SHIPBREAKING AND THE BASEL CONVENTION: ANALYSIS OF THE LEVEL OF CONTROL ESTABLISHED UNDER THE HONG KONG CONVENTION

April 2011



1350 Connecticut Ave. NW, Suite 1100, Washington, DC 20036. • 15 Rue des Savoises, 1205 Geneva, Switzerland. This legal analysis has been prepared by CIEL Attorneys Marcos A Orellana and David Azoulay and CIEL Law Fellows Hana Heineken and Serena Corbetta. Comments or questions are welcome at morellana@ciel.org.

TABLE OF CONTENTS

Table of Contents	2
Executive Summary	5
List of Acronyms	8
1. Introduction	9
2. Background to Shipbreaking under the Basel Convention and the Hong Kong Convention .	10
2.1 Shipbreaking, Health & the Environment	10
2.2 The Basel Convention & Shipbreaking	13
2.2.1 Fundamentals of the Basel Convention	13
2.2.2. Shipbreaking under the Basel Convention	16
2.3. Domestic Litigation applying Basel-implementing statutes	18
2.4 Limitations of Basel as applied to Ship Recycling	20
2.4.1 Difficulties in determining when a Ship is a Waste	20
2.4.2 Difficulties in determining the Export State	20
2.5. The IMO Hong Kong Convention	21
2.5.1 Negotiations	22
2.5.2. Key elements of Hong Kong Convention	23
2.6. Process & State of Play	27
2.7 Conclusion	29
3. Equivalence and the Interpretation of Article 11 of Basel	29
3.1. Literal Interpretation	30
3.2. Teleological Interpretation	32
3.3. Travaux Préparatoires	32
3.4. COP Decisions	34
3.5. Practice of States with respect to Art 11 Agreements	37
3.6 Conclusion	39
4. Criteria to determine equivalence under the Basel Convention	39
4.1. Status of the Debate over Equivalence Criteria	39

4	.2. Gaps in OEWG criteria	41
4	3 Conclusion	43
5. E	Evaluation of equivalence of the Hong Kong Convention	43
5	5.1 Criteria Cluster 1: Scope and Applicability	44
	5.1.1 "Coverage of wastes and identification of hazardous materials"	44
	5.1.2 "Management of life cycle of the ship"	45
	5.1.3 "Relationship between Parties and non-Parties"	46
	5.1.4 "Jurisdiction of the Convention"	46
5	5.2 Criteria Cluster 2: Control	47
	5.2.1 Authorizations, Surveys and Certifications	47
	5.2.2 "Designation of competent authorities / focal points"	48
	5.2.3 Mandatory requirements	49
	5.2.4 "Ability to prohibit import or export"	49
	5.2.5 "Traceability and transparency of hazardous materials until final treatment / ultim disposal"	
	5.2.6 "Prior notification and prior consent"	50
	5.2.7 "Certification of disposal / Statement of Completion of ship recycling"	52
	5.2.8 Other control mechanisms: minimization of transboundary movement	52
5	3.3 Criteria Cluster 3: Enforcement	52
	5.3.1 "Illegal shipments, violations, and sanctioning, including criminalization, of illegal traffic"	52
	5.3.2 "Dispute settlement"	52
	5.3.3 "Duty to re-import"	53
5	5.4 Criteria Cluster 4: Exchange of information by Parties, Cooperation and Coordination.	53
	5.4.1 "Access to and dissemination of information"	53
	5.4.2 "Reporting obligations"	53
	5.4.3 "Transmission of information regarding import / export restrictions"	54
	5.4.4 "Among Parties to advance ESM through information exchange and technical assistance and capacity building on best practices, technical guidelines, monitoring and	
	public awareness."	. 54

5.5 Consideration of the interests of Developing countries	55
6. Conclusion	56
ANNEX 1: Proposed Criteria for Equivalence and Evaluation of Equivalence	58
Bibliography	71

EXECUTIVE SUMMARY

The current state of the shipbreaking industry—where ships are dismantled so that their parts can be recycled back onto the market—is dangerous to human health and the environment. Since 2004, more than 80% of vessels greater than 500 gross tons have been dismantled in South Asia using a technique known as "beaching," where ships are run up onto sandy beaches and dismantled, largely by hand. With minimal or nonexistent protections for human health or the environment, shipbreaking is having a significant harmful effect on human health and the global environment.

The "beaching method" has caused severe pollution, occupational disease and even death in the India, Bangladesh and Pakistan. These are not only localized concerns: shipbreaking based on beaching results in the release of toxic chemicals including asbestos; persistent organic pollutants; and heavy metals such as lead, cadmium, mercury and arsenic. Most of these and the other chemicals released migrate across borders via environmental transport. The contamination of the environment coupled with poor working conditions are violating the human rights of the workers involved in shipbreaking, presenting issues of global concern that deserve an international response.

Increasing international concern with the hazardous nature of shipbreaking practices in the developing world has led to action by Parties to the Basel Convention, as well as by the International Labor Organization and the International Maritime Organization (IMO). In October 2004, by Decision VII/26, the Basel Convention Conference of Parties (COP) affirmed that a ship may become waste as defined in the Basel Convention and called on the Parties to fulfill their obligations under the Basel Convention, in particular with respect to prior informed consent, minimization of transboundary movement of hazardous waste and the principles of environmentally sound management. In December 2006, the Basel COP by Decision VIII/11 invited the IMO to ensure that the draft ship recycling convention to be adopted by it establishes an equivalent level of control as that established under the Basel Convention, noting that the duplication of regulatory instruments that have the same objective should be avoided. In 2009, the IMO adopted the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships (Hong Kong Convention).

The Basel COP is expected to consider at its tenth meeting in October 2011 whether the Hong Kong Convention establishes a level of control and enforcement that is equivalent to the Basel Convention, taking into account comments by the Parties and other stakeholders. If the Basel COP determines that the Hong Kong Convention does in fact provide an "equivalent level of control," then Basel Parties may decide not to apply the Basel Convention to those ships covered by the Hong Kong Convention. Alternatively, if the Basel COP concludes that aspects of the Hong Kong Convention do not provide an "equivalent level of control" to the Basel Convention, the Basel Convention would continue to apply to end-of-life vessels, as expressed in decision VII/26. Other possible outcomes of the COP include: a decision by the Parties requesting further work on the equivalence assessment of the Hong Kong Convention, a decision to amend the Basel Convention to exclude ships from its scope of application, a decision to negotiate a new protocol on shipbreaking,

a decision to draft new guidelines on transboundary movement of ships, or, alternatively, no action by the COP, which would result in the concurrent application of both treaties.

The need to determine an "equivalent level of control" derives from Article 11 of the Basel Convention, which is the exclusive mechanism by which Parties may enter into other international agreements regulating the transboundary movement of hazardous waste. The Hong Kong Convention regulates the transboundary movement of end-of-life ships, which have been determined to constitute hazardous waste under the Basel Convention. In order to be considered a valid Article 11 Agreement, the Hong Kong Convention must meet certain criteria. The *travaux préparatoires* of the Basel Convention, the Basel COP's Decisions, and the practice of Parties show that an Article 11 Agreement must contain, at minimum, measures to ensure the environmentally sound management of waste and a strict control system based on prior informed consent. In addition, Article 11 requires that the Hong Kong Convention ensure consideration of the interests of developing states to the same degree as the Basel Convention.

This legal analysis concludes that the Hong Kong Convention does not provide a level of control that is equivalent to that provided by the Basel Convention, and therefore "derogates" from the environmentally sound management requirements articulated by the Basel Convention. Accordingly, the Basel Conference of the Parties should conclude that end-of-life ships shall remain subject to the regulatory framework of the Basel Convention.

In reaching this conclusion, this analysis applies the criteria articulated by the Open-Ended Working Group to the Basel Convention, in light of Article 11 of the Basel Convention. The analysis shows how the Hong Kong Convention would undermine key protections of the Basel Convention, including the following:

- Scope and Applicability: The Basel Convention's scope applies to a broader range of ships and chemicals than the Hong Kong Convention. Further, the Hong Kong Convention fails to properly address the standards applicable to downstream facilities and their management of waste generated from the recycling activity.
- O Control System: The notification system in the Hong Kong Convention is far weaker than the Basel Convention's Prior Informed Consent mechanism. For example, the Hong Kong Convention allows transboundary movement of wastes upon the tacit, rather than express, consent of the recycling State. Also, the Hong Kong Convention is silent as to ability of the recycling State to reject importation of an end-of-life ship, in clear contrast to Basel, since its control system focuses on recycling operations rather than on the import and export involved in transboundary movement. Further, the Hong Kong Convention also ignores a key aspect of the Basel control system, which is the minimization of the transboundary movement of waste by greater national self-sufficiency in waste management. Also, procedures for authorizing recycling facilities and certifying ships under the Hong Kong Convention do not provide sufficient mandatory minimum standards to ensure that shipbreaking is conducted without adverse effects to human health and the environment a key requirement of the Basel Convention.

- o *Enforcement*: the Basel Convention provides a higher level of control and enforcement through the criminalization of illegal traffic of waste. By contrast, the Hong Kong Convention does not require the criminalization of illegal transfer of hazardous waste. In addition, the Hong Kong Convention lacks the duty to re-import waste illegally transferred, which is an essential component of the Basel Convention.
- o Exchange of Information, Cooperation and Coordination: Although the information provision requirements are similar under both conventions, the reporting obligations under the Basel Convention are more comprehensive than the Hong Kong Convention.

Finally, a key criterion missing from the criteria proposed by the Basel Convention's Open Ended Working Group is the especial consideration of the interests of developing countries, a factor mandated by Article 11 of the Basel Convention. Such consideration is built into the entire policy framework of the Basel Convention by, for example, the provision of funding to Parties to assist them in their efforts to comply with the Convention and the prohibition of exports to Parties when there is reason to believe the wastes will not be managed in an environmentally sound manner. It is also a fundamental basis of the Basel Ban Amendment and the decisions that enabled the Basel Ban. The Hong Kong Convention's shifting of the burden of ensuring environmentally sound management to the Recycling State and its vagueness as to the obligations of the shipowner prior to shipbreaking is further evidence that it does not sufficiently take into account the interests of developing countries.

The Hong Kong Convention does include certain features that, if fully implemented, could reduce the environmental, health, and human rights impacts of shipbreaking. These include assurances of gas-free for hot work prior to recycling as well as comprehensive inventories of hazardous materials on board new ships. However, even if implemented, these features of the Hong Kong Convention would not provide a level of protection equivalent to the Basel Convention.

In light of these and other limitations, the Hong Kong Convention, while useful, clearly fails to ensure that shipbreaking will be conducted globally in a manner as protective of human rights and the environment as does the Basel Convention. In particular, the Hong Convention does not ensure a level of control over the transboundary movement of end-of-life ships and their disposal equivalent to that established under the Basel Convention. The Basel Convention's Conference of the Parties should therefore find that the Hong Kong Convention fails to ensure a level of control as that established under the Basel Convention. The Conference of the Parties should further decide that the Basel Convention will continue to engage the shipbreaking issue in order to achieve the Convention's overall goal to protect human health and the environment against the adverse effects that may result from the generation, transboundary movement and management of ships as hazardous wastes.

