



FACULTY OF LAW
Lund University

Timothy Carey

The Hong Kong International
Convention for the Safe and
Environmentally Sound Recycling of
Ships: Progress?

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Lars-Göran Malmberg

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Summary

Part 1 of this thesis will provide an introduction to the materials and method used in its preparation, delimitations and a detailed background into ship recycling.

Part 2 consists of a review of the international legal regime for ship recycling including an overview of key principles and a detailed review of the Basel and Hong Kong Conventions. Part 3 will compare the Basel and Hong Kong Conventions with the aim of describing in what ways the Hong Kong Convention constitutes progress and in what ways it falls short of the framework provided by the Basel Convention. In the conclusion, the author will determine whether or not the Hong Kong Convention satisfies the test in Article 11 of the Basel Convention by providing protections that are not less environmentally sound than those of the Basel Convention.

The Hong Kong Convention makes several important advances on the Basel Convention but it is plagued by a few apparent deficiencies. With that said, the Basel Convention also suffers from rather serious deficiencies when it comes to ship recycling. When considering a comparison of the two treaties in light of the principles of international environmental law, the author believes that the Hong Kong Treaty, taken as a whole, does provide for an equivalent level of protection as the Basel Convention. As a result, the Hong Kong Convention should replace the Basel Convention as the authoritative source of international law for ship recycling once it enters into force.

Definitions and Abbreviations

| | |
|----------------------|--|
| Basel Convention | Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal |
| COP | Conference of Parties to the Basel Convention |
| EPA | Environmental Protection Agency |
| EU | European Union |
| EU Treaty | The Maastricht Treaty Provisions Amending the Treaty Establishing the European Economic Community with a View to Establishing the European Community |
| GT | Gross tons |
| Hong Kong Convention | Hong Kong Convention for the Safe and Environmentally Sound Recycling of Ships |
| ILO | International Labor Organization |
| IMO | International Maritime Organization |
| MEPC | Marine Environment Protection Committee |
| OECD | Organisation for Economic Co-operation and Development |
| PCBs | Polychlorinated Biphenyls |
| PIC | Prior informed consent |
| Rio Declaration | Rio Declaration on Environment and Development |
| TBT | Tributyltin Compounds |

Technical Guidelines

Technical Guidelines for the Environmentally
Sound Management of the Full and Partial
Dismantling of Ships

UNCLOS

United Nations Convention on the Law of the
Sea

1. Introduction

1.1. Material and Method

As the Hong Kong Convention is a relatively new document that is yet to enter into force, and consideration of the relationship between the Hong Kong Convention and the Basel Convention is currently underway in the relevant regulatory bodies, there are to an extent a limited amount of resources available on the topic. As a result, the primary focus is on the text of the conventions, commentary provided by the regulatory authorities behind the conventions and parties to the conventions, and academic articles considering the issue and comparing the conventions. There is not as of yet any direct case law on the issue as the Hong Kong Convention has not yet entered into force. Citations from case law are, therefore, very limited and only for the purpose of elucidating some of the background concepts.

The methodology is primarily comparative with an analysis of the impact drawn from the results of comparing the two conventions. It does, in a sense, differ from a standard comparison of two legal instruments in that a key provision to the Basel Convention, Article 11, calls for such a comparison whenever the parties to the Basel Convention enter into a subsequent multilateral or bilateral agreement that intends to regulate an issue within the scope of the Basel Convention. If the subsequent agreement does not meet the test laid out in Article 11, then such agreement will be more or less ineffective as the Basel Convention's stricter standards will continue to govern. Hence, the comparison contained herein is a direct requirement of the analysis of the legal relationship between the two conventions. Additionally, a straightforward comparison would be inadequate due to the fundamental differences in the respective scopes of the two conventions. Therefore, an evaluation of the differences in light of some of the guiding principles of international environmental law is undertaken to determine to what extent one of the conventions can be said to be superior or equal to the other convention.

1.2. Delimitations

As the primary purpose of this thesis is to determine the legal relationship between the Hong Kong Convention and the Basel Convention based on a comparison and analysis applying the Basel Convention's Article 11 test for subsequent agreements among parties, the scope of this thesis is limited accordingly. For example, the Basel Convention is intended to cover all transboundary movements of hazardous waste, while the author's focus herein will be limited to the regulation of ship recycling. The Hong Kong Convention, which is limited in scope to only ship recycling, will not be discussed in any greater detail than is necessary to point out key differences that will have a bearing on the outcome of the Basel Convention's Article 11 test.

1.3. Background

1.3.1. The International Treaty Framework

On 15 May 2009 the IMO adopted the Hong Kong Convention.¹ The Hong Kong Convention, which has not yet entered into force, represents the culmination of years of work on the development of a comprehensive international regime governing the management of waste generated in the process of recycling a vessel. Prior to the adoption of the Hong Kong Convention, ship recycling was primarily covered by the Basel Convention.² The Basel Convention was not without its problems with respect to ship recycling, and the Hong Kong Convention can be viewed in part as an attempt to solidify the international legal framework covering ship recycling.

¹ Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships (15 May 2009) available at <http://ec.europa.eu/environment/waste/ships/pdf/Convention.pdf> (last visited on 21 May 2010).

² Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (22 March 1989) available at <http://www.basel.int/text/con-e-rev.pdf> (last visited on 22 May 2010).

1.3.2. Ship Recycling

1.3.2.1. The Need

Ship recycling is the process by which obsolete vessels are dismantled, and the components of the vessel that are fit and valuable for reuse are salvaged and returned into the market. Approximately 95% of a vessel is recycled with scrap steel making up most of the recycled material.³ Ships are typically used for 20-30 years and then decommissioned and sent to be recycled because the cost of maintaining and insuring an older vessel becomes prohibitive.⁴ Each year, approximately 1900 ships need to be decommissioned to maintain the current average age of the world cargo fleet.⁵ The number of ships that need to be recycled is likely to increase as single-hulled tankers are phased out.⁶

1.3.2.2. Viable Alternatives?

When a ship reaches the end of its operational life, there are very few viable alternatives to recycling the vessel in developing nations. In fact, “shipbreaking is virtually non-existent in developed nations.”⁷ An illustrative case of the difficulty of dealing with obsolete vessels in the developed world is that of the National Defense Reserve Fleet in the United States.

During the Reagan administration, and as a consequence of the military build-up during the Cold War, very few Navy vessels were scrapped, and the U.S. Navy amassed a fleet of around 600 vessels.⁸ At the end of the

³ Sawyer, John F., “Shipbreaking and the North-South Debate: Economic Development or Environmental and Labor Catastrophe?” 20 *Penn State International Law Review* at 536 (Spring 2002).

⁴ Bhattacharjee, Saurabh, “From Basel to Hong Kong: International Environmental Regulation of Ship-Recycling Takes One Step Forward and Two Steps Back”, *Trade Law and Development*, Vol. 1 No. 2 at 200 (Fall 2009). See also Dodds, David, “Breaking Up Is Hard to Do: Environmental Effects of Shipwrecking and Possible Solutions Under India’s Environmental Regime”, 20 *Pacific McGeorge Global Business & Development Law Journal* at 211 (2007).

⁵ Bhattacharjee at 200.

⁶ *Id.*

⁷ Sawyer at 541.

⁸ *Id.* at 541.

Cold War, the Navy began to rapidly downsize its fleet.⁹ The domestic industry was unable to meet the expanding demand to dismantle Navy vessels, and the result was “a backlog of approximately 200 ships awaiting dismantlement.”¹⁰

The inadequacy of the domestic ship recycling industry coupled with the legal obligation to obtain the best price possible for disposal of their obsolete ships led the Navy to look into exporting their vessels for disposal.¹¹ The Navy sought and received the approval of the EPA to export obsolete vessels, required because of an export ban on PCBs implemented in the United States in 1993.¹² However, the export program was dead on arrival as an exposé appearing shortly thereafter in the *Baltimore Sun* chronicling the human and environmental costs of ship recycling in the developing world caused a political storm.¹³ The result was a moratorium on the export of Navy vessels to the developing world for recycling. The Navy resolved to mothball obsolete vessels. Ultimately, around 250 ships ended up in storage at a cost of around \$58 million for maintenance, storage and security costs.¹⁴

Recycling vessels in the developed world cannot operate as a profitable venture in the current economic climate. This is a result of high labor costs, the low resale value of salvaged components in the developed world and high costs associated with labor and environmental regulations.¹⁵ Western shipowners have no incentive to recycle ships domestically when they can sell their ships on an “as is” basis to ship recyclers in the developing world.¹⁶ This allows the global carriage of goods industry to externalize the economic, environmental and human costs of ship recycling.¹⁷ Such costs are borne entirely by those who work in the ship recycling industry and the

⁹ Id.

