federal government’s denial of any responsibility for the sale of the Marine Atlantic ferries and their subsequent arrival in Alang indicates that Canada is failing to meet its international obligations. Under the Basel Convention, Canada is obligated to ensure that adequate disposal facilities are available, to minimize pollution related to waste management, to ensure that the movement of hazardous *and other* types of waste is reduced to a minimum, and conducted in a manner which will protect human health and the environment against adverse effects. Further, the Ban Amendment, ratified by Canada (though not yet in force), prohibits the transfer of hazardous wastes to non-OECD countries. Canada chose to sell the MV *Caribou* and MV *Joseph and Clara Smallwood* to the highest bidder, without regard for viable ship recycling options in Canada. In doing so, Canada failed to take

⁸¹ “Marine Atlantic and the ship breaking yards of India” *CBC Radio* (29 November 2011), online: <<http://www.cbc.ca/thecurrent/episode/2011/11/29/marine-atlantic-and-the-ship-breaking-yards-of-india/>>.

steps to minimize the transfer of hazardous wastes. Unless one adopts a narrow reading of the definition of waste that would not include vessels and would not accord with the European interpretation, Canada's performance is inexcusable.

7.0 Conclusion

The business of ship recycling involves a network of global actors, all operating within distinct but overlapping spheres. This interdependency plays across legal and economic realities, requiring States to act cooperatively and to honour their mutual commitments. Nevertheless, national implementation of treaty obligations has proven a slow process. Like other countries, Canada struggles to capture the spirit of its international agreements without compromising domestic freedoms.

The struggle to balance international obligations with domestic interests is typified by the hands-off approach taken with the sale of the MV *Caribou* and MV *Joseph and Clara Smallwood*. The trade of these ships conferred direct economic benefits to the Canadian government, without violating any explicit Canadian rules or obligations. The problem with this line of thinking is that we have simply grown too wise and the world has shrunk too small. With instant access to international media and telecommunications, Canadian citizens may be easily made aware of conditions across the globe. If we are indeed blind to the consequences of our actions then we are wilfully so.

Through its participation in the Basel Convention, and the Ban Amendment, Canada has committed to keeping its hazardous waste at home. A good faith approach to this commitment requires that we acknowledge the harmful contents of aging ships and ensure that they are recycled in an environmentally sound fashion. This may require that Canadian legislation be amended to prohibit the trade of end-of-life ships to non-OECD countries. It is possible that by taking such an approach Canada may suffer certain short-term economic losses. However, these losses must be considered in the context of a domestic ship recycling industry that is ripe for growth. Moreover, if Canada is not willing to pay the cost of honouring its treaty obligations then it should simply opt out.

7.1 Recommendations

Canada has several options by which to satisfy its international legal obligations: (1) Canadian ships could be dismantled by Canadian ship recycling companies, (2) hazardous waste could be removed prior to export, (3) Canada could impose trade restrictions (i.e. prohibitions or restrictions on sales of end-of-life ships) and (4) Canada could introduce penalties or other enforcement mechanisms which would apply to trade of hazardous wastes.

In order to align its domestic legal regime with its obligations under the Basel Convention, Canada must enact legislation inclusive of non-traditional forms of hazardous waste (i.e. defining end-of-life ships as a type of hazardous waste).

7.2 Conference application

Universities, environmental NGOs, and the Government of Canada must all be engaged in supporting the delivery of the Rio+20 vision for healthy oceans and related economies. This is particularly true when considering the environmental challenges associated with ship recycling. Universities have a role to play in conducting research on the hazardous contents of aging Canadian ships, methods of removing hazardous materials, alternative means of shipbuilding, and containment and remediation of shipbreaking beaches. NGOs should continue to investigate and report on environmental conditions at shipbreaking yards, review conference outcomes and State behaviour, and provide the public with accurate and up-to-date information. The Canadian Government should update Canadian legislation to address trade in end-of-life ships, address the question of whether and when ships qualify as “waste” or “hazardous waste,” restrict trade in end-of-life ships, and investigate ship recycling conditions.