LIST OF ACRONYMS

BAN Basel Action Network

CA Competent Authorities

COP Conference of the Parties

CPP Contingency Preparedness Plan

EIA Environmental Impact Assessment

EMP Environmental Management Plan

EMS Environmental Management System

ESM Environmentally Sound Management

FOC Flag of Convenience

FIDH International Federation for Human Rights

GT Gross Tonnage

ICIHM International Certificate on Inventory of Hazardous Materials

IHM Inventory of Hazardous Materials (also known as Green Passport)

ILO International Labour Organization

IMO International Maritime Organization

IRRC International Ready for Recycling Certificate

LOSC United Nations Convention on the Law of the Sea

MEPC Marine Environment Protection Committee

MP Monitoring Plan

NGOs Nongovernmental Organizations

OECD Organization for Economic Cooperation and Development

OEWG Open-ended Working Group to the Basel Convention

PIC Prior Informed Consent

SRP Ship Recycling Plan

SRF Ship Recycling Facilities

SRFP Ship Recycling Facilities Plan

UNEP United Nations Environment Programme

WMP Waste Management Plan

1. Introduction

The increasing rate at which end-of-life ships are now transferred to developing countries for shipbreaking and the conditions under which such ships are dismantled have raised concerns among States as to how to ensure such activity is performed in an environmentally sound and safe manner.¹ By Decision VII/26 (October 2004) on Environmentally Sound Management of Ship Dismantling, the Conference of the Parties (COP) to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (1989) (hereinafter "Basel Convention")² invited the International Maritime Organization (IMO) to continue its work on the establishment of "mandatory requirements ... that ensure an equivalent level of control as established under the Basel Convention and ... the environmentally sound management of ship dismantling."³ The IMO agreed in December 2005, through an Assembly resolution, to develop a "new legally binding instrument on ship recycling."⁴ The resulting Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009 (hereinafter "Hong Kong Convention"), was adopted by States in May 2009. It has not yet entered into force.⁵

Since June of 2008, following Decision IX/30 (June 2008) on the Dismantling of Ships, the Parties to the Basel Convention have commenced work on the determination of whether the Hong Kong Convention provides an equivalent level of control and enforcement as that provided by the Basel Convention.⁶ This is critical since "a ship may become a waste as defined in article 2 of the Basel Convention" while remaining "a ship under other international rules," and as such be subject to Basel's regulatory framework. The Basel COP have also noted "that the duplication of regulatory

Dec. V/28 on the Dismantling of ships, U.N. Doc. UNEP/CHW.5/29 (December 1999), Dec. VI/24 on the Technical Guidelines for the Environmentally Sound Management of the Full and Partial Dismantling of Ships, U.N. Doc. UNEP/CHW.6/40 (December 2002), Dec. VII/26 on Environmentally Sound Management of Ship Dismantling, U.N. Doc. UNEP/CHW.7/33 (October 2004) (hereinafter "Dec. VII/26"), Dec. VIII/11 on Environmentally Sound Management of Ship Dismantling, U.N. Doc. UNEP/CHW.8/16 (December 2006) (hereinafter "Dec. VIII/11"), Dec. IX/30 on Dismantling of Ships, U.N. Doc. UNEP/CHW.9/39 (June 2008) (hereinafter "Dec. IX/30").

Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, March 22, 1989, 1673 U.N.T.S. 57 [hereinafter "Basel Convention"].

Dec. VII/26, supra note 1.

⁴ IMO Assemb. Res. A.981(24), U.N. Doc. A 24/Res.981 (December 2005).

The Hong Kong Convention will enter into force 24 months after the date on which the following conditions are met: "1. Not less than 15 states have either signed it without reservation as to ratification, acceptance or approval, or have deposited the requisite instrument of ratification, acceptance, approval or accession in accordance with Article 16; 2. The combined merchant fleets of the States mentioned in paragraph 1.1. constitute not less than 40 percent of the gross tonnage of the world's merchant shipping; and 3. The combined maximum annual ship recycling volume of the States mentioned in paragraph 1.1 during the preceding 10 years constitutes not less than 3 percent of the gross tonnage of the combined merchant shipping of the same States." Art. 17.1. As of January 31 2011, the following countries have signed the Convention: France, Italy, Netherlands, Saint Kitts and Nevis, and Turkey.

Dec. IX/30, *supra* note 1 (requesting the Open-ended Working Group "to carry out a preliminary assessment on whether the ship recycling Convention establishes an equivalent level of control and enforcement as that established under the Basel Convention, in their entirety," and inviting "Parties to that end, to provide comments on appropriate criteria to be used to the Secretariat.").

Dec. VII/26, supra note 1.

instruments that have the same objective should be avoided."⁸ Parties and relevant stakeholders have been invited to provide the Basel Secretariat with a preliminary assessment of equivalence based on the criteria developed by the Open-ended Working Group of the Basel Convention in 2010. 9 CIEL offers this analysis of equivalence in order to inform this process.

This legal analysis of equivalence tackles the question of whether the Hong Kong Convention provides an equivalent level of control as that provided by the Basel Convention. It first examines the shipbreaking industry, the application of the Basel Convention to ships and shipbreaking, and the structural elements of the Hong Kong Convention. The analysis then explores Article 11 of the Basel Convention, which allows Basel Parties to enter into agreements concerning transboundary movements of waste with other Parties and non-Parties, and establishes its proper interpretation under customary law rules of treaty interpretation. Next, the analysis identifies the criteria to be used to determine equivalence of the Hong Kong Convention with respect to ships and shipbreaking. Finally, the legal analysis answers the question of whether the Hong Kong Convention provides an equivalent level of control and enforcement as that required by the Basel Convention.

We conclude that although the Hong Kong Convention makes progress in some respects, such as the upkeep of a comprehensive inventory of hazardous materials during the life of a ship and the requirement for assurances of gas-free for hot work prior to recycling, it does not provide an equivalent level of control and enforcement as that established under the Basel Convention. The lack of equivalence results from the absence of several key elements of the Basel Convention that have been deemed essential in ensuring the Environmentally Sound Management (ESM) of waste and the minimization of transboundary movements of hazardous wastes and other wastes. Specifically, the Hong Kong Convention excludes certain ships and wastes that are hazardous in the shipbreaking process; lacks in concrete and mandatory requirements to ensure the environmentally sound management (ESM) of waste; fails to provide an equivalent strict control mechanism based on Prior Informed Consent; and provides insufficient consideration of the interests of developing countries.

In light of the shortcomings of the Hong Kong Convention to secure a level of protection equivalent to Basel, Basel Parties must remain reengaged on the shipbreaking problem in order to seek solutions that effectively address the health and environmental challenges of hazardous waste management in shipbreaking.

2. BACKGROUND TO SHIPBREAKING UNDER THE BASEL CONVENTION AND THE HONG KONG CONVENTION

2.1 Shipbreaking, Health & the Environment

Shipbreaking refers to the process by which end-of-life ships are dismantled so that their parts can be recycled back into the market. With the rising cost of ship recycling in developed countries, owing largely to stricter environmental regulations requiring costs to be internalized, major

⁸ Dec. IX/30, supra note 1.

Dec. OEWG-VII/12, Report of the Open-ended Working Group of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal on the work of its seventh session, U.N. Doc. UNEP/CHW/OEWG/7/21 (14 May 2010).

recycling industries have developed in certain developing countries where costs can be readily externalized. In 2009, nearly 25 million Gross Tons (GT) of ships were recycled, with 98% of the world's tonnage recycled in 5 states: China, Bangladesh, India, Pakistan, and Turkey. 10 The world fleet of ships of 500 GTs and above is estimated around 50,000 ships, of which about 1,670 ships must be recycled annually. 11 This number is projected to increase with the impending phase-out of single-hulled oil tankers, resulting in thousands of ships being dismantled over the next 10 years. 12

The shipbreaking industry has contributed to the economies of recycling states, owing to the opportunity to reuse materials and employ tens of thousands of workers on the shipbreaking yards and hundreds of thousands in businesses related to shipbreaking activities. 13 In addition, shipbreaking has offered several of these countries easy access to materials such as steel. 14 However, shipbreaking has also raised international concern due to the extremely poor working conditions, leading to deaths and damage to human health, as well as the serious environmental pollution it has caused. 15

The Special Rapporteur on the adverse effects of the movement and dumping of toxic and dangerous products and wastes on the enjoyment of human rights has observed that end-of-life vessels sent for dismantling represent one of the major streams of hazardous waste transferred from industrialized countries to the developing world. 16 Shipbreaking industries in India, Bangladesh and Pakistan have been found to be one of the major land-based sources of marine pollution in the South Asian Seas region. 17 Toxic and dangerous substances that have been

IHS Fairplay, 2009 Lloyd's Register of Ships. In 2009, Bangladesh recycled 6.61 million GT, China 7.74 million GT, India 7.56 million GT, Pakistan 2.10 million GT, and Turkey .56 million GT of Ships. Unlike the nonmechanized process used in South Asia, China and Turkey utilize an intermediate process with limited equipment and significant manpower. See Report of the Special Rapporteur, infra note 12, at para. 13.

Nikos Mikelis, The Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, (PPT) presented at the UN Conference on Trade and Development: Multi-year Expert Meeting on Transport and Trade Facilitation (10 December 2010). available http://www.unctad.org/Templates/Page.asp?intItemID=5754&lang=1&print=1 [hereinafter "Mikelis"].

See Okechukwu Ibeanu, Report of the Special Rapporteur on the adverse effects of the movement and dumping of toxic and dangerous products and wastes on the enjoyment of human rights, U.N. Doc. A/HRC/12/26, para. 12 (15 July 2009) (hereinafter "Report of the Special Rapporteur").

Report of the Special Rapporteur, supra note 12, at para. 10. It is estimated that shipbreaking yards directly employ approximately 30,000 workers worldwide, and 100,000 to 200,000 persons are engaged in different business related to shipbreaking activities. See also The World Bank, The Ship Breaking and Recycling Industry in Bangladesh and Pakistan (Report No. 58275-SAS) (December 2010) (hereinafter "World Bank Report")

¹⁴ See World Bank Report.

¹⁵

Report of the Special Rapporteur, supra note 12, at para 11. See generally Greenpeace-FIDH (International Federation for Human Rights), End of Life Ships - The Human Cost of Breaking Ships (Dec. 2005), http://www.greenpeace.org/international/Global/international/planet-2/report/2006/4/end-of-life-the-humancost-of.pdf [hereinafter "End of Life Ships"]; International Federation for Human Rights (FIDH), Where do the 'floating dustbins' end up? Labour Rights in Shipbreaking Yards in South Asia: The cases of Chittagong (Bangladesh) and Alang (India), 4 (Dec. 2002), www.fidh.org/IMG/pdf/bd1112a.pdf;, Aage Bjorn Anderson, International Labour Organization, Worker Ship-Breaking Industry, (2001),available http://www.ilo.org/public/english/dialogue/sector/ papers/shpbreak/wp-167.pdf.