¹⁰ Id. at 542.

¹¹ Id. at 543.

¹² Id. at 542.

¹³ Id. at 543.

¹⁴ Bhattacharjee at 201.

¹⁵ Sawyer at 543.

¹⁶ Id. at 544.

¹⁷ Dodds at 210.

communities where such work is undertaken.¹⁸ Additionally, as demonstrated by the experience of the United States Navy, mothballing obsolete vessels is a costly and ultimately wasteful alternative. Few additional options exist, including dry-docking and using obsolete vessels to create artificial reefs. Dry-docking is insufficient for many of the same reasons as mothballing. Sinking vessels to create artificial reefs can also be highly costly due to the need to remove all environmental hazards prior to sinking.¹⁹

1.3.2.3. Beaching: The Most Common Method for Recycling Obsolete Ships

The process of ship recycling takes place in several stages. When the ship is offshore, “various water and fuel tanks are discharged into the sea.”²⁰ Additionally, “loose onboard consumables that are easily transported are removed at this point to make the ship as light as possible.”²¹ Next, the vessel is beached under its own power.

In order to beach the ship, it is moved under its own power to the inter-tidal zone.²² This is done twice a month, at a full moon and new moon, when tides are at their highest.²³ When the tide recedes, the ship is beached on dry land. This method is a key reason why India, Pakistan, Bangladesh and China, with their large inter-tidal zones, are the leaders in the ship recycling industry.²⁴

After the ship is beached, the bulk of the dismantling process is undertaken. The hull is cut by crews of approximately 25 unskilled workers “using gas torches, iron cutters and their bare hands.”²⁵ The steel from the hull is cut into manageable pieces, and workers carry the scraps off to be loaded onto

¹⁸ Id.

¹⁹ Id. at 212 (Additionally, shipowners have little or no incentive to assume the costs of environmental remediation associated with sinking vessels to create artificial reefs when they can sell vessels “as is” in the international ship recycling market).

²⁰ Dodds at 213.

²¹ Id.

²² Id.

²³ Id.

²⁴ Id. at 214.

²⁵ Id.

trucks for redistribution throughout the economy or recycled.²⁶ The by-products of recycled ships, including steel, pumps, generators, compressors and motors are valuable to the local economies of countries with a strong ship recycling industry.²⁷ In fact, “ship-breaking yards in Alang, India contribute an estimated 15% of the total steel output in the country.”²⁸

1.3.2.4. Hazardous Waste Generated in Ship Recycling

As mentioned above, approximately 95% of a dismantled ship can be recycled and reused. The remaining 5% is comprised of a variety of hazardous wastes. These wastes primarily consist of PCBs, asbestos, waste oils, TBT, mercury, arsenic, and cadmium and metal paints.²⁹

PCBs are “synthetic organic compounds that can take a variety of physical properties ranging from oily liquids to waxy solids.”³⁰ PCBs are found in a several parts of a ship including “electrical components, cables, vent ducts, miscellaneous gaskets, insulation materials, adhesives, paint and various rubber and plastic components.”³¹ PCBs are dangerous for a number of reasons. Exposure to PCBs “creates a significant risk of developing various cancers.”³² A particular danger of PCBs is that their chemical composition changes when released into the environment, and “the most carcinogenic PCBs tend to build up in the flesh of fish and other animals.”³³ So the danger associated with PCBs often has a far wider range than simply the ship recycling industry. Finally, “PCBs may cause a wide range of non-cancer health effects on the immune system, reproductive system, nervous system, and endocrine system.”³⁴

The dangerous effects of asbestos have been well documented (and heavily litigated). Asbestos is commonly found in ship insulation.³⁵ Asbestos has

²⁶ Id.

²⁷ Id. at 216.

²⁸ Bhattacharjee at 198.

²⁹ Id. at 198-199.

³⁰ Dodds at 217.

³¹ Id.

³² Id. at 218.

³³ Id.

³⁴ Id.

³⁵ Id.

been associated with a variety of cancers and lung diseases and is “the only known cause of mesothelioma, a cancer of the lungs, chest cavity and abdomen.”³⁶ One of the chief health concerns of ship recycling workers is asbestosis, a lung disease caused by exposure to asbestos.³⁷

TBT is “an organotin compound used primarily as a biocide in antifouling paints.”³⁸ It is used to “prevent the growth of marine organisms like algae and barnacles on ships’ hulls.”³⁹ TBT works as an “endocrine-disrupting chemical that causes severe reproductive defects in aquatic organisms.”⁴⁰ Additionally, “TBT is extremely stable and resistant to natural degradation in water.”⁴¹ During the process of beaching a vessel for dismantling, TBT is rubbed off of the hull and onto the beach.⁴²

Lead, another hazardous byproduct of ship dismantling, is “commonly found in batteries, paints and components of motors, generators, piping and cables.”⁴³ Lead has many known harmful effects. Children exposed to lead can suffer “learning difficulties, mental retardation and delayed neurological and physical development.”⁴⁴ Lead exposure in adults can cause harm to the nervous system and impair hearing, vision and muscle coordination.⁴⁵

Finally, bilge water, pumped into the sea before beaching a ship for dismantling, contains a number of hazardous wastes. Such wastes include “oil, cargo residues, inorganic salts, arsenic, copper, chromium, lead, and mercury.”⁴⁶ Bilge water poses a serious threat to the health of many aquatic species and organisms.⁴⁷

³⁶ Id.

³⁷ Id.

³⁸ Id. at 219.

³⁹ Sawyer at 540.

⁴⁰ Dodds at 219.

⁴¹ Id.

⁴² Sawyer at 550.

⁴³ Dodds at 219.

⁴⁴ Id.

⁴⁵ Id.

⁴⁶ Id.

⁴⁷ Id.

1.4. Problem

The Basel Convention, while being an extremely valuable international instrument governing the shipment of hazardous wastes, proved to be insufficient to deal with the wastes generated by ship recycling. The IMO, with consultation from the ILO and COP, began work in the early 2000s on a comprehensive convention to manage the recycling of obsolete ships. The idea was to close the gaps left in the previous international legal regime, led primarily by the Basel Convention. The Hong Kong Convention arrived on the scene as a result of this work. The question remains as to whether or not the Hong Kong Convention will be an improvement on the Basel Convention.

The question of whether or not the Hong Kong Convention can be considered an improvement on the Basel Convention takes on added importance when considered from provisions within the Basel Convention governing subsequent treaties entered into by parties. The Basel Convention requires that subsequent agreements among parties or parties and non-parties offer equivalent protection in order to remove the transboundary movement of waste covered by such subsequent agreement from the regulation of the Basel Convention. So the issue of whether or not the Hong Kong Convention can be considered an improvement on the Basel Convention will determine if the Hong Kong Convention will have any legal effect for parties. If the Hong Kong Convention is not considered to be at least equivalent to the Basel Convention then parties to the Basel Convention will likely have to continue to look to the Basel Convention for the operative regulation of ship recycling.

2. International Legal Regime

2.1. International Principles

There are several key principles that provide a basis for international environmental law. Many of these principles have the effect of curtailing industry, but there are also principles that aim to offset the negative impact of environmental regulation on industry and development. Some of the key

principles at play in ship recycling are the polluter pays principle, the source principle, the principle of sustainable development and the principle of environmentally sound management.

As a straight-forward comparison of the text contained within Basel and Hong Kong Conventions cannot be expected to, by itself, determine whether or not the Hong Kong Convention provides an equivalent level of protection to that existing under the Basel Convention, a background understanding of these principles is essential to provide a sort of common denominator to any such comparison. The question will ultimately be whether or not the Hong Kong Convention is equal to or better than the Basel Convention at achieving the goals embodied in these principles, as they are also guiding principles of the protections provided in the Basel Convention.

2.1.1. Polluter Pays

The polluter pays principle “has become a firmly established principle of international environmental law.”⁴⁸ The polluter pays principle provides that the actor causing pollution should pay the costs of such pollution. This is basically an economic mechanism aiming to make polluters and potential polluters internalize the costs of such pollution. The effect should be that potential polluters will take the most economically efficient means possible, up to the potential cost of such pollution, to prevent pollution.

The polluter pays principle is described in the Rio Declaration as:

[An] endeavor to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment.⁴⁹

The first half of the clause establishes the goal of the economic internalization of potential environmental damage. The second half states that the mandate to internalize the costs of pollution is subject to “due

⁴⁸ Bhattacharjee at 226.

⁴⁹ *Rio Declaration on Environment and Development*, U.N. Conference on Environment and Development, 13 June 1992, principle 16 available at <http://www.unep.org/Documents.Multilingual/Default.asp?documentid=78&articleid=116> (last visited on 31 December 2011)

regard to the public interest and without distorting international trade and investment” introducing a tension that will be more clearly illustrated in the discussion of the principle of sustainable development below.

2.1.2. Source Principle

The source principle relates to the polluter pays principle.⁵⁰ In fact, the two principles are so closely related that they are often seen as two sides of the same coin. For example, the EU Treaty provides that “environmental damage should as a priority be rectified at source and that the polluter should pay” illustrating the inter-relation of these two principles in EU environmental law. With regard to ship recycling, it is still helpful to think of these as somewhat distinct principles. This is especially the case because deviations from the polluter pays principle, often in favor of economic practicalities, can be partly mitigated by adhering to the source principle. While it may not always be easy to identify the element of cause necessary to clearly determine who the “polluter” is, it should in theory be easier to determine the source.

However, one can easily see the difficulties that this principle poses for the industry of exported retired vessels to developing countries for dismantling and recycling. While this initial impression is no doubt of some significance, it is not always so easy to determine what the “source” is of pollution caused by the recycled vessel. Is it the flag state, the domicile of the ship owners, or the location of the ship-building facilities where the vessels are originally assembled?

2.1.3. Sustainable Development

As mentioned above, the principles at work in international environmental regulation seek to strike a balance between industry and protection of the environment. The two principles already discussed, the polluter pays principle and the source principle, primarily constitute a burden to industry if purely applied. The principle of sustainable development seeks to

⁵⁰ *The Queen v. Secretary of State for the Environment*, Case C-293/97, 1999 E.C.R. I-2603, para. 44.

incorporate the concerns of industry and development in the legal treatment of pollution. While the polluter pays principle and the source principle apply so that the polluter and source shall not be able to benefit from polluting activities without also taking on the costs of such pollution, the principle of sustainable development acknowledges that the range of “beneficiaries” from industry and development is considerably greater than the potential polluter and source.

The principle of sustainable development is best expressed in two principles found in the Rio Declaration. The Rio Declaration states, in principles 4 and 5, that:

In order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it. All States and all people shall cooperate in the essential task of eradicating poverty as an indispensable requirement for sustainable development, in order to decrease the disparities in standards of living and better meet the needs of the majority of the people of the world.⁵¹

The principle of sustainable development recognizes that environmental regulation should not impede the economic development of the developing world. The purpose is to seek a balance between environmental protection and the development of industry. In the case of ship recycling, the principle recognizes “the right to development of the recycling states”.⁵² Hence, the idea is that the export of ships for recycling in the developing world is an important source of jobs, income and resources for recycling states; and this important source should, if possible, remain open with appropriate environmental safeguards in place.

2.1.4. Environmentally Sound Management

Perhaps the most essential principle for comparing the Basel Convention and the Hong Kong Convention with regard to ship recycling is the principle of environmentally sound management. This is because the Basel Convention, under its critical Article 11, requires that a subsequent

⁵¹ Rio Declaration principles 4 and 5.

⁵² Bhattacharjee at 226.

agreement between parties, in order to remove the subject matter of that agreement from the regulatory framework of the Basel Convention, must “not derogate from the environmentally sound management of hazardous wastes” and that they must “stipulate provisions which are not less environmentally sound than those provided for by [the Basel Convention]”.⁵³

The Secretariat of the Basel Convention describes the principle of environmentally sound management as:

The protection of human health and the environment by minimizing hazardous waste production whenever possible...through an “integrated life-cycle approach”, which involves strong controls from the generation of a hazardous waste to its storage, transport, treatment, reuse, recycling, recovery and final disposal.⁵⁴

COP has issued a specific set of Technical Guidelines for the Environmentally Sound Management of the Full and Partial Dismantling of Ships (the “Technical Guidelines”) aiming to guide the relevant actors toward the environmentally sound management of ship recycling. COP has, in the Technical Guidelines, stated that it is Article 4.2 to the Basel Convention that is most directly applicable in establishing such guidelines.⁵⁵ It is helpful to read Article 4.2 in its entirety, as the relevant clause contains aspects of all of the key principles discussed in this Section 2.1 and will, together with such principles, provide a key basis for determining if the Hong Kong Convention offers an equivalent level of environmentally sound management as the Basel Convention with regard to ship recycling.

Article 4.2 provides:

Each party shall take the appropriate measures to:

⁵³ Basel Convention at Art. 11(1).

⁵⁴ Secretariat of the Basel Convention Publication “Environmentally Sound Management”, available at <http://www.basel.int/pub/environsound.pdf> (last visited on 25 May 2010). See also the COP on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, Geneva, Dec. 9-13, 2002, Technical Guidelines for the Environmentally Sound Management of the Full and Partial Dismantling of Ships at 23 available at http://basel.int/meetings/cop/cop6/cop6_23e.pdf#annex (last visited on 2 January 2012) (hereinafter referred to as “COP 10 Environmentally Sound Dismantling of Ships”).

⁵⁵ Technical Guidelines at 24.

- a) Ensure that the generation of hazardous wastes and other wastes within it is reduced to a minimum, taking into account social, technological and economic aspects;
- b) Ensure the availability of adequate disposal facilities, for the environmentally sound management of hazardous wastes and other wastes, that shall be located, to the extent possible, within it, whatever the place of their disposal;
- c) Ensure that persons involved in the management of hazardous wastes or other wastes within it take such steps as are necessary to prevent pollution due to hazardous wastes and other wastes arising from such management and, if such pollution occurs, to minimize the consequences thereof for human health and the environment;
- d) Ensure that the transboundary movement of hazardous wastes and other wastes is reduced to the 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;
- e) Not allow the export of hazardous wastes or other wastes to a State or group of States belonging to an economic and/or political integration organization that are Parties, particularly developing countries, which have prohibited by their legislation all imports, or if it has reason to believe that the wastes in question will not be managed in an environmentally sound manner, according to criteria to be decided on by the Parties at their first meeting;
- f) Require that information about a proposed transboundary movement of hazardous wastes and other wastes be provided to the States concerned, according to Annex V A, to state clearly the effects of the proposed movement on human health and the environment;
- g) Prevent the import of hazardous wastes and other wastes if it has reason to believe that the wastes in question will not be managed in an environmentally sound manner;
- h) Co-operate in activities with other Parties and interested organizations, directly and through the Secretariat, including the dissemination of information on the transboundary movement of hazardous wastes and other wastes, in order to improve the environmentally sound management of such wastes and to achieve the prevention of illegal traffic.

One can see in the first three sub-clauses to Article 4.2 the embodiment of the principle of sustainable development (Art. 4.2(a)); the source principle (Art. 4.2(b)); and the polluter pays principle (Art. 4.2(c)).

Before embarking on a closer review of the two conventions, it is important to point out that the very structure of the Technical guidelines suggests that the Basel Convention is not, by its own standards, providing for the environmentally sound management of recycled ships. The Technical Guidelines aim to close gaps between current practice at the time they were drafted and best practices that would constitute the environmentally sound management of ship recycling. So where Article 11 of the Basel Convention is asking for an equivalent level of protection as the Basel Convention, the level that is required to be equivalent is still substandard with regard to ship recycling according to the Technical Guidelines.

2.2. The Basel Convention

2.2.1. Background

The Basel Convention is a byproduct of the strengthening of environmental regulations in the industrialized world.⁵⁶ More stringent environmental regulations greatly increased the cost of hazardous waste disposal. As a result, “‘toxic traders’ began shipping hazardous waste to developing countries and to Eastern Europe.”⁵⁷ The world reacted with outrage when this was brought to light as a result of several high profile incidents involving the international shipment of hazardous waste, and this international outrage led to the drafting of the Basel Convention.⁵⁸

The Basel Convention was drafted with three objectives in mind. First, it aims to minimize the “amount and hazard level of generated wastes.”⁵⁹ In furtherance of this objective, the convention requires “generators/exporters (of hazardous waste) to develop waste minimization policies”, and “all states are therefore required to develop technologies and policies that decrease the amount of waste generated.”⁶⁰ The second objective is the “promotion of disposal of waste as close as possible to the source of

⁵⁶ Secretariat of the Basel Convention website, “Origins of the Convention” available at <http://www.basel.int/convention/basics.html> (last visited on 23 May 2010).

⁵⁷ Id.

⁵⁸ Id.

⁵⁹ Bhattacharjee at 205.