Report of the Special Rapporteur, supra note 12, at para. 19.

UNEP, Marine Litter: A Global Challenge, 2009, http://www.unep.org/pdf/unep_marine_littera global challenge.pdf.

identified by the Special Rapporteur as present on end-of-life ships include Asbestos; Polychlorinated biphenyls (PCBs); Polyvinyl chloride (PVC); heavy metals such as lead, mercury, arsenic, and cadmium; Polycyclic aromatic hydrocarbons (PAHs); Organotins, particularly Tributyltin (TBT); oil and sludge; bilge water; and ballast water. For example, in 2000, a sampling of the soil in the coastal town of Alang, India, known as the largest scrapping site for ocean-going vessels, revealed that deadly asbestos fibers were present not only in the ship yards but also in workers' living quarters. Because the workers often handle the asbestos with their bare hands, they risk asbestosis, lung cancer, and mesothelioma after prolonged exposure. Because the workers often handle the asbestos with their bare hands, they risk asbestosis, lung cancer, and mesothelioma after prolonged exposure.

The hazardous nature of the industry has largely been attributed to the recycling methods commonly used in the shipbreaking yards of developing countries as well as operations downstream of those yards. The ship dismantling itself can be performed at a pier, a dry dock, a dismantling slip or on a beach, using a highly mechanized process or little to no mechanization. Before the 1970s, most ship dismantling took place in Europe, using highly mechanized processes found at ship building operations. However, increases in cost resulting from more stringent regulation of hazardous waste caused much of this activity to move to developing countries, where cheaper labor and minimal regulation lowered the costs of disposal due to enhanced opportunity for cost externalization.²¹

Shipbreaking in South Asia, particularly in Bangladesh, India and Pakistan, is generally done through a largely non-mechanized platform and associated methodology called "beaching," whereby ships are run up onto sandy beaches during high tide. Since 2004, more than 80% of end-of-life vessels of 500 GT and above have been dismantled in South Asia through the use of this process. The ship is dismantled largely by use of heavy manpower, without sufficient use of cranes for lifting, proper access by emergency equipment, or concrete covering or other containment, other than the hull of

Report of the Special Rapporteur, *supra* note 12, at para. 19. Potential health and environmental impacts of these substances include the following: Asbestos: asbestosis, lung cancer, and mesothelioma; PCB: cancer, birth defects and reproductive and neurological damage; PVC: cancer, kidney damage, and interference with reproductive and neurological system; Heavy metals: cancer and damage to the nervous, digestive, reproductive and respiratory systems; PAHs: malignant tumors; Organotins: nerve toxin accumulation in the blood, liver, kidneys and brain, and highly toxic for aquatic systems; Oil and sludge: poisoning of marine organisms, birds, fish, plants and other forms of life; Bilge water: pollution of water and coastal areas; Ballast water: pollution of water and coastal areas, introduction of alien species and viruses and bacteria that may cause epidemics. *See also* Appendix B to the Basel Convention Technical Guidelines for the Environmentally Sound Management of the Full and Partial Dismantling of Ships, UNEP/CHW.6/23 (8 August 2002).

End of Life Ships, *supra* note 15, para 11.

Report of the Special Rapporteur, *supra* note 12, at para. 19.

Id., para. 9 and 13. See also *Scrapping of Ocean-Going Ships: A Global Environmental, Health and Human Rights Problem,* June 1999 - Speech by Thilo Bode, Executive Director of Greenpeace International for the 1st Global ship Scrapping summit: "In the last 20 years, partly as a result of globalization, the shipbreaking industry has degenerated from mechanized dock work to primitive technology, simple hand labour. In the 1970s, ocean-going vessels were scrapped at docks in the United Kingdom, Taiwan, Spain, Mexico and Brazil with prescribed technical procedures and mechanical aids. Since the early 1980s, shipbreaking activities have migrated to low-pay Asian countries that are poor in raw materials. Old ships are cut up by hand on open beaches and under inhuman working conditions. The product is primarily ship steel, which is turned into mild steel by cold rolling. In industrialized countries, rolled steel is banned from structural use for quality reasons."

² IHS Fairplay, 2008 Lloyd's Register of Ships.

the ship, to prevent releases of pollutants.²³ Because end-of-life ships brought to South Asia are rarely pre-cleaned prior to being dismantled, "cleaning" is in part accomplished by drilling holes into the beached ship and allowing the seawater to wash out the oil-contaminated tanks as well as other contaminated parts, thereby releasing toxic and hazardous substances found in end-of-life ships directly into the marine environment.²⁴ Subsequent dismantling operations often allow other hazardous contaminants, such as those from toxic paints and materials using asbestos or PCBs, to be released into the environment, causing harm to workers. Downstream operations result in further negative impacts due to substandard residual management and lack of pollution controls in rolling mills and the processing of paint laden steel.

2.2 The Basel Convention & Shipbreaking

2.2.1 Fundamentals of the Basel Convention

The Basel Convention is the principal international legal instrument regulating the transboundary movement and disposal of hazardous wastes. The main goal of the Basel Convention is to "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." ²⁵

The Basel Convention pursues three main objectives: 26

- 1. **Minimization of the production of waste at the source**. Art. 4(2)(a) requires that the Parties take the appropriate measures to "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." The objective is to reduce not only the amount of waste, but also their hazardousness: "the most effective way of protecting human health and the environment from the dangers posed by such wastes is the reduction of their generation to a minimum in terms of quantity and/or hazard potential." ²⁷
- 2. **Environmentally sound management and disposal of waste (ESM)**. The ESM of waste requires the management of waste "in a manner which will protect human health and the environment against the effects which may result from such waste." Art. 4 of the Convention mentions this concept several times with regard to the treatment facilities, transboundary movement and export,

Report of the Special Rapporteur, *supra* note 12, at para. 16.

Report of the Special Rapporteur, *supra* note 12, at para. 34.

Basel Convention, Summary of Treaty, *available at* http://ec.europa.eu/world/agreements/ prepareCreateTreatiesWorkspace/treatiesGeneralData.do?step=0&redirect=true&treatyId=528.

Sejal Choksi, *The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal: 1999 Protocol on Liability and Compensation*, 28 Ecology L.Q. 509, 516 (2001).

Basel Convention, preamble. In accordance with the principle of the reduction of waste at source, the minimization of the hazardous components of products is a concept that is considered in several International and European documents. The European Directive 2002/95/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment is an important example, as well as the Stockholm Convention on Persistent Organic Pollutants.

Basel Convention, art. 2, def.8.

and import.²⁹

3. Minimization of transboundary movements of hazardous wastes and other wastes through national self-sufficiency in waste management. Movement and disposal of waste must be considered only in the case that the generation cannot be avoided, ³⁰ and it must take place as close as possible to the place where waste is generated. ³¹ Art. 4(2)(d) requires the minimization of the transboundary movement of waste.

The Convention does not prohibit the transboundary movement of waste but imposes strict control of such movement by way of a prior informed consent (PIC) procedure.³² Specifically, the Convention establishes the following procedure:

- a) all the States concerned by a transboundary transport of waste³³ must receive a prior notification (by the state of export, or the arranger of the expedition, or the generator) of the expedition;
- b) the State(s) concerned shall respond in writing to the notification (1) consenting to the transport (with or without conditions), or (2) denying the transport, or (3) requesting additional information;
- c) the State of export allows the movement when all the following conditions occur:
 - i. it has received the written confirmation of the PIC of all the concerned States;
 - ii. the existence of a written contract between the exporter and the destination plant is proven. The contract must specify that the waste object of the export will be managed in an environmentally sound manner;
 - iii. the lack of domestic technical capacity and facilities to dispose of the waste in an environmentally sound and efficient manner is proven ³⁴;
 - iv. the need for raw material by the State of import is proven.
- d) the State of export must prohibit the movement if any one of the conditions listed above is lacking, or any time it believes that the wastes will not be managed in an environmentally sound manner.

This provision can be considered as one of the first appearances of the so called "hierarchy of wastes," which has been fully developed in the European directives Dir. 2002/96/EC (art. 1), Dir. 2006/12/EC (art. 3), Dir. 2008/98/EC (art. 4). According to this principle the choice of the method to apply for the waste management must take place according to the following order: (1) prevention, (2) Reuse, (3) Recycle, (4) Other forms of recovery to reduce the disposal (e.g. production of energy), and (5) Disposal.

²⁹ Basel Convention, art 4.2 (b), (d), (e), (g).

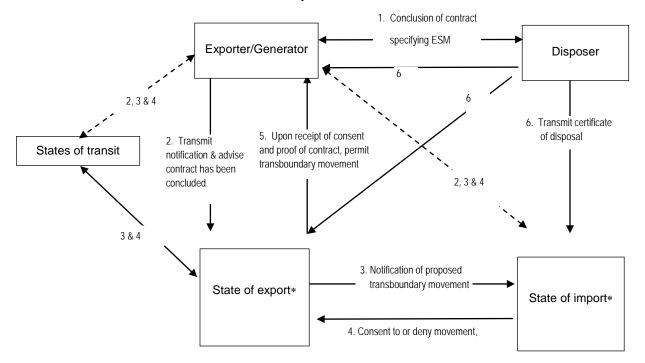
Basel Convention, art. 4.2 (b).

Basel Convention, art. 6. See also Matt Cohen, U.S. Shipbreaking Exports: Balancing Safe Disposal with Economic Realities, 28 Environs: Envtl, L. & Pol'y J. 237 (2004-2005).

The Convention considers as "concerned" not only the state of destination, but also all States of transit, which also have the right to prohibit the import of certain kinds of waste (see Basel Convention, art. 4.1 (b)).

Basel Convention, art. 4.9 (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."

Basel Convention Prior Informed Consent procedure



^{*}State of export and State of import shall require that each person who takes charge of a transboundary movement of hazardous waste or other wastes sign the movement document either upon delivery or receipt of the wastes.

The Basel Convention does not strictly prohibit the export of waste because in several cases it is recognized as appropriate.³⁵ For example, developing countries benefit from sending their waste to a developed country when they themselves lack the technical capacity to manage such wastes in an environmentally sound manner. Developing countries also benefit economically from the trade in waste where it provides a source of raw materials and second-hand products as well as employment opportunities for the local population. Nevertheless, Parties' concern that the imports of hazardous wastes from developed to developing countries would not comply with ESM led to the adoption of the Basel Ban Amendment in 1995.³⁶ The amendment bans the export of hazardous wastes for final disposal and recycling/recovery operations from countries listed in Annex VII of the Convention (Lichtenstein, EU and OECD member States) to non-Annex VII countries. Although it has yet to enter into force, it has been implemented by the European Union.³⁷

The Basel Convention establishes an enforcement framework that requires State Parties to

Basel Convention, art. 4.9.

The Ban Amendment was adopted by the Basel COP by Decision III/1 (1995) as an amendment to the Basel Convention.

See Council Regulation (EC) No 120/97 of 20 January 1997 amending Regulation (EC) No 259/93 on the supervision and control of shipments of waste within, into and out of the European Community, Official Journal No. L 022, 24/01/1997. See also Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipment of waste, Official Journal L 190, 12/7/2006.

criminalize illegal shipments of hazardous waste.³⁸ Further, Basel requires the State of export "to re-import" the shipment unless an alternative disposal in compliance with the ESM principle can be found within 90 days.³⁹

2.2.2. Shipbreaking under the Basel Convention

The applicability of the Basel Convention to the recycling of end-of-life ships has been highly debated. ⁴⁰ In particular, the key issues confronting the international community have been whether the ship can become a waste, and if so:

- When does a ship become a waste;
- Who is the waste generator and which state is the exporting state; and
- Whether it simultaneously must be governed in compliance with the regulations concerning ships.

2.2.2.1. Status of Ships under the Basel Convention

The Basel COP, by Decision VII/26 (October 2004), affirmed, "a ship may become waste as defined in article 2 of the Basel Convention and ... at the same time it may be defined as a ship under other international rules." As a consequence, the Parties have been called to "fulfill their obligations under the Basel Convention where applicable, in particular their obligations with respect to prior informed consent, minimization of transboundary movement of hazardous wastes and the principles of environmentally sound management." 42

2.2.2.2 Environmentally sound management of Ships

Art. 2.8 of the Basel Convention defines ESM as "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." ⁴³

The Parties to the Basel Convention have considered the issue of what constitutes the ESM of shipbreaking and adopted the Technical Guidelines for the environmentally sound management of the full and partial dismantling of ships (Basel Technical Guidelines).⁴⁴ The Basel Technical

Basel Convention, art. 2.8.

Basel Convention, arts. 4.3, 9.

Basel Convention, art. 8.

The industry has strongly defended the thesis that ships cannot be ships and wastes at the same time because ships can sail "under their own power." On the other hand, NGOs have argued that the obligations introduced by the Basel Convention concern all wastes listed in Annex I and presenting the characteristics listed in Annex III, irrespective of the waste's capability to operate, or the functionality or ability to operate, or the possibility to be economically reutilized. NGOs have also argued that the location of the hazardous waste (e.g. located in the structure of the ship) and the quantity of the hazardous waste are similarly irrelevant for the purpose of determining whether or not the ship is a waste. Basel Action Network and Greenpeace International, Shipbreaking and the legal obligations under the Basel Convention, submitted to the Legal Working Group of the Basel Convention, U.N. Doc. UNEP/CHW/LWG/5/4/Add.1, Sec. III, paras. 1 and 2 (21 May 2002).

Dec. VII/26, supra note 1.

⁴² Id

Basel Convention Technical Guidelines for the Environmentally Sound Management of the Full and Partial

Guidelines "provide information and recommendations on procedures, processes and practices that **must** be implemented to attain [ESM] at facilities for ship dismantling (emphasis added)." ⁴⁵ It is premised on the conception that "in order to achieve ESM-compliant procedures, it may be necessary to address factors of the process other than those directly related to the actual dismantling facility." ⁴⁶ This approach involves three different phases of ship dismantling in order to achieve ESM: preparations on the ship, preparation of the Environmental Management Plan, and the dismantling of the ship.

Table 1: Phases of an environmentally sound ship dismantling process

Preparations on	Preparation of an inventory list of onboard hazardous/polluting wastes
the ship ⁴⁷	Removal/cleaning – liquids, including fuels and oils
	 Securing the vessel by ensuring safe access to all areas and safe conditions for hot work.
	Removal of equipment
Environmental	Environmental Impact Assessment (EIA)
Management Plan (EMP)	Inventory of best practices
(=,	Waste management plan (WMP)
	Contingency preparedness plan (CPP)
	Monitoring plan (MP)
Ship dismantling	Minimum key functionalities of a model facility:
facility	Containment
	Workstations for secondary dismantling and sequential breakdown into component elements.
	Specially equipped workstations for removal of hazardous and toxic materials
	 Temporary storage areas for benign materials and steelwork.
	Secure storage areas for hazardous wastes.
	• Storage areas for fully processed equipment and materials that are ready for reuse, recycling or disposal.
	Proximity to proper disposal facilities.

Dismantling of Ships, 7, U.N. Doc. UNEP/CHW.6/23 (8 August 2002) [hereinafter "Technical Guidelines"].

⁴⁵ Id.

⁴⁶ Id at 23

See Report of the Special Rapporteur, supra note 12, at para. 12, affirming that "ESM on ship dismantling requires that hazardous waste and materials are managed and disposed in a manner that ensures the protection of human health and the environment against the adverse effects which may result from such waste." According to the report, in case the dismantling facility is not able to ensure the environmentally sound management of hazardous waste, a pre-cleaning must be done before the last voyage of the ship.

It is noteworthy that the Basel Technical Guidelines require the pre-cleaning of ships to avoid the transport of hazardous wastes⁴⁸ as well as the use of impermeable surfaces in the ship dismantling facility.

This holistic approach to achieving ESM is affirmed in various statements made by the Basel COP. For example, the COP has noted the need to make specific requirements for ships before being scrapped⁴⁹; the importance of identifying the potentially hazardous materials used to construct the ship as well as those found on board⁵⁰; and the utility of prior informed consent for "enabl[ing] the minimization of the impact to human health and the environment associated with dismantling of ships."⁵¹

2.3. Domestic Litigation applying Basel-implementing statutes

In domestic litigation involving shipbreaking, domestic Courts, particularly in Europe, have applied the legal requirements of the Basel Convention, as they have been made manifest in national law.

1. The Sandrien Case (2002)

This case involved a Mauritius owned vessel, the *Sandrien*, docked in The Netherlands but flying a Bolivian flag. The Dutch Shipping Inspectorate had initially given the shipowner permission to transfer the vessel to India in order to be dismantled. The transfer was stopped by the Dutch Environment Ministry upon discovery of large quantities of hazardous materials on board, including 5000 kg of asbestos. According to the reasoning of the Council of State at The Hague,⁵² the existence of a contract with the dismantling facility located in India indicated an intention to dispose and therefore was enough to demonstrate that the ship had already acquired the nature of waste before leaving Dutch waters. As a consequence, the transport was required to comply with the Basel Convention, as implemented by the European Waste Shipment Regulation, by giving proper notice of the shipment.⁵³

2. The Clemenceau Case (2005)

In 2005, the French government decided to send the French aircraft Clemenceau to India in order to be dismantled. Nonetheless, after a long and debated process, the French Conseil d'Etat decided that the transport was in violation of the European Waste Shipment Regulation, specifically its provision implementing the Basel Ban Amendment. It therefore ordered the re-import of the ship into French territory. In the motivation of the decision, the Supreme Assembly affirmed that the

See Technical Guidelines, supra note 44, at p.4 (stating "hazardous wastes and materials such as asbestos, PCBs and TBT paints should, to the extent possible, be removed in best available facilities from the ship during its life cycle prior to its voyage for dismantling so that a minimal amount of this material will have to be dealt with during the breaking process.")

Dec. V/28, *supra* note 1, at Annex VI: "ships have to meet certain requirements to sail. Similarly, it was suggested that requirements relating to the environmental condition of a ship designated for scrapping could be defined"

Dec. VII/26, supra note 1.

⁵¹ *Id*.

⁵² Council of State of The Hague, Case number: 200105168/2, June 19, 2002.

⁵³ Regulation (EC) No 1013/2006, *supra* note 37.

sale contract of the ship for purposes of dismantling showed the intention of the French government to dispose of the ship, which is enough to demonstrate that the ship was already a waste before leaving the French waters. For that reason, the Supreme Assembly held that the transport must be arranged in compliance with the Basel Convention, as implemented by the European Waste Shipment Regulation, irrespective of the use of the ship as a military aircraft.⁵⁴

3. The Otapan Case (2007)

This case involved the MV Otapan, a ship docked in a Dutch port and sent to Turkey in order to be dismantled. In this case the Netherlands, as the State of export, correctly identified the ship as a waste and started the procedure for the transport of the ship by notifying the State of import, as required by the Basel Convention and by the European Waste Shipment Regulation. Turkey, however, possessed a hazardous waste import ban and therefore required pre-cleaning prior to export. Although some pre-cleaning took place, the Turkish government stopped the vessel from entering domestic waters on grounds that the vessel had more asbestos on board than specified in the notification. The court found that the waste treatment process was wrongly classified on the notification form as a recovery operation, when in fact the asbestos needed to be disposed of. The judgment therefore held that the Dutch government "wrongly failed to object to the proposed shipment on the ground of an incorrect classification on the notification form." 55

4. The M.T. Enterprise case (2008)

This case was brought by the Bangladesh Environmental Lawyers Association (BELA) in 2008, challenging the entry of MT Enterprise into Bangladesh territory. The MT Enterprise had been listed by Greenpeace as a toxic ship. In March 2009, the High Court directed that none of the other Greenpeace listed ships should be imported into Bangladesh for breaking purposes until authorities conduct appropriate scrutiny of the waste content and cleaning of the ships, in line with applicable laws, and proper infrastructural facility is in place to deal with such ships. The Court also directed the government to close all shipreaking yards within two weeks for operating without environmental clearance from the government. The Court directed the Ministry of Environment and Forest to frame within three months necessary rules on shipbreaking, relying on the obligations of Bangladesh under the Basel Convention, the Environment Conservation Act of 1995, and the Environment Conservation Rules of 1997. In May 2010, the Court ruled that all ships coming into the nation to be dismantled must now be required to carry proof that they have been decontaminated of hazardous materials before entering Bangladesh's waters. This was in direct response to Bangladesh's national ban on the importation of hazardous waste, in accordance with Basel Convention Art. 1.1(b).

⁵⁴ Conseil d'Etat, contentieux n. 288801, 6^{ème} et 1^{ère} sous-sections rèunies, Lecture du 15 Fevrier 2006.

⁵⁵ Council of State of The Hague, Case number: 200606331/1, February 21, 2007.

See Bangladesh Environmental Lawyers Association, List of Selected Public Interest Litigation of BELA, p33, available at http://www.belabangla.org/activities.htm#Public%20Interest%20Litigation%20%28PIL%29.

⁵⁷ Id

The Daily Star, "Ship-breaking ordered shut," March 18, 2009, available at http://www.thedailystar.net/newDesign/news-details.php?nid=80213

2.4 Limitations of Basel as applied to Ship Recycling

2.4.1 Difficulties in determining when a Ship is a Waste

Decision VII/26 (October 2004) established that ships may become waste. Of critical importance is the exact moment when the ship becomes a waste, because it not only determines whether the Basel Convention applies but also identifies the state responsible for the correct management of the ship/waste. The Basel Convention defines "wastes" as substances or objects which are (1) disposed of, or (2) are intended to be disposed of, or (3) are required to be disposed of by the provisions of national law. In the absence of specific provisions or guidance concerning the special nature of the transboundary movement of ships for purposes of recycling or disposal, provided by the Basel Convention or the Parties, the general waste definition must be applied. Ships therefore become waste once the intention to dispose of it is formed.

An NGO submission to the Legal Working Group of the Basel Convention⁵⁹ has addressed the exact issue of how to identify the intention to dispose of a ship. They argue that the intention can be confirmed through a contract, preparatory actions (such as cancellation or modification of insurance, notice of destination to a port or notices given to crew), or through the communications between the ship owner and third parties (e-mail, fax, telex, phone-call).