⁶⁰ Id.

generation.”⁶¹ The aim of this objective is, clearly, to reduce the dumping of hazardous wastes in developing countries. The final objective is to promote the “‘environmentally sound management’ and disposal of hazardous waste.”⁶²

2.2.2. Key Concepts

2.2.2.1. *Hazardous Wastes*

Article 2, listing the Definitions for the convention, includes a definition of “wastes.” Wastes are defined as “substances or objects which are disposed of or intended to be disposed or are required by law to be disposed of by the provisions of national law.”⁶³ COP Decision VII/26 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 law.”⁶⁴ “Disposal” is defined as “any operation specified in Annex IV”⁶⁵, which includes “operations which may lead to resource recovery, recycling reclamation, direct re-use or alternative uses.”⁶⁶

A question arises as to when a ship is “intended” to be disposed of under the Basel Convention, which is measured by the subjective intent of the relevant actor.⁶⁷ The first issue is who must have the intention to dispose of the ship. In most cases it will be the owner of the ship, and in some cases the management company if they are given authority to make such decisions.⁶⁸ Although the intent required is subjective, there are certain legal or physical actions that may be indications of an intent to scrap the vessel.⁶⁹ For example, the ship may be taken out of traffic awaiting arrangements for scrapping or may be deleted from the ship registry.⁷⁰

⁶¹ Id. at 205-206.

⁶² Id. at 206.

⁶³ Basel Convention at Art. 2(1).

⁶⁴ Bhattacharjee at 211.

⁶⁵ Id. at Art. 2(4).

⁶⁶ Id. at Annex IV(B).

⁶⁷ Ulfstein, Geir, “Legal Aspects of Scrapping Vessels”, *A Study for the Norwegian Ministry of Environment* (9 March 1999) at 7.

⁶⁸ Id.

⁶⁹ Id. at 8.

⁷⁰ Id.

While it seems clear that a ship intended for scrapping is “waste” under the Basel Convention, it still must be determined whether or not it would be considered “hazardous waste”. Article 1 of the Basel Convention defines “hazardous wastes” as:

1. Wastes that belong to any category contained in Annex I, unless they do not possess any of the characteristics contained in Annex III; and
2. Wastes that are not covered under paragraph (a) but are defined as, or considered to be hazardous wastes by the domestic legislation of the Party of export, import or transit.⁷¹

Several of the categories listed in Annex I are relevant for ship recycling; including asbestos, PCBs, mercury and cadmium.⁷² Additionally, “asbestos and PCBs are highly “toxic” – one of the characteristics listed in Annex III.⁷³

A ship intended for recycling would be considered “hazardous waste” under the Basel Convention. The next issue in considering the application of the Basel Convention to wastes generated by ship recycling is to determine whether or not it constitutes a “transboundary movement.” While it may seem obvious that a ship sent across the world to be disposed of would be making a transboundary movement, the issue is not always so black and white.

2.2.2.2. *Transboundary Movement and State of Export*

Transboundary movement is defined in Article 2(3) of the Basel Convention as follows:

Any movement of hazardous wastes or other wastes from an area under the national jurisdiction of one State to or through an area under the national jurisdiction of another State or to or through an area not under the national jurisdiction of any State, provided that at least two states are involved in the movement.⁷⁴

⁷¹ Basel Convention at Art. 11.

⁷² Bhattacharjee at 212.

⁷³ Id.

⁷⁴ Basel Convention at Art. 2(3).

The convention clarifies the definition of transboundary movement with the following definition of “area under the national jurisdiction of a State”:

Any land, marine area or airspace within which a State exercises administrative and regulatory responsibility in accordance with international law in regard to the protection of human health or the environment.⁷⁵

The definition of transboundary movement is fairly straight forward in its application to the shipment of waste loaded up in the territory of one state and shipped into the territory of another. It becomes considerably more complicated when applied to the situation of a ship bound for scrapping.

It is clear that a state has “‘administrative and regulatory responsibility’ over both ‘human health’ and the ‘environment’ in its ports and internal waters.”⁷⁶ A state exercises sovereignty over its territorial sea, and “while other states have the right to innocent passage, the coastal state may adopt laws and regulations relating to environmental protection.”⁷⁷ A coastal state also has “certain jurisdiction in sanitary matters in the contiguous zone” and “a carefully drafted environmental jurisdiction in the 200-mile exclusive economic zone.”⁷⁸ All of the maritime zones of a coastal state could be interpreted as an “area under the national jurisdiction of a state,” but “the fact that also the flag state exercises ‘administrative and regulatory’ responsibility over ships with respect to human health and environmental matters may raise some doubt about the proper interpretation.”⁷⁹

The definition of transboundary movement presents problems when considered along with the discussion above regarding whether or not a ship is waste or hazardous waste. If we assume that a ship which is intended to be recycled is waste and even hazardous waste, the problem is when and where the intention to recycle the ship is formed. This will be discussed further below in considering the shortcomings of using the Basel Convention to regulate wastes generated during ship recycling.

⁷⁵ Id. at Art. 2(9).

⁷⁶ Ulfstein at 15.

⁷⁷ Id.

⁷⁸ Id.

⁷⁹ Id.

Before moving on to the general obligations imposed on the shipping industry by the Basel Convention, there is one additional definition to bear in mind. The Basel Convention defines “state of export” as “a Party from which a transboundary movement of hazardous wastes or other wastes is planned to be initiated or initiated.”⁸⁰ The key consideration is when and where the transboundary movement is initiated, either actually initiated or “planned to be initiated.” In both cases it refers to where the physical action of moving the waste is commenced. In other words, “planned to be initiated” does not refer to the place where the planning was done, but rather to the physical place where the movement is planned to begin.⁸¹

2.2.3. General Obligations

2.2.3.1. *Prior Informed Consent*

One of the key obligations imposed by the Basel Convention on a state of export is the requirement to ensure that PIC is obtained from the import state before the waste is shipped. A state of export is required to notify, or require the generator or exporter of the hazardous waste to notify, the states concerned of any proposed transboundary movement of hazardous wastes.⁸² A state of import shall then either consent to the import, deny it or request additional information.⁸³ Parties and states of export shall not permit the transboundary movement until it has received written consent from the state of import and confirmation of the existence of a contract “between the exporter and the disposer specifying environmentally sound management of the wastes in question.”⁸⁴ Additionally, each state of transit, which is any state other than the state of import or the state of export through which the waste is planned to be moved, shall consent to the import, deny it or request additional information.⁸⁵

⁸⁰ Basel Convention at Art. 2(10).

⁸¹ Ulfstein at 12.

⁸² Basel Convention at Art. 6(1)

⁸³ Id. at Art. 6(2).

⁸⁴ Id. at Arts. 6(3), 4(1)(c) and 4(2)(e).

⁸⁵ Id. at Art. 6(4).

2.2.3.2. Illegal Traffic, the Duty to Take Back Hazardous Wastes and Punishing Illegal Traffic

Following the obligation to obtain PIC from states of import, the convention considers the transboundary movement of hazardous waste without notifying and obtaining consent, or obtaining consent through “falsification, misrepresentation or fraud”, from the states concerned to be illegal traffic.⁸⁶ A transboundary movement of waste will also be considered illegal if it does not conform in a material way with the relevant documents or if it “results in deliberate disposal of hazardous wastes or other wastes in contravention of this Convention and of general principles of international law.”⁸⁷

The convention also imposes some obligations on parties to remedy illegal trafficking or otherwise harmful transboundary movements of hazardous waste. In the case of an illegal transboundary movement that is a result of the conduct of the exporter or generator, the state of export shall ensure that the waste is “taken back by the exporter or the generator or, if necessary, by itself into the state of export.”⁸⁸ Even if the transboundary movement is legal, if it cannot be completed in an environmentally sound manner then the state of export shall ensure that the waste is taken back if it cannot be disposed of in an environmentally sound manner within 90 days.⁸⁹

Parties to the Basel Convention agree that illegal traffic of hazardous wastes is a criminal offense.⁹⁰ Article 4(4) requires parties 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.⁹¹

In addition to “conduct in contravention of the convention,” the Article 9(5) also requires parties to introduce legislation to prevent and punish “illegal

⁸⁶ Id. at Art. 9(1).

⁸⁷ Id.

⁸⁸ Id. at 9(2).

⁸⁹ Id. at Art. 8.

⁹⁰ Id. at Art. 4(3).

⁹¹ Id. at Art. 4(4).

traffic.”⁹² The Article 4(4) obligation is broader in scope than the Article 9(5) obligation. However, the mandate imposed by Article 9(5) on parties with regard to “illegal traffic”, when read together with Article 4(3), is much stronger and requires parties to criminalize illegal traffic.