However, difficulties in determining the exact moment when a ship becomes a waste has continued to hinder the application of the Basel Convention to shipbreaking. Ships carry cargo during their last voyage for dismantling or change owners in the middle of the voyage, making it difficult for regulators to identify when the decision to dispose is formed. Many shipowners are also reluctant to classify ships as waste, in order to avoid compliance with transboundary waste legislation. Because ships are able to easily navigate across national boundaries, shipowners have been able to avoid obligations under Basel by hiding the intent to dispose the ship until the ship is on the high seas or in the ship recycling state. In the absence of transboundary movement (from one state jurisdiction to another), the Basel obligations for transboundary movement do not apply.

2.4.2 Difficulties in determining the Export State

The difficulty of determining when a ship becomes a waste leads to a second challenge – identification of the export state. An "Export State" is critical for the effective implementation of the Basel Convention's strict control procedures including PIC. Under the Basel Convention, States are responsible for ensuring that the management of hazardous wastes is consistent with the

20

See Basel Action Network and Greenpeace International, *Shipbreaking and the legal obligations under the Basel Convention*, *supra* note 40, at para.1(2).

Saurabh Bhattacharjee, From Basel to Hong Kong: International Environmental Regulation of Ship-Recycling Takes One Step Forward and Two Steps Back, 1(2) TRADE L. & DEV. 193, 214 (2009) [hereinafter "Bhattacharjee"]. at 214. See also H. Edwin Anderson, The Nationality of Ships and Flags of Convenience: Economics, Politics, and Alternatives, 21 Tul. MAR. L. J. 139, 163 (1996) ["hereinafter "Anderson"]

Bhattacharjee, supra note 60, at 214. See also European Community, Comparison of the Level of Control and Enforcement Established by the Basel Convention with the Expected Level of Control and Enforcement to be provided by the Draft Ship Recycling Convention in its Entirety – An Assessment by the EU and its Member States, (2008) available at: www.basel.int/ships/commentsOEWG6/EU.doc

See Basel Convention, art. 2.3 (defining 'transboundary movement')

protection of human health and the environment.⁶³ In particular, the State of Export has the obligation to ensure Environmentally Sound Management (ESM) as well as the obligation to implement Basel's strict control procedures:

"The obligation under this Convention of States in which hazardous wastes and other wastes are generated to require that those wastes are managed in an environmentally sound manner may not under any circumstances be transferred to the States of import or transit." ⁶⁴

"The State of export shall notify ... in writing, through the channel of the competent authority of the State of export, the competent authority of the States concerned of any proposed transboundary movement of hazardous wastes or other wastes." 65

The Basel Convention defines the "State of export" as the "Party from which a transboundary movement of hazardous wastes or other wastes is planned to be initiated or is initiated." ⁶⁶ In the case of ships, the Export State may be the State where the intention to dispose is formed, or the Port State from which the end-of-life ship originates. In order to be consistent with the producer responsibility principle of the Basel Convention, this debate should also consider the responsibility of the generator of the waste, that is, the State of the shipowner.

The issue of identifying the export state has arisen most often where the intention to dispose of the ship is formed on the high seas and the ship directly sails towards the state of destination, without intermediate dock or intermediate transit through waters under the jurisdiction of another state. Even where a ship calls at a port before heading to the recycling state, it is unclear whether the Port State can be regarded as the Export State. In practice, this has hindered the implementation of PIC and certain export bans, such as the European Waste Shipment Regulation prohibiting the export of hazardous wastes to non-OECD countries, because the decision to dispose is formed or disclosed after the ship has already left the territorial waters of the State where the ban is in force. In Decision VII/26 (October 2004), the Basel COP acknowledged the difficulty of enforcing the Convention to end-of-life ships, particularly its system of Prior Informed Consent designating a State of Export. It has also been recognized by the IMO as one reason justifying the new Hong Kong Convention.

2.5. The IMO Hong Kong Convention

The Hong Kong Convention was adopted by the IMO Assembly on May 15, 2009, at the International Conference on the Safe and Environmentally Sound Recycling of Ships. The main aim

Basel Convention, preamble para. 4.

Basel Convention, art. 4.10.

Basel Convention, art. 6.1.

Basel Convention, art. 2.10.

Report of the Special Rapporteur, *supra* note 12, at para. 41. *See also* Greenpeace International and Basel Convention Action Network (BAN), *Shipbreaking and the legal obligations under the Basel Convention, supra* note 37 (stating the control procedures of the Basel Convention are unenforceable under these circumstances).

The term port state refers to the authority of the country in which a port of call (a ship stop) is located. European Maritime Safety Agency, Improving Port State Control 2 (2007), available at: http://www.emsa.europa.eu/Docs/psc/leaflet-psc.pdf.

⁶⁹ Bhattacharjee, *supra* note 60, at 214.

Mikelis, supra note 8, slide 10. See also Bhattacharjee, supra note 55, at 203.

of the Convention is to reduce the dangers of ship dismantling. Specifically it aims "to prevent, reduce, minimize and, to the extent practicable, eliminate accidents, injuries and other adverse effects on human health and the environment caused by Ship Recycling, and enhance ship safety, protection of human health and the environment throughout a ship's operating life." ⁷¹

Despite the objectives of the Hong Kong Convention, its provisions have engendered heated debate as to its ability to achieve its stated goals. Some have viewed the Hong Kong Convention as insufficient in addressing the environmental harms caused by the shipbreaking industry, ⁷² while others have welcomed the Convention as a step in the right direction. ⁷³

2.5.1 Negotiations

In July 2005,⁷⁴ the Marine Environment Protection Committee (MEPC) of the IMO considered the problem of the recycling of ships. It recalled the activity of the Working Group on Ship Recycling, stressing the importance of the following two concepts elaborated by the Working Group:

- the general acknowledgment of the urgency to develop an effective solution for ship recycling in order to reduce both environmental and occupational health and safety risks correlated to this activity⁷⁵;
- the fact that the most effective solution to address this problem would be the development of a new instrument "providing legally binding and globally applicable ship recycling regulations for international shipping and for recycling facilities."

The report also recalled the preliminary draft structure that the Working Group had developed for the new Convention, which considered the following issues:

ъ Id.

Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009, art. 1.1 [hereinafter "Hong Kong Convention"].

See International Federation for Human Rights (FIDH), "New ship recycling Convention legalizes scrapping toxic ships on beaches" (May 15, 2009), available at http://www.fidh.org/New-ship-recycling-convention-legalizesscrpping (stating that the new Convention (1) legitimates the "beaching method," thereby penalizing the companies which have already invested in safer and cleaner methods; (2) fails to uphold the principle of the international hazardous waste trade law; (3) fails to impose the substitution of hazardous materials with alternative substances; (4) does not introduce the fund mechanism, strongly suggested during the negotiation); Rizwana Hasan, Final Speech of the NGO Platform on Shipbreaking before the International Conference on the Safe and Environmentally Sound Recycling Ships (May 15, 2009), available http://www.ban.org/Library/RizwanaSpeechIMO.html.

See Duncan Hollis, "Will the new ship recycling Convention sink or swim?" (May 27, 2009), available at http://opiniojuris.org/2009/05/27/will-the-new-ship-recycling-convention-sink-or-swim/ (stating that the text of the Convention is the result of a balance of different interests. Taking as an example the beaching method, a ban of this practice would not have been accepted by the current recycling states, and as a consequence, they would not have signed the Convention. The author stresses the fact that this Convention is a starting point). See also Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee of the regions — an EU strategy for better ship dismantling, COM(2008)767 final (Nov. 19, 2008) (positively welcoming the new Convention, while noting at least two problems that must be addressed: the stricter regulation of the ship dismantling facilities; and the ban of the beaching method).

Int'l Maritime Org. [IMO], Report of the Marine Environment Protection Committee on its fifty-third session, MECP 53/24 (18) (July 25, 2005).

⁷⁵ *Id*.

⁷⁶

- the prohibition of the use of certain hazardous material in the construction and equipment of ships;
- the design of ships and ships' equipment to facilitate recycling and removal of hazardous materials;
- the preparation, update and verification of inventories of potentially hazardous materials on board ships;
- the possible need for a survey and certification system;
- the development of a reporting system for ships destined for recycling;
- the need for the recycling facilities to be approved/licensed or properly regulated in accordance with internationally developed and globally applied standards;
- the development of a ship recycling plan;
- the provision of, access to, and proper utilization of adequate reception facilities for shipboard wastes and other wastes by the recycling facilities.

On the basis of these considerations, on December 2005, the Assembly mandated the MEPC to proceed with the adoption of a new legally binding instrument on ship recycling that would provide regulation for:

- 1. the design, construction, operation and preparation of ships so as to facilitate safe and environmentally sound management on ship recycling, without compromising the safety and operational efficiency of ships;
- 2. the operation of ship recycling facilities in a safe and environmentally sound manner; and
- 3. the establishment of an appropriate enforcement mechanism for ship recycling (certification/reporting requirements). 77

During the negotiations, participants expressed their particular concerns and considerations regarding the draft of the IMO Convention. Some of the more contentious issues included:

- the importance of prior informed consent
- the ban of the beaching method
- the ban of trade with non-Parties
- the need for an international fund to internalize the costs of shipbreaking
- the importance of clarity and transparency of the measures introduced by the Convention
- the entities responsible for the preparation of the ship
- the importance of the mechanisms for control and monitoring

2.5.2. Key elements of Hong Kong Convention

The Hong Kong Convention consists of 21 Articles and an Annex of 24 Regulations and 7

Int'l Maritime Org. [IMO], *New legally binding instrument on ship recycling*, Assemb. Res. A.981(24) (Dec. 1, 2005).

Appendixes. The Annex is equally binding on the Parties, unless expressly provided for otherwise.⁷⁸ The key elements of the Hong Kong Convention are the following:

- 1. Environmental Ship Design: the Hong Kong Convention incorporates the concept that the efficient management of waste found in a ship begins with an environmental design of the ship. The Convention seeks to reduce the amount of waste and hazards involved in shipbreaking by requiring more environmental ship design and planning. Specifically, it requires each Party to prohibit and/or restrict the installation or use of hazardous materials listed in Appendix I, such as asbestos, ozone depleting substances, polychlorinated biphenyls (PCB), and anti-fouling compounds and systems. This reduces the amount of hazardous material used to construct ships and facilitates dismantling. However, it is worth noting that these substances are already banned in other Conventions, so the Hong Kong Convention failed to advance the substitution principle recognized in its preamble.
- 2. Inventory of hazardous materials: Regulation 5 establishes that each vessel, for its whole operational life, shall hold the "Inventory of Hazardous Materials (IHM)" also known as "green passport." The IHM must be continuously updated throughout the life of the ship, detailing hazardous materials listed in Appendices 1 and 2 of the Hong Kong Convention that are present on board. The function of this document is to allow the government of the Flag State to verify that the facility where the vessel is going to be disposed of has the technical and operational capability to manage the waste in an environmentally sound manner.
- 3. Survey and certification requirements: Part C of the Convention is dedicated to the survey, and to the issuance and endorsement of certificates. The Convention requires different surveys depending on the stage of recycling: the initial survey⁸¹, the renewal survey⁸², the survey after any change-replacement-repair⁸³, and the final survey⁸⁴. The general purpose of these surveys is to verify the presence and accuracy of the IHM throughout the life of the ship, in order to ensure a lifelong monitoring of the materials on board.
- 4. Authorization of Ship Recycling Facilities (SRF): Article 4 of the Hong Kong Convention requires each Party to ensure SRFs under its jurisdiction comply with requirements of the Convention, while Article 6 requires each Party to ensure that SRFs under its jurisdiction are authorized in accordance with the corresponding Regulations. Accordingly, Regulation 16 requires each SRF to be authorized by the competent authority of the ship recycling State (or by an organization recognized by it), taking into account the guidelines provided by the IMO. The authorization shall include all the verification documentation required by the Convention and a site inspection. The authorization is valid for a period specified by the Party but no more than five years.
 - 5. Notifications and reporting obligation: Regulation 23 of the Hong Kong Convention

Hong Kong Convention, art. 1.5.

Hong Kong Convention, regulation 4.

See Bhattacharjee, supra note 60, at 221.

Hong Kong Convention, regulation 10.1.1.

Hong Kong Convention, regulation 10.1.2.

Hong Kong Convention, regulation 10.2.3.

Hong Kong Convention, regulation 10.1.4.

requires the authorized Ship Recycling Facility to inform the Competent authority of the Recycling State of any incidents, accidents, occupational diseases or chronic effects causing, or with the potential of causing, risks to workers safety, human health, and the environment. Regulation 24 requires the shipowner to notify the Administration shout the intention to recycle a ship; this information allows the Administration to take the measures necessary to verify if the transport and the following waste disposal is organized in conformity with the Hong Kong Convention. Other documents that help to maintain the traceability of the waste stream are the International Ready for Recycling Certificate, the Report of the planned start date of Ship Recycling, and the Statement of Completion. 86

9. Notification of receiving the Ready for Recycling Certificate 3. Reg. 8.4: Providing the SHIPOWNER RECYCLING FACILITY SRF with all info needed for the SRP 6. Reg. 9.5: Once approved, providing the SRP 1. Reg. 24.1: Initial 5. 10. Reg. 24: 4. Reg. 9: notification Report of development of 6. start of the 7. Reg. 10.4: Final the SRP +Reg. ship recycling Survey 24.12: report of 2. Regs. 8. Reg. 11.11: the SRP to the 10/11: Survey Issuance of Ready Recycling State 5. Reg. 9.4: and ICIHM for Recycling Approval of 11. Reg. 25: Certificate the SRP Report upon completion 5. RECYCLING STATE FLAG STATE 12. Reg. 25: Notification of statement of completion

Flow-chart: Control Mechanism of the Hong Kong Convention

25

-

[&]quot;Administration" refers to "the Government of the State whose flag the ship is entitled to fly, or under whose authority it is operating." Hong Kong Convention, art. 2(3).

Hong Kong Convention, Appendix IV, Appendix VI; Appendix VII.

- 6. Circulation of information: under Article 12 of the Hong Kong Convention, Parties must provide the IMO with information including the list of authorized facilities, the list of ships recycled, the list of the competent authorities and the list of violations of the Convention. The IMO is required to disseminate this information as appropriate.
- 7. Inspection of ships by party states: under Article 8 of the Hong Kong Convention, when a ship to which the Convention applies is in a port or offshore terminal of another Party, officers duly authorized by that Party may inspect the ship to verify the presence of the International Certificate of Inventory of Hazardous Materials. The Convention also introduces the possibility to conduct a detailed inspection when one of the following occurs: (1) the ship does not carry a valid certificate, or (2) the condition of the ship does not correspond substantially with the certificate, or (3) the ship does not implement the procedure for the maintenance of the Inventory of Hazardous Materials (IHM).⁸⁷
- 8. Regulatory enforcement and detection of violations: inspections are one of the means to enable the *enforcement the Convention's provisions*, and Parties are required to establish sanctions under domestic law "adequate in severity to discourage violations of the Convention wherever they occur." 88

The Hong Kong Convention allocates responsibility on the Flag State to ensure that its ships comply with the requirements of the Convention. ⁸⁹ The role of the Flag-State raises the concern of "Flags of Convenience (FOC)," by which ships register to fly the flag of a country other than the country of ownership. The main motivation for such practice has been the reduction of operational cost, as it enables shipowners to avoid restrictive regulatory regimes in their home state by changing registration to an FOC country that has open registry and minimal regulation. ⁹⁰ There are currently 32 FOC countries. ⁹¹

Legal scholars have examined whether the UN Convention on the Law of Sea (LOSC) addresses this legal loophole. Under the LOSC, a ship that is operational must sail under the flag of one State only and not change its flag during voyage or while in a port of call, save in the case of a real transfer of ownership or change of registry. The LOSC deems a self-propelled ship on its way to being recycled as operational. Additionally, the LOSC grants Coastal States and Flag States concurrent jurisdiction over a vessel in territorial seas. Under the LOSC, Port States are able to exercise jurisdiction over a vessel voluntarily in its ports, including the ability to stop the end-of-life ship from continuing on to the dismantling facility if it threatens damage to the marine environment by failure to meet the international rules and standards governing seaworthiness or if it has released

Hong Kong Convention, art. 8.

Hong Kong Convention, art. 10.

Hong Kong Convention, art. 4.1.

⁹⁰ Bhattacharjee, *supra* note 60, at 203.

International Transport Workers' Federation, FOC countries, available at http://www.itfglobal.org/flags-convenien-183.cfm (last visited February 8, 2011).

United Nations Convention on the Law of the Sea, Dec. 10, 1982, 1833 UNTS 397, art. 92. [hereinafter "UNCLOS"]

Division for Ocean Affairs and the Law of the Sea, Comments, submitted to the Legal Working Group of the Basel Convention, UNEP/CHW/LWG/5/4, para 2 (May 2002)

pollutants into the internal waters, territorial sea or exclusive economic zone of the Port State.⁹⁴ FOCs thus allows shipowners and operators to escape the jurisdiction of Port States if the vessel satisfies the standards for seaworthiness or has not released pollution into the Port State's waters. More generally, the pervasive practice of FOCs is a real limitation of the Hong Kong Convention.

In addition, some of the elements of the Hong Kong Convention establish a lower level of protection when compared with the Basel Convention. These elements are analyzed in detail in Section 5 below on the evaluation of equivalence of the Hong Kong Convention; here we identify the following:

- 1. exclusions that narrow the application of its provisions
- 2. dilution of prior informed consent
- 3. absence of the duty to re-import
- 4. insufficient requirements to ensure ESM
- 5. no criminalization of illegal traffic
- 6. trade with non-parties
- 7. failure to incorporate international principles relating to the sound management of waste

In light of these weaknesses, the Special Rapporteur on the adverse effects of the movement and dumping of toxic and dangerous products and wastes on the enjoyment of human rights has concluded that the Hong Kong Convention "is not sufficient to bring about the significant and urgently needed improvements to the working practices prevailing in the shipbreaking yards or the elimination of the serious environmental pollution that shipbreaking yards generate." These limitations are also relevant to determine equivalence, as analyzed further below.

2.6. Process & State of Play

Basel COP 7 in October 2004 recognized the work of the IMO in developing a ship recycling Convention and called on the IMO "to continue to consider the establishment in its regulations of mandatory requirements, including a reporting system for ships destined for dismantling, that ensure an equivalent level of control as established under the Basel Convention and to continue work aimed at the establishment of mandatory requirements to ensure the environmentally sound management of ship dismantling, which might include pre-decontamination within its scope." This request was reiterated in Decision VIII/11 (December, 2006), in which the COP "invite[d] the International Maritime Organization to ensure that the draft ship recycling convention to be adopted by it establishes an equivalent level of control as that established under the Basel Convention, noting that the duplication of regulatory instruments that have the same objective should be avoided." Subsequently, Basel COP 9 in 2008 requested the Open-ended Working Group (OEWG) to the Basel Convention to carry out a preliminary assessment of whether the Ship

See UNCLOS, art. 218 (Enforcement by Port States), 219 (Measures relating to seaworthiness of vessels to avoid pollution).

Report of the Special Rapporteur, supra note 12, at para. 65.

Dec. VII/26, supra note 1, at para. 5.

Dec. VIII/11, supra note 1, at para. 2.

Recycling Convention, as adopted, established an equivalent level of control and enforcement as that established under the Basel Convention, in their entirety. In order to do so, the OEWG was requested to first develop the criteria necessary for such an assessment and the Parties were requested to submit comments on appropriate criteria to be used by the OEWG. 99

The OEWG, at its seventh session in 2010, reached an agreement on preliminary criteria for assessing whether the Hong Kong Convention establishes an equivalent level of control and enforcement as that of the Basel Convention. The proposed criteria contains four broad categories:

- Scope and applicability
- Control
- Enforcement
- Exchange of information by Parties / Cooperation and Coordination.

The Open-ended Working Group of the Basel Convention (OEWG) considered these criteria to be "an appropriate basis for further work, including discussion, to implement decision IX/30," ¹⁰¹ (calling for an assessment of equivalence) and subsequently invited Parties and relevant stakeholders:

- a) "To review and complete the table set out in the Annex to [Decision OEWG-VII/12];
- b) On the basis of this table, to provide a preliminary assessment of whether the Hong Kong Convention establishes an equivalent level of control and enforcement as that established under the Basel Convention, in their entirety, and in doing so, to take into account:
 - The special characteristics of ships and international shipping;
 - The principles of the Basel Convention and the relevant decisions of the Conference of the Parties;
 - The comments submitted by Parties and other relevant stakeholders, as appropriate."

The OEWG invited Parties and relevant stakeholders to submit their tables and preliminary assessment to the Secretariat by April 15, 2011, to be later compiled and synthesized by the Secretariat and transmitted to the COP at its Tenth meeting in Cartagena, Colombia, 17 - 21 October 2011, "for consideration and action, as appropriate." ¹⁰²

If the Basel COP determines that the Hong Kong Convention does in fact provide an "equivalent level of control," then Basel Parties may decide not to apply the Basel Convention to those ships covered by the Hong Kong Convention, ¹⁰³ consistent with Article 11 of the Basel Convention. Alternatively, if the Basel COP "concluded that aspects of the Ship Recycling Convention did not

¹⁰² *Id*.

⁹⁸ Dec. IX/30, *supra* note 1, at para. 4.

Id. See also Environmentally sound management of ship dismantling: comments received pursuant to decision IX/30, U.N. Doc. UNEP/CHW/OEWG/7/INF/15, Annex.

Dec. OEWG-VII/12, supra note 9.

¹⁰¹ *Id*.