2.2.4. Problems Applying the Basel Convention to Ship Recycling

One of the first problems in applying the Basel Convention to waste generated in ship recycling is determining *when* a ship is to be considered waste.⁹³ This is especially difficult given that beaching requires a vessel to be operational right up to the last, and vessels bound for dismantling often carry cargo on their last voyage. A shipowner can hold off on taking any preparatory steps until the vessel has arrived in the port of the recycling state.⁹⁴ Finally, the shipowner may wait to sign a contract to scrap the vessel until in the high seas or the territorial waters of the recycling state to avoid being certified as waste at an earlier stage.⁹⁵

It is also difficult to apply the principle of “state of export” to ships on their way to being scrapped. Because it is difficult to even determine when a vessel becomes waste, it can be difficult to determine which port is the port where the transboundary movement is initiated or planned to be initiated. Would it be the first port the ship departs from on its last voyage or the last port it calls at before dismantling? This also raises the issue of how effective, if at all, it is to use a port state as the state of export for Basel Convention purposes.

For the purposes of the Basel Convention, the nationality of the waste or the owner of the waste and the place where the decision is taken to initiate transboundary movement is not relevant to determining state of export.⁹⁶ Rather it is where the transboundary movement is initiated or planned to be initiated. So in the case of a ship it would be a port state and not the flag state that would be a state of export. This creates a jurisdictional problem

⁹² Id. at Art. 9(5).

⁹³ Bhattecharjee at 214.

⁹⁴ Ulfstein at 8.

⁹⁵ Id.

⁹⁶ Id. at 12.

with ships since the port state only has jurisdiction over ships when they are in its ports.⁹⁷ It would be difficult or impossible for a port state to ensure that a vessel which has left its port has continued to meet its obligations under the Basel Convention. On the other hand, the flag state has little to no incentive to voluntarily act as a state of export. The difficulty of identifying an effective state of export undermines the effectiveness of PIC, the obligation to take back waste violating the convention and punish the violating party.

One final problem with applying the Basel Convention to waste generated by ship recycling is a problem in the application of the definition of transboundary movement in light of the scheme of traditional maritime zones under UNCLOS. The easy case is when a vessel becomes waste in the ports or internal waters of one state and is then beached on the coast of another state.⁹⁸ It will also likely be a transboundary movement “if a ship becomes waste in one state’s territorial waters and then enters the internal waters of another state.”⁹⁹ It becomes more difficult to determine if “a vessel becomes scrap in the contiguous zone or the 200-mile exclusive economic zone of one state and then enters the internal waters of another state.”¹⁰⁰ At the other end of the spectrum, “it should not be considered transboundary movement if the vessel becomes waste on the high seas or in one of the maritime zones where it is to be scrapped.”¹⁰¹

2.3. The Hong Kong Convention

2.3.1. Background

As seen above, while the Basel Convention has proven invaluable for regulating the international trade of hazardous waste, it is not always easily applicable to waste generated by ship recycling. As a result of gaps in the regulation of the Basel Convention, the MEPC decided to create a “new mandatory instrument on recycling of ships, with a view to providing

⁹⁷ Id. at 13.

⁹⁸ Id. at 16.

⁹⁹ Id.

¹⁰⁰ Id.

¹⁰¹ Id.

legally-binding and globally applicable regulations for international shipping and for recycling facilities.”¹⁰² The end result was the Hong Kong Convention.

In addition to closing the gaps in the Basel Convention, and, implicitly, picking up on the objectives of the Basel Convention, the Hong Kong Convention has important objectives of its own. The Hong Kong Convention aims to establish “‘cradle-to-grave’ regulation that spans across every aspect of the entire life-cycle of a ship.”¹⁰³ This envisions regulations that begin at design and construction and run up to the point that the ship is dismantled.¹⁰⁴ The Hong Kong Convention is also very committed to the principle of sustainable development. Many have pushed for a ban on exporting ships for recycling to developing countries, but this would result in a loss of jobs and valuable resources in the recycling state.¹⁰⁵ By not banning export, the Hong Kong Convention has demonstrated its commitment to “the right of development of the recycling states.”¹⁰⁶

2.3.2. Key Provisions

2.3.2.1. Application

The Hong Kong Convention applies to “ships entitled to fly the flag of a Party” and “ship recycling facilities operating under the jurisdiction of a Party.”¹⁰⁷ The convention does not apply to military vessels and other ships “owned or operated by a Party and used...only on government non-commercial service.”¹⁰⁸ Additionally, the convention will not apply to “ships of less than 500 gross tons or to ships operating throughout their life only in waters subject to the sovereignty or jurisdiction of the state whose flag the ship is entitled to fly.”¹⁰⁹ In the case of excluded vessels, parties

¹⁰² Bhattacharjee at 216.

¹⁰³ Id.

¹⁰⁴ Id.

¹⁰⁵ Id. at 226.

¹⁰⁶ Id.

¹⁰⁷ Hong Kong Convention at Art. 3(1).

¹⁰⁸ Id. at Art. 3(2).

¹⁰⁹ Id. at 3(3).

shall aim to ensure that they comply with the convention “so far as is reasonable and practicable.”¹¹⁰

2.3.2.2. *Inventory of Hazardous Materials, Surveys and Certificates*

The Hong Kong Convention requires each ship to carry an Inventory of Hazardous Materials. The requirement applies immediately to all new ships and not later than five years after the convention enters into force for existing ships.¹¹¹ The obligation to maintain the Inventory lasts for the entire life of the ship.¹¹²

The Inventory must be verified by the flag state and shall contain as Part I a list naming all of the hazardous wastes on the vessel and their location and approximate quantities and note that the ship is in compliance with Regulation 4.¹¹³ Hazardous wastes are listed in Appendices 1 and 2 of the convention. Regulation 4, the “cradle” side of the convention’s cradle-to-grave approach, establishes certain requirements on the construction of vessels.¹¹⁴ These requirements include an outright ban on the use of certain hazardous materials.¹¹⁵ Before recycling the ship, Part II for “operationally generated wastes” and Part III for stores must be added.¹¹⁶

Article 6 of the Hong Kong Convention requires flag states to ensure that “ships flying its flag or operating under its authority and subject to survey and certification are surveyed and certified according with the regulations.”¹¹⁷ The regulations require: (1) an initial survey before the ship is put into service or before the International Certificate on Inventory of Hazardous Materials is issued; (2) a renewal survey at intervals not exceeding five years; (3) an additional survey at the request of a shipowner after a change or significant repair of the ship; and (4) a final survey prior to

¹¹⁰ Id. at 3(2) and 3(3).

¹¹¹ Id. at Regs. 5.1 and 5.2.

¹¹² Bhattacharjee at 217.

¹¹³ Hong Kong Convention at Reg. 5.2.1.

¹¹⁴ Id. at Reg. 4.

¹¹⁵ Id.

¹¹⁶ Id. at Reg. 5.4.

¹¹⁷ Id. at Art. 6.

the ship being taken out of service.¹¹⁸ The surveys are required to check that Part I of the Inventory is maintained correctly.¹¹⁹ The final survey also checks Part II and III of the Inventory, the ship's recycling plan and that the proposed recycling facility is properly authorized.¹²⁰

After each initial and renewal survey, an International Certificate on Inventory of Hazardous Materials will be issued.¹²¹ After the final survey is completed, an International Ready for Recycling Certificate is issued.¹²² Additionally, the Hong Kong Convention provides that a ship in the ports or offshore terminals of another party may be inspected to see that the ship is carrying the proper certificates.¹²³ When a ship is not carrying valid certificates, there are "clear grounds for believing" that the actual condition of the ship does not comply with the certificates and Inventory or there is no procedure in place to maintain the Inventory then a detailed inspection may be carried out.¹²⁴

2.3.2.3. *Authorization for Recycling Facilities*

In addition to the focus on ship compliance, the Hong Kong Convention requires that recycling facilities comply. The parties agree to take effective measures to ensure that recycling facilities under their jurisdiction comply.¹²⁵ The regulations require that the recycling facilities establish protections for human health and the environmentally sound management of hazardous wastes.¹²⁶ Recycling facilities also agree to only deal with ships in compliance with the convention.¹²⁷

¹¹⁸Id. at Reg. 10.1.

¹¹⁹ Id.

¹²⁰ Id.

¹²¹ Id. at Reg. 11.1.

¹²² Id. at 11.11.

¹²³ Id. at Art. 8(1).

¹²⁴ Id. at Art. 8.

¹²⁵ Id. at Art. 4(2) and 6.

¹²⁶ Id. at Ch. 4.

¹²⁷ Id.