Press Release (14 May 2010), available at www.basel.int/press/press-releases/14May2010-e.doc

provide equivalent levels of control to the Basel Convention, the Basel Convention would continue to apply to those aspects, as expressed in decision VII/26." Other possible outcomes of the COP include: a decision by the Parties requesting further work on the equivalence assessment of the Hong Kong Convention, a decision to amend the Basel Convention to exclude ships from its scope of application, a decision to negotiate a new protocol on shipbreaking, a decision to draft new guidelines on transboundary movement of ships, or, alternatively, no action by the COP, which would result in the concurrent application of both treaties. ¹⁰⁵

2.7 Conclusion

Shipbreaking, the practice of dismantling end-of-life ships, has become an established industry in certain developing countries. Yet, it continues to be hazardous not only to human health but also to the local and global environment. By Decision VII/26 (October 2004), the Basel COP affirmed that end-of-life ships may be a waste and thus controlled by the Basel Convention. At the same time, the International Maritime Organization negotiated and adopted the Hong Kong Convention in 2009, to ensure the safe and environmentally sound recycling of ships by use of a regulatory regime which requires greener design and the efforts of both flag states and recycling states. The duplicity of international instruments pertaining to shipbreaking raises the question of coherence and compatibility between them, as well as the need to ensure the effective regulation of the shipbreaking in order to protect human health, workers rights, and the environment. In the context of the Basel Convention, the Basel COP must now confront the question whether the Hong Kong Convention provides an equivalent level of control as that of the Basel Convention.

3. Equivalence and the Interpretation of Article 11 of Basel

An analysis of equivalence must properly interpret Article 11 of the Basel Convention, as this is the only provision in the Basel Convention which allows for other international agreements to supersede Basel in regulating the transboundary movements of hazardous wastes. The COP's demand for an "equivalent level of control" derives from Article 11, as it permits Parties to enter into bilateral, multilateral or regional agreements or arrangement regarding transboundary movement of hazardous wastes or other wastes so long as they "do not derogate" from the environmentally sound management required by the Basel Convention. A proper understanding of "equivalent level of control" therefore necessitates an understanding of the purpose and requirements of Art. 11.

The methodology for interpreting a treaty is outlined in Articles 31 and 32 of the Vienna Convention. Article 31(1) states that "[a] treaty shall be interpreted in good faith in accordance

Basel Secretariat, Environmentally sound management of ship dismantling and the Joint Working Group of the International Labour Organization, the International Maritime Organization and the Basel Convention on Ship Scrapping, UN Doc. UNEP/CHW.9/34 Annex 1, para. 8 (April 2008).

Basel Secretariat, *The Basel Convention and its application to ship recycling*, Ship Recycling Technology & Knowledge Transfer Workshop, 14 - 16 July 2010, Izmir, Turkey.

Vienna Convention on the Law of Treaties, 1155 U.N.T.S. 331 (signed 23 May 1969, entered into force 27 January 1980) [hereinafter "Vienna Convention"].

with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose." ¹⁰⁷ In addition, the interpreter must take into account any relevant provisions of international law applicable in the relations between the parties as well as the parties' own interpretation of the treaty, as reflected in subsequent agreements regarding the treaty's interpretation and application and subsequent practice of the parties. ¹⁰⁸ Where a term is defined in the Convention, such meaning should prevail. ¹⁰⁹ An interpretation according to Article 31 may be confirmed or clarified using supplementary means of interpretation such as the negotiated history or *travaux préparatoires* of the treaty. ¹¹⁰

3.1. Literal Interpretation

The requirements of equivalency are explicit in Art. 11 of the Convention:

- 1. "... Parties may enter into agreements or arrangements regarding transboundary movement of hazardous wastes or other wastes with Parties or non-Parties provided that such agreements or arrangements do not derogate from the environmentally sound management of hazardous wastes and other wastes as required by the Convention" and "stipulate provisions which are not less environmentally sound than those provided for by this Convention, in particular taking into account the interests of developing countries."
- 2. "Parties shall notify the Secretariat of any bilateral, multilateral or regional agreements or arrangements referred to in paragraph 1 and those which they have entered into prior to the entry into force of this Convention for them, for the purpose of controlling transboundary movements of hazardous wastes and other wastes which take place entirely among the Parties to such agreements. The provisions of this Convention shall not affect the transboundary movements which take place pursuant to such agreements provided that such agreements are compatible with the environmentally sound management of hazardous wastes and other wastes as required by this Convention."

The key language in this text is the requirement that Parties to the Basel Convention only enter into agreements and arrangements regarding transboundary movements of hazardous waste that do "not derogate" from but rather are "compatible with" the ESM of hazardous wastes and other wastes as required by the Basel Convention, ¹¹¹ and "stipulate provisions which are not less"

According to the Vienna Convention, Art. 31(2), the "context" includes the text itself, including the preamble and annexes, as well as: (a) "any agreement relating to the treaty which was made between all the parties in connection with the conclusion of the treaty"; (b) "any instrument which was made by one or more parties in connection with the conclusion of the treaty and accepted by the other parties as an instrument related to the treaty.

Vienna Convention, art. 31(3).

Vienna Convention, art. 31(4).

Vienna Convention, art. 32.

It has been argued that different standards of equivalence apply depending on when the Art. 11 agreement was signed. The thesis is that international agreements that pre-date the Basel Convention must be "compatible" with the ESM requirements of the Convention, while agreements signed after the Basel Convention must not "derogate" from the ESM requirements of the Convention, a higher standard than the former. David

environmentally sound than those provided for by this Convention, in particular taking into account the interests of developing countries." Such agreements and arrangements are called Article 11 Agreements.

The terms "not derogate" are not defined in the Convention. In ordinary language "derogate" means "to repeal or abrogate in part (a law, sentence, etc.); to destroy or impair the force and effect of; to lessen the extent or authority of." Similarly, "compatible" is also not defined. In ordinary language, "compatible" means "mutually tolerant; capable of being admitted together, or of existing together in the same subject; accordant, consistent, congruous, agreeable." 113114

The Convention attaches a special meaning to ESM, defining it to mean, "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." This interpretation must prevail according to Art. 31(4) of the Vienna Convention. While "environmentally sound" is not defined in the Convention, it may be inferred by the context that its meaning is similar to ESM. Furthermore, the Convention defines "wastes" as "substances or objects that are disposed of or are intended to be disposed of or are required to be disposed of by the provisions of national law." Finally, "management" includes the process of "collection, transport and disposal of hazardous wastes or other wastes, including after-care of disposal sites." 117

A literal interpretation of Article 11 therefore indicates that any agreement or arrangement regarding transboundary movement of hazardous wastes or other wastes outside of the Basel Convention must meet the ESM requirements of the Basel Convention, that is, requirements

Hunter et. al, International Environmental Law and Policy (1998), at 869. This analysis is confirmed in Decision II/10 of the Conference of the Parties to the Basel Convention, U.N. doc. UNEP/CHW.2/30 (March 1994). While this analysis agrees that Article 11(1) applies exclusively to agreements made after the Basel Convention, the requirement of compatibility in Article 11(2) is also applicable to such agreements as indicated by the reference of "such agreements" in 11(2) to both "agreements referred to in paragraph 1" and agreements "entered into prior to" the Basel Convention. Therefore it is useful to understand the literal interpretation of both "derogate" and "compatible."

- The Oxford English Dictionary, 2d ed., 1989, online version Nov. 2010, available at http://www.oed.com.proxycu.wrlc.org/Entry/50655 (accessed 09 February 2011). "Derogation" is defined as "The partial repeal or abrogation of a law by a later act that limits its scope or impairs its utility and force." Black's Law Dictionary 509 (9th ed.) (West 2009).
- The Oxford English Dictionary, 2d ed., 1989, online version Nov. 2010, available at http://www.oed.com.proxycu.wrlc.org/Entry/37499 (accessed 09 February 2011).
- The Arabic, Chinese, English, French, Russian and Spanish texts of the Convention are equally authentic, art. 29 of the Basel Convention, so it is instructive to examine the definitions in these other languages. Derogate: "减损": derogate from, diverge from (Chinese: English-Chinese Dictionary of Anglo-American Law (Law Press of China, 2003)); "déroger à": to infringe, to depart from (French: Concise Oxford-Hachette French Dictionary (Oxford University Press, 2005)); "oтступают от": to take away, detract from (Arabic: ECTACO English Arabic Online Dictionary); "отступают от": depart from (Russian: Pocket Oxford Russian Dictionary (Oxford University Press, 2006)); "menoscabar": diminish, impinge upon, infringe (Spanish: Concise Oxford Spanish Dictionary (Oxford University Press, 2005)). Compatible: "符合": in conformity with (Chinese); "compatible": coexisting without any conflict (French); "పో: capability of emulation (Arabic); "не противоречат": not contradictory (Russian); "compatible": consistent (Spanish).
- Basel Convention, art. 2.8.
- Basel Convention, art. 2.1.
- Basel Convention, art. 2.2.

related to "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." The Basel COP determined, by Decision VII/26 (October 2004), that end-of-life ships may be a waste and a ship at the same time, so an agreement regarding the transboundary movement of end-of-life ships, under the purview of Article 11, must be compatible with the ESM requirements of the Basel Convention. Additionally, under Article 11.1, the agreement must take into account the interests of developing countries, discussed in further detail in Section 5.5 on the evaluation of equivalence.

3.2. Teleological Interpretation

A teleological interpretation of Article 11 highlights the object and purpose of the Convention in ascertaining the meaning of its terms. As the Basel Convention does not have a specific section regarding its objective, the preamble of the Convention may be used as authoritative text to interpret the object and purpose of the treaty.¹¹⁹

The Basel Convention aims "to protect, by strict control, human health and the environment against the adverse effects which may result from the generation and management of hazardous wastes." The Convention's use of a strict control procedure reflects "the growing international concern about the need for stringent control of transboundary movement of hazardous wastes and other wastes, and of the need as far as possible to reduce such movement to a minimum." It is based on the consideration "that enhanced control of transboundary movement of hazardous wastes and other wastes will act as an incentive for their environmentally sound management and for the reduction of the volume of such transboundary movement." The objective of the Convention makes clear that Article 11 agreements and arrangements must be strict enough to minimize transboundary movement and waste generation in order to protect human health and the environment against the adverse effects resulting from the generation and management of hazardous wastes.

3.3. Travaux Préparatoires

The travaux préparatoires can help to shed light on any obscurity in the meaning of terms used in a treaty by clarifying the intentions of a treaty. An examination of the travaux préparatoires of the

Basel Convention, art. 2.8.

See *Arbitral Award of 31 July 1989*, Guinea-Bissau v. Senegal [1991] ICJ Rep. 53, at 142 (dissenting opinion of judge Weeramantry) where he stated: "The preamble is a principal and natural source from which indications can be gathered of a treaty's objects and purposes even though the preamble does not contain substantive provisions. Article 3 1 (2) of the Vienna Convention sets this out specifically when it states that context, for the purpose of the interpretation of a treaty, shall comprise in addition to the text, the preamble and certain other materials. The jurisprudence of this Court also indicates ... that the Court has made substantial use of it for interpretational purposes." See also *Case concerning rights of nationals of the United States of America in Morocco*, Judgment of August 27th, 1952: I.C.J. Reports 1952, p. 176, at 196, where the judge affirmed: "the interpretation of the provisions of the Act must take into account its purposes, which are set forth in the Preamble" Finally, see *Colombian-Peruvian asylum case*, Judgment of November 20th 1950: I.C.J. Reports 1950, p. 266., at 282.