2.3.2.4. Notification, Reporting and Information Sharing Requirements

Shipowners are required to notify their flag state authority of their intention to recycle a ship in order to prepare the final survey and certification.¹²⁸ A recycling facility is required to inform its state authority before it accepts a ship for recycling, issue a report of the planned start date of the recycling process and issue a Statement of Completion when the process is completed.¹²⁹

The Hong Kong Convention also requires certain levels of information sharing. When a party has authorized a recycling facility it shall provide relevant information on the basis of its decision to the IMO and other parties who request it.¹³⁰ Each party is also required to submit to the IMO, and the IMO shall disseminate, the following information: (1) a list of authorized recycling facilities; (2) a list of ships flying its flag to which International Ready for Recycling Certificates have been issued; (3) a list of violations of the convention and actions taken; and (4) other miscellaneous information.¹³¹

2.3.2.5. Enforcement

In addition to the preventative measures outlined above, the Hong Kong Convention contains a procedure for detecting and punishing violations. The parties agree to cooperate to detect violations.¹³² If a party has evidence that a ship has violated or is about to violate the convention, then it may request an investigation of the suspected ship when it enters the port or offshore terminals of another party.¹³³ If the ship is found to be in violation of the convention the “the Party carrying out the inspection may take steps to warn, detain, dismiss or exclude the ship from its ports.”¹³⁴ A party may

¹²⁸ Id. at Reg. 24.1.

¹²⁹ Id. at 24.2, 24.3 and 25.

¹³⁰ Id. at Art. 7.

¹³¹ Id. at Art. 12.

¹³² Id. at Art. 9.1.

¹³³ Id. at 9.2.

¹³⁴ Id. at 9.3.

also request an investigation of a recycling facility when it has sufficient evidence that the facility has or will violate the convention.¹³⁵

Article 10 establishes the obligation to impose penalties for violations of the convention. Violations of the convention shall be prohibited by national laws.¹³⁶ For violations committed by ships, “sanctions shall be established under the law of the flag state, wherever the violation occurs.”¹³⁷ With regard to violations committed by a ship recycling facility, sanctions shall be established under the law of the Party having jurisdiction over the ship recycling facility.¹³⁸ The sanctions established under the laws of the parties must be “adequate in severity to discourage violations of this convention wherever they occur.”¹³⁹

3. Comparing the Two Conventions

3.1. The Improvements in the Hong Kong Convention

There are several key advances to the regulation of the hazardous wastes generated by ship recycling in the Hong Kong Convention. Several of these advances are the comprehensive and cradle-to-grave scope of the convention, the jurisdictional cooperation of the parties and the reporting and certification system.

The Hong Kong Convention’s cradle-to-grave approach is a very valuable aspect of the convention. Rather than simply regulating the disposal of hazardous waste, the convention aims to reduce the existence of such waste by taking into account the design and construction of new vessels. The surveying and certifying process throughout the life of the ship requires shipowners to maintain a focus on the costs associated with the ultimate fate of the vessel. This helps to shift some of the cost of the hazardous waste of recycling ships from the recyclers to the shipbuilders and owners. It will hopefully help to develop a mentality in the shipping industry whereby the fate of a vessel, and the costs of the waste generated at the end of the life of

¹³⁵ Id. at 9.4.

¹³⁶ Id. at Art. 10(1),

¹³⁷ Id. at Art. 10(1)(1).

¹³⁸ Id. at Art. (10)(1)(2).

¹³⁹ Id. at Art. 10(3).

a ship, will be factored into the planning process from the very beginning and consistently considered until the end.

Another benefit of the Hong Kong Convention is the cooperation of the parties. As mentioned above, the Basel Convention's concepts of transboundary movement and state of export were insufficient to regulate ship recycling. Ships often fell between the cracks in the Basel Convention regime. The Hong Kong Convention represents progress by more clearly defining the respective roles of flag states, port states and states with jurisdiction over recycling facilities. The information sharing and cooperation involved in the detection of violations helps to create a situation where the regulatory eye is constantly on ships regardless of where they move to. That being said, the system is far from perfect, and some of its flaws will be discussed below.

Finally, the reporting and certification system envisioned by the Hong Kong Convention should be viewed as progress. Because of the need to issue an International Ready for Recycling Certificate, the Hong Kong Convention hopes to alleviate the problem encountered by the Basel Convention of trying to ascertain the intention to scrap a vessel. Additionally, the Inventory and various certificates will inform recyclers of what hazardous wastes are located on the vessel and where these wastes may be found. This should prevent a situation where recyclers are going blind into the process of dismantling the ship, and was one of the key recommendations of the Technical Guidelines.¹⁴⁰ On the recycling side, the details on recycling facilities furnished to the IMO should help to improve and standardize the recycling process and more easily detect violations.¹⁴¹

3.2. Apparent Shortcomings of the Hong Kong Convention

Despite the numerous improvements of the Hong Kong Convention, there are a number of places where it appears to be inadequate and perhaps even a step backwards from the Basel Convention. Some of these instances are the decreased scope of vessels to which the Hong Kong Convention is

¹⁴⁰ Technical Guidelines at 9.

¹⁴¹ Bhattacharjee at 222.

applicable, a lack of force behind the increased involvement of port states included in the Hong Kong Convention, the dilution of prior informed consent and the failure to criminalize illegal traffic.

A preliminary issue under the Hong Kong Convention when compared to the Basel Convention is the scope of its applicability. While the Basel Convention would apply to all vessels that become “waste”, the Hong Kong Convention excludes “warships and State-owned ships, ships of less than 500 GT, and ships operating throughout their life only in waters subject to the sovereignty or jurisdiction of the State whose flag the ship is entitled to fly.”¹⁴² However, the Hong Kong Convention requires parties ensure that such ships are in compliance with the convention to the extent practicable.

An additional scope issue to consider is how the Hong Kong Convention defines hazardous material. The Hong Kong Convention lists certain materials as hazardous material in Appendices 1 and 2.¹⁴³ As noted by parties to the Basel Convention, “the Hong Kong Convention does not include certain wastes covered by the Basel Convention that have been identified in the Technical Guidelines.”¹⁴⁴ Because such Technical Guidelines are not mandatory, they cannot be considered, on their face, to demonstrate a clear shortfall of the Hong Kong Convention. However, since they have been persuasive in the operation of the Basel Convention they should be taken into account in the practical consideration of whether or not the Hong Kong Convention provides an equivalent level of control and enforcement as the Basel Convention.

As mentioned above, the Hong Kong Convention increases the involvement of port states. Port states are given the power to inspect vessels for compliance with the convention. The problem with this new power is that it is extremely limited.¹⁴⁵ Port states may, in most cases, only review the certificates of the vessel in question. While this power is limited, it is hard

¹⁴² See Section 2.3,2.2 above.

¹⁴³ Id.

¹⁴⁴ COP 10 Environmentally Sound Dismantling of Ships at 4.

¹⁴⁵ Bhattacharjee at 219.

to envision a situation where a port state could do much more without greatly disrupting the flow of commercial shipping.

A potentially more significant difference in the Hong Kong Convention is the dilution of PIC. The Hong Kong Convention does not provide for “direct ‘State to State reporting’, *i.e.* notification between the flag state and the recycling state and requires no reporting to other transit states.”¹⁴⁶ The convention contains “no express need for consent from the recycling state or any of the transit states.”¹⁴⁷ While recycling states as port states can refuse the entry of a ship for recycling, and transit states can deny the right of innocent passage if the vessel poses an environmental risk, these approaches are likely to be of little effect. This is especially true for transit states.

Another apparent shortfall of the Hong Kong Convention when compared to the Basel Convention is the failure to criminalize illegal traffic. As mentioned above, the Basel Convention requires parties to criminalize illegal traffic whereas the Hong Kong Convention only requires that violations be prohibited and sanctions established for such violations. Willful avoidance of the regulatory requirements of the Hong Kong Convention and actions showing a complete disregard for it, such as beaching a vessel without bothering to comply with the convention at all, could be most adequately prevented by using criminal sanctions.

¹⁴⁶ *Id.* at 223.

¹⁴⁷ *Id.*

4. Analysis and Conclusion

4.1. Does the Hong Kong Convention Establishes an Equivalent Level of Control and Enforcement as the Basel Convention

The Hong Kong Convention is a valuable and welcome change to the international regulation of hazardous wastes generated by the recycling of ships. The Basel Convention was not drafted with ship recycling in mind, and, as a result, there are instances where wastes generated by ship recycling slip through the cracks of the regulatory scheme of the Basel Convention. The Hong Kong Convention does a better job of dealing with the problems that the peculiarities of the ship recycling industry posed for the Basel Convention.

That being said, there are several ways that the Hong Kong Convention appears to fall short of the Basel Convention.

4.2. The Absence of a PIC Requirement

In many ways, the Basel Convention obligation imposed on a shipowner to get the PIC of the recycling state and transit states, which is absent in the Hong Kong Convention, was a superior arrangement. This is especially true for transit states, which have little to no protection under the Hong Kong Convention. The Hong Kong Convention substitutes an extensive reporting, surveying and certification arrangement for PIC.

However, it is not so clear that the lack of a PIC requirement in the Hong Kong Convention leads to the conclusion that the Hong Kong Convention does not establish an equivalent level of control and enforcement as the Basel Convention. One has to consider the practical impact of such a lack. If a recycling state wishes to maintain the important ship recycling industry within its borders then it will simply consent to the import of the vessel to be recycled. So PIC is not, by itself, a guarantee that states will act in a way to protect the environment over more narrow economic interests. It could be that the Hong Kong Convention's system of reporting, surveying and certifying is, in a practical sense, more useful for preventing pollution related to ship breaking.

The Hong Kong Convention's arrangement makes it possible for all of the relevant parties to be knowledgeable about the potential threat from the very beginning to the very end of the process. Take, for example, the Inventory of Hazardous Materials and the outright ban of certain materials in the construction of vessels. These measures either eliminate a threat outright or put the knowledge in the hands of those who have control over the process of recycling the vessel.

Where PIC could represent a clear advantage is in the protections it affords to transit states. Even this though does not clearly tip the balance in favor of the Basel Convention. The Basel Convention envisions a situation where a party is carrying hazardous wastes that could potentially cause pollution in a transit state. In the case of a ship in route to being recycled, the impact or threat to a transit state is no greater (and perhaps even less) than if the vessel were passing through its waters in the normal course of trade.

The only advantage here would be that a responsible transit state could help to alleviate the ill effects of an irresponsible recycling state by not providing PIC and disrupting transit of the vessel to such recycling state. In practice, this would almost certainly never become an issue due to the difficulties in establishing when a vessel is "waste" under the Basel Convention. It would be very easy for a shipowner to circumvent a non-cooperative transit state by not taking actions that would lead the vessel to be deemed "waste" until the vessel has passed the transit state.

While PIC is a valuable mechanism, it is not clearly superior to the Hong Kong Convention's extensive reporting, surveying and certification arrangement. PIC is more tailored to the typical paradigm of transboundary movement of hazardous waste than the grey area that ship recycling represents.

4.3. The Absence of Required Criminal Sanctions in the Hong Kong Convention

The failure to criminalize illegal traffic also appears to be a shortcoming of the Hong Kong Convention. One of the key problems in ship recycling is that the shipowner presumably gets to pass all of the costs of the waste generated in recycling to the recycling facility and surrounding community. The cradle-to-grave approach of the Hong Kong Convention helps to distribute some of those costs to the newbuilding, repair and shipping industries. However, in certain cases where a shipowner shows blatant disregard for the obligations of the convention and is thus able to avoid all of the costs associated with the waste generated by recycling the vessel, criminalization is likely to be the best deterrent.

However, it is also the case that this apparent deficiency of the Hong Kong Convention does not amount to a lesser standard of control and enforcement as that of the Basel Convention. The Hong Kong Convention requires that sanctions be established under the law of the flag state, wherever the violation occurs and that such sanctions be adequate in severity to discourage violations of the convention wherever they occur. Accordingly, a flag state may feel free to establish criminal penalties if it feels that these are adequate in severity to discourage violations of the convention.

They are not, however, required to establish criminal penalties. This is significant because criminal penalties are not necessarily the best way to guarantee compliance, and requiring such penalties may head off attempts to create a better and more applicable sanctions regime. Your typical violator of the Hong Kong Convention will not likely be a natural person but rather a corporate entity of some sort. While criminal sanctions are no doubt severe and likely to deter violations, it will not be so easy to find a responsible natural person in all cases to be subject to criminal prosecution. The result will likely have a degree of arbitrariness that will be offensive to principles of justice and will hurt the preventative aim of such penalties.

It is often the case that civil remedies are more effective in controlling the behavior of corporate actors than criminal penalties. An effective civil remedies regime can be quantified, insured against and easily considered in the decision-making process. This makes civil remedies a more natural fit for the corporate model than criminal penalties in many cases. Civil remedies work easily into the existing economic arrangements of corporate entities. As such, the lack of required criminal penalties cannot be said to be, on its face, cause for considering the Hong Kong Convention's protections inferior to that of the Basel Convention.

4.4. Scope Deficiencies in the Hong Kong Convention

A more serious criticism of the level of protection offered in the Hong Kong Convention is the narrower scope of applicability with regard to the type of vessels covered and wastes deemed hazardous. The Hong Kong Convention's exclusion of "warships and State-owned ships, ships of less than 500 GT, and ships operating throughout their life only in waters subject to the sovereignty or jurisdiction of the State whose flag the ship is entitled to fly" appears to be a clear deficiency. Although the convention requires that parties ensure that such ships are in compliance, this alone does not overcome the deficiency.

As a result, these excluded vessels are not treated with an equivalent level of protection as the Basel Convention. Considered as a whole, this deficiency does not rise to the level of making the Hong Kong Convention of a lesser level of control and enforcement than the Basel Convention. This is especially the case because these vessels are *excluded* from the scope of the Hong Kong Convention. The likely result is that the Basel Convention will still apply to these classes of vessels. For the sake of completeness, it would certainly be preferable to bring these vessels within the scope of the Hong Kong Convention.

Another scope issue is with regard to certain materials that the Basel Convention includes as hazardous waste but are not considered hazardous under the Hong Kong Convention. Although this is clearly a deficiency, it should also not amount to a finding that the Hong Kong Convention has a lesser level of control and enforcement than the Basel Convention.

The reasoning is similar to that in the scope of vessels deficiency. Exclusion from the scope does not mean that these materials receive less protection in the Hong Kong Convention. It simply means that they are not dealt with at all by the Hong Kong Convention. Accordingly, they are still directly covered by the Basel Convention. Admittedly, this scope deficiency is much more problematic from a practical perspective because it would be unduly complex to have some materials on the vessel covered by the Hong Kong Convention and others covered by the Basel Convention with regard to ship recycling. This scope deficiency should certainly be dealt with by expanding the list of hazardous materials to match that of the Basel Convention's Technical Guidelines where relevant.

4.5. Considering the Differences in Light of Key Principles of International Environmental Law

Besides a side-by-side comparison of the text in the two conventions, it is necessary to consider to what extent they realize the underlying principles of international environmental law discussed in Section 2.1 above. These principles are the polluter pays principle, the source principle and the principle of sustainable development. The fourth principle discussed above, the principle of environmentally sound management, will be flushed out by a more detailed analysis of the other three principles as environmentally sound management incorporates the other principles.

4.5.1. The Polluter Pays and Source Principles

It has been argued that the Hong Kong Convention fails to enact provisions honoring the polluter pays and source principles.¹⁴⁸ In this case, both the polluter pays principle and the source principle may be dealt with together as the issues are substantially similar. It is argued that the burden to remove hazardous materials should fall on the “owner of the ship and not on the country operating the dismantling ship yards.”¹⁴⁹

¹⁴⁸ Bhattacharjee at 227-228.

¹⁴⁹ Id.

There is a kernel of truth to this argument, but it must be drawn out a bit more in order to determine whether or not it poses a serious threat to the viability of the Hong Kong Convention alongside the Basel Convention. There are two elements that still have to be considered. First, is the shipowner really the “polluter” or “source” in this case? Second, in any case, does the Basel Convention do a better job of honoring the polluter pays and source principles than the Hong Kong Convention?

With regard to the first question, it is a vast oversimplification to say that the ship owner is the “polluter” or “source” in the case of ship recycling. After all, many of the hazardous materials are built into the ship by the ship builder and released into the environment by the ship recycler. They all benefit to an extent from their respective activities, and all of these activities contribute to some degree to the pollution that occurs at the end of the life of the vessel.

To use an analogy, in the international civil liability regime for oil spill pollution, it is the shipowner who carries liability despite the fact that they are not necessarily the producer or owner of the oil that they are carrying. The shipowner is expected to maintain the oil safely and securely from the loading point to the destination while performing its role in the supply chain, the transport of goods. To extend this paradigm to ship recycling, it would be the ship recycler and not the ship owner that would be responsible for maintaining the safety and security of the hazardous materials onboard the vessel while performing its role in the supply chain, dismantling and recycling the vessel.

Finally, it is not entirely clear, even if we assume that any one party, particularly the shipper, is the polluter or source that the Basel Convention provides any better protection than the Hong Kong Convention with regard to ship recycling. Both conventions instruct liability, and, as described above, it is not clear at all that the Basel Convention's mandatory criminal liability is at all preferable. Neither conventions provide for a fund to cover the costs of such pollution liability; which would help to spread the risk among all of the true beneficiaries, in this case the builders, owners and recyclers.¹⁵⁰ While the Basel Convention does, in some limited cases, require that the state of export re-import illegally exported hazardous wastes, this is not a clear advantage because the ship would not be illegally exported for reasons discussed in Section 4.2 above, and the state of export is likely to be a disinterested port state as discussed in Section 2.2.3.2 above.

In fact, one could even argue that the Hong Kong Convention's system of reporting, surveying and certification coupled with the prohibition on the use of certain materials in building goes further in efficiently allocating costs with regard to waste generated by ship recycling than the Basel Convention. These measures are introduced to help to prevent potential pollution, and all of these measures are cost-incurring. The costs will be spread among the relevant actors, which will more closely reflect the multi-faceted nature of the "polluter" or "source" of ship recycling related pollution.

¹⁵⁰ It should be mentioned that the Basel Convention has a draft protocol providing for a fund, which has not yet entered into force. Were this protocol to enter into force, it would tip the balances with regard to the polluter pays and source principle in favour of the Basel Convention.

As a final word on the polluter pays and source principles, there are certainly measures that could be taken to improve the Hong Kong Convention on this front. A fund for pollution damage that is shared among the ship builders, owners and recyclers would help to make sure that the industry actors each internalize some of the costs related to such pollution. Currently it is primarily the local environment and unskilled labor force that bears most of these costs. Another measure could be more direct obligations on the shipowner to remove hazardous materials to the extent reasonably possible before delivering the vessel to the recyclers. Of course, this would mean that the amounts payable to the recyclers would be reduced, as additional work and risk is being born by the shipowner. It should be noted that both of these measures are aspired to by the Basel Convention in the Technical Guidelines and the Protocol on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes and their Disposal.¹⁵¹ The fact that these measures are only aspirational under the Basel Convention lends strength to the conclusion that the Hong Kong Convention does not provide for lesser protection.

4.5.2. The Principle of Sustainable Development

The principle of sustainable development is a strong driver behind the Hong Kong Convention, and much of the most vocal criticism of the convention are by groups that in principle support absolute environmental protections at the expense of development.¹⁵² While the Basel Convention initially received similar criticism for serving more to “legitimize hazardous waste trade rather than to prohibit what many felt was a criminal act”, it has evolved over time and is certainly less industry friendly at this point than the Hong Kong Convention.¹⁵³

¹⁵¹ Technical Guidelines at 9. See also the Protocol on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes and their Disposal (10 December 1999) available at <http://basel.int/pub/protocol.html> (last visited on 2 January 2012).

¹⁵² See for instance the Basel Action Network, which seeks an outright ban of the export of hazardous materials to non-OECD countries and advocates for the amendment to the Basel

The Hong Kong Convention can be viewed as friendly to the recycling industry. It leaves the industry largely intact with the addition of relatively low-cost preventative measures. It is very likely that the drafters were concerned that an instrument that cut too strongly against the recycling industry “would have acted as a barrier to entry of ship-breaking States into the Convention.”¹⁵⁴ This is very likely true, and, in fact, it could have also prevented shipowning States that benefit from the low-cost services of recycling states from entering into the convention.

The balance here is difficult to strike, and there will undoubtedly be some that will be unsatisfied no matter which way the interests are weighed. The author is also of the belief that the Hong Kong Convention is not strict enough in some ways. However, this does not mean that the Basel Convention provides a better regime for shipbreaking. In the end, the Basel Convention is also fairly friendly to industry with regard to ship recycling, largely because ship recycling is poorly fit for the Basel Convention. A recycling State will perceive a ship sent to be recycled on its shores, providing jobs and raw materials to its economy, differently than having pure waste shipped within its jurisdiction for cheap disposal. Hence, the PIC approach of the Basel Convention is simply asking a very interested party to affirm its interest.

4.6. In Conclusion

The future of regulating the ship recycling industry is uncertain in many ways. What is certain is that the harms posed by hazardous wastes generated during ship recycling can be devastating to the local environment and health of the workers. The Hong Kong Convention is a valuable development on this front as a starting point for the deeper development of an international legal regime for ship recycling.

Convention that would implement this ban. Information available at <http://www.ban.org/> (last visited at 2 January 2011).

¹⁵³ Id.

¹⁵⁴ Bhattacharjee at 226-227.

The Hong Kong Convention is far from perfect, but one can reasonably argue that it offers at least the same level of environmentally sound management as the Basel Convention with regard to ship recycling. This is not necessarily a testament to the improvements of the Hong Kong Convention so much as the deficiencies in the Basel Convention for regulating ship recycling.

In many ways, the Basel Convention is better suited to its purpose, regulating the transboundary movement of hazardous materials, than the Hong Kong Convention is suited to regulating ship recycling. However, many of the advances in the Basel Convention are the result of over 20 years of development, and some of the most dramatic improvements, such as the Protocol on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes and their Disposal, are still waiting to enter into force.

There is no reason to believe that the Hong Kong Convention could not likewise develop into a better instrument for regulating ship recycling. It has incorporated a flexible amendment procedure that should allow for easy development once it enters into force. From a practical perspective, the political will just may not be there at this point to create a stricter regime.

That being said we have not heard the last of the Basel Convention in ship recycling. Due to scope limitations in the Hong Kong Convention, the Basel Convention will still have a clear role in regulating the excluded types of vessels and a much less clear role in regulating the excluded types of materials. It would be beneficial to the coherence of the Hong Kong Convention to remove these scope limitations and eliminate the role of the Basel Convention in ship recycling altogether.

If the Hong Kong Convention ever enters into force, it will be interesting to see how these conventions develop side by side. Particularly, if improvements to the Basel Convention, such as entry into force of the Protocol on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes and their Disposal, make it clearly superior to the Hong Kong Convention in some ways. The effect will likely be to push similar changes in the Hong Kong Convention.

The Hong Kong Convention, once it enters into force, should remove the greater part of ship recycling from regulation under the Basel Convention by virtue of Article 11 of the Basel Convention. The future will tell to what extent the Hong Kong Convention is truly an advance, but at the very least the discussion is now in the process of evolving into an area of international environmental law.

Works Cited

International Conventions and Related Documentation

Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (22 March 1989) available at <http://www.basel.int/text/con-e-rev.pdf> (last visited on 22 May 2010).

Conference of the Parties to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, “Environmentally sound dismantling of ships”, Tenth meeting, Cartagena, Colombia, 17–21 October 2011, Item 3 (c) (vii) of the provisional agenda (hereinafter referred to as “COP 10 Environmentally Sound Dismantling of Ships”)

Conference Of Parties to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, Geneva, Dec. 9-13, 2002, Technical Guidelines for the Environmentally Sound Management of the Full and Partial Dismantling of Ships available at http://basel.int/meetings/cop/cop6/cop6_23e.pdf#annex (last visited on 2 January 2012).

Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships (15 May 2009) available at <http://ec.europa.eu/environment/waste/ships/pdf/Convention.pdf> (last visited on 21 May 2010).

Protocol on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes and their Disposal (10 December 1999) available at <http://basel.int/pub/protocol.html> (last visited on 2 January 2012).

Rio Declaration on Environment and Development, U.N. Conference on Environment and Development, 13 June 1992, available at <http://www.unep.org/Documents.Multilingual/Default.asp?documentid=78&articleid=116> (last visited on 31 December 2011)

Secretariat of the Basel Convention Publication, “Origins of the Convention” available at <http://www.basel.int/convention/basics.html> (last visited on 23 May 2010).

Secretariat of the Basel Convention Publication “Environmentally Sound Management”, available at <http://www.basel.int/pub/environsound.pdf> (last visited on 25 May 2010).

Court Opinions

The Queen v. Secretary of State for the Environment, Case C-293/97, 1999 E.C.R. I-2603

Academic Articles

Bhattacharjee, Saurabh, “From Basel to Hong Kong: International Environmental Regulation of Ship-Recycling Takes One Step Forward and Two Steps Back”, *Trade Law and Development*, Vol. 1(2) 193 (Fall 2009).

Dodds, David, “Breaking Up Is Hard to Do: Environmental Effects of Shipwrecking and Possible Solutions Under India’s Environmental Regime”, *20 Pacific McGeorge Global Business & Development Law Journal* 207 (2007).

Sawyer, John F., “Shipbreaking and the North-South Debate: Economic Development or Environmental and Labor Catastrophe?” *20 Penn State International Law Review* 535 (Spring 2002).

Ulfstein, Geir, “Legal Aspects of Scrapping Vessels”, A Study for the Norwegian Ministry of Environment (9 March 1999).

Journalistic Sources

Basel Action Network Website available at <http://www.ban.org/> (last visited on 2 January 2011).