Basel Convention, Preamble para. 24.

Basel Convention, Preamble para. 18.

Basel Convention, Preamble para. 10.

Basel Convention confirms the Parties' intent to only permit bilateral, regional or multilateral agreements that are consistent with the purpose of the Basel Convention.

At the Organizational Meeting of the Ad Hoc Working Group of Legal and Technical Experts with a Mandate to Prepare a Global Convention on the Control of the Transboundary Movements of Hazardous Wastes (hereinafter "Ad Hoc Working Group of Legal and Technical Experts") (October 1987), several experts "expressed their interest in a convention which would be effective, even in the absence of bilateral or regional agreements, but which would, at the same time, encourage and facilitate the development of such agreements." The experts noted "the need for compatibility between the Convention and existing binding international instruments dealing with transboundary movement of hazardous waste," and proposed to require any new bilateral or multilateral agreements to not derogate from the purposes of the Convention.

In the subsequent three sessions of the Ad Hoc Working Group of Legal and Technical Experts, held in February, June, and November of 1988, the Parties negotiated the parameters of the bilateral, multilateral and regional agreements. The drafts in the first and second sessions both used language encouraging Parties to enter into such agreements "with a view to implementing and further developing the provisions and purpose of this Convention," provided that they are "compatible with the object and purpose of this Convention." This language of encouragement was dropped in the third session and replaced by "may enter into" such agreements, provided they are "[compatible with the aims of the Convention]." Moreover, at the third session, Parties abandoned an earlier proposal to include 5 scenarios under which a Contracting Party may enter into such an agreement. These scenarios were the following:

- 1) To implement and further develop the provisions relating to scientific and technical cooperation among contracting parties;
- 2) To provide specific procedures for notification and response in the case where the hazardous wastes are destined for recycling, re-use or reclamation;
- 3) To provide specific procedures for notification and response in the case where a series of hazardous waste shipments possessing the same physical and chemical characteristics, from the same site of generation by the same importer, are shipped through the same points of entry and exit to the same disposer;
- 4) To provide that notice provided to transit countries be less detailed than provided by the relevant provision in the Convention;
- 5) To provide for tacit consent to an import of hazardous wastes where notice has been provided and receipt of such notice has been acknowledged by the country of import. 127

Report of the Organizational Meeting of the Ad Hoc Working Group of Legal and Technical Experts with a Mandate to Prepare a Global Convention on the Control of the Transboundary Movements of Hazardous Wastes, U.N. Doc. UNEP/WG.180/3 (October 1987)

¹²⁴ *Id.*, at para. 88.

¹²⁵ *Id.*, at para. 94.

Report of the Working Group, U.N. Doc. UNEP/WG.182/3 (February 1988), Report of the Ad Hoc Working Group on the Work of its Second Session, U.N. Doc. UNEP/WG.186/3 (June 1988)

Id.

The draft adopted at the third session, which closely mirrors the final text of the Convention, replaced these 5 scenarios with an explicit condition that such agreement "not provide for any procedures less stringent than those stipulated in this Convention." ¹²⁸

Lastly, during the Fifth Session of the Working Group (March 1989), the compatibility criteria was revised by replacing "compatible with the aims of the Convention" with compatible with the ESM requirements of the Convention. These changes as well as insertion of the word "not derogate" were proposed by the Executive Director of UNEP, based on recommendations of a group composed of experts from various developed and developing countries. Considering that the above-mentioned terms of Article 11 were revised to be more stringent, this revision implies that an explicit reference to not derogating and being compatible with the ESM requirements of the Convention strengthens Article 11.

At this Fifth Session, the United States stated that it viewed its existing bilateral agreements with Canada and Mexico as compatible with the ESM requirements of the Convention. Notably, both agreements incorporate procedures requiring the prior informed consent of the importing country to the shipment of waste and the readmission of wastes by the exporting country if returned by the importing country. 131

In sum, the consistent use of "compatible" as a necessary criteria, the later consensus to require no "less stringent" procedures, and the subsequent inclusion of specific reference to ESM requirements demonstrate the importance parties placed on ensuring the same ESM requirements in the bilateral, regional or multilateral agreements. In addition, the *travaux préparatoires* indicates that the tacit approval procedures were considered in previous drafts of the Basel Convention but were dropped from the Basel Convention as adopted.

3.4. COP Decisions

Since the adoption of the Basel Convention in 1989, the Parties to the Basel Convention have regularly examined the issue of "bilateral, multilateral and regional agreements or arrangements and their conformity with the stipulations of Article 11 of the Convention." The first

1

Report of the Ad Hoc Working Group on the Work of its Third Session, U.N. Doc. UNEP/WG.189/3 (November 1988)

Proposal by the Executive Director based on recommendations of a group composed of experts from Austria, Brazil, German Democratic Republic, Lebanon, Norway, Spain, and USA, UNEP/WG.191/3/Add.3 (March 1989).

Final Report of the Ad Hoc Working Group, UNEP/IG.80/4, para. 28 (March 1989). See also Cyril Uchenna Gwam, Travaux Preparatoires of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, 18 J. NAT. RESOURCES & ENVTL. L. 1, 66 (2003); https://www.epa.gov/epawaste/hazard/international/agree.htm (US EPA website on International Waste Agreements).

Agreement Between the Government of Canada and the Government of the United States of America Concerning the Transboundary Movement of Hazardous Waste and Other Waste, Oct. 28, 1986, available at http://www.basel.int/article11/canada-us-e.doc [hereinafter "US-Canada Agreement"]: art. 3 (Notification to the Importing Country), art. 6 (Readmission of Exports). Agreement on Cooperation for the Protection and Improvement of the Environment in the Border Area, Aug. 14, 1983, US-Mex., TIAS No. 10, 827, 22 ILM 1025-26 [hereinafter "La Paz Agreement"]: art. 3 (Notification to the Importing Country), art. 4 (readmission of exports)

Report of the First Meeting of the Open-Ended Ad Hoc Committee for the Implementation of the Basel Convention, U.N. doc. UNEP/CHW/C.1/1/9, para. 20-21, Appendix III (October 1993). See also Decision II/10 of the Conference of the Parties to the Basel Convention, U.N. doc. UNEP/CHW.2/30 (March 1994) [hereinafter Decision

consideration of elements to be used to evaluate conformity was made in Decision II/10 on Bilateral, multilateral and regional agreements or arrangements (March 1994), in which the COP requested Parties to report to the Open-Ended Ad Hoc Committee on the conformity of their bilateral, multilateral or regional agreements with the provisions of Article 11 of the Convention. The Decision puts forth certain questions as a guide to measure conformity, while noting, "the agreement must be viewed in its entirety and not strictly provision by provision." It also states, "the purpose of the said agreement and the geographic, legal and economic circumstances of the other Contracting Party(ies) constitute elements of this review." The proposed considerations established in COP Decision II/10 (March 1994) are as follows:

- a. "Does the agreement address the control of the transboundary movement of hazardous wastes and other wastes subject to the Basel Convention?
- b. Taking all practicable steps, will the management of hazardous wastes under the agreement or arrangement be such that it will protect human health and the environment against adverse effects?
- c. How does the agreement or arrangement take into account the interests of developing countries?
- d. Does the agreement or arrangement require prior notification?
- e. Does the agreement or arrangement require prior consent?
- f. Does the agreement or arrangement provide for the tracking of the wastes?
- g. Does the agreement or arrangement provide for the identification of authorities responsible for the implementation of such an agreement?
- h. Are the obligations of the Article 11 agreement or arrangement consistent with the control measures related to the transboundary movements of hazardous wastes as provided for by the Basel Convention?
- i. Are the wastes covered by the Article 11 agreement or arrangement consistent with the scope of the Basel Convention?" ¹³⁴

Since that time, the issue of conformity with Article 11 has been considered by the Basel COP, the Open-Ended Ad Hoc Committee for the Implementation of the Basel Convention, the Technical Working Group of the Basel Convention, and the Legal Working Group of the Basel Convention.

II/10)]; Report of the Second Meeting of the Open-Ended Ad Hoc Committee for the Implementation of the Basel Convention, U.N. doc. UNEP/CHW/C.1/2/14, para. 103-117 (December 1994); Report of the Third Meeting of the Open-Ended Ad Hoc Committee for the Implementation of the Basel Convention, U.N. doc. UNEP/CHW/C.1/3/23, para. 11-16, Annex 1 (June 1997); Report of the Fourth Meeting of the Open-Ended Ad Hoc Committee for the Implementation of the Basel Convention, U.N. doc. UNEP/CHW/C.1/4/1 (June 1999), Draft Guidance Elements for Bilateral, Multilateral or Regional Agreements or Arrangements, U.N. Doc. UNEP/CHW/TWG/LWG/1/3/Rev. 1 (January 2002); Draft Guidance Elements for Bilateral, Multilateral or Regional Agreements or Arrangements, U.N. Doc. UNEP/CHW/TWG/LWG/2/2 (April 2002); Dec. VI/18 of the Conference of the Parties to the Basel Convention, U.N. Doc. UNEP/CHW.6/40 (December 2002); Draft Guidance Elements for Bilateral, Multilateral or Regional Agreements or Arrangements, U.N. Doc. UNEP/CHW.6/15 (December 2002).

Dec. II/10, U.N. Doc. UNEP/CHW.2/30 (March 1994).

Dec. II/10 Annex, U.N. doc. UNEP/CHW.2/30 (March 1994).

This work culminated in the Draft Guidance Elements for Bilateral, Multilateral or Regional Agreements or Arrangements, prepared by the Technical Working Group and Legal Working Group of the Basel Convention at its Second Joint Meeting (May 2002)¹³⁵ and submitted to the Sixth Meeting of the COP. However, at this meeting the COP failed to reach a consensus on the Guidance Elements. Some representatives sought to include an explicit reference to compliance with the obligations contained in Article 4 of the Convention, one representative suggested to delay finalization until the Ban Amendment had entered into force, while others believed further discussion was required. The COP therefore requested the Open-Ended Working Group to consider the Guidance Elements again and report back to the Seventh Meeting. The Open-Ended Working Group subsequently decided to recommend to the COP that it cease work on the guidance elements. The subject has not been discussed since that time.

Although a consensus was not reached regarding the Guidance elements for bilateral, multilateral or regional agreements, the Draft Guidance Elements can inform the present discussion on equivalence as it illustrates perspectives by the Parties and the Expert Working Group on the elements of equivalence under Article 11. Under "Purpose" the Draft Guidance Elements state:

"It is important that such agreements or arrangements are [consistent with the relevant provisions of] [and] [are designed to meet the objectives of] the Convention and designed to assist both Parties and non-Parties lacking adequate capacity to manage their own wastes in an environmentally sound manner. An agreement or arrangement should not serve as a mechanism to delay the ratification of the Convention [or [to contravene] [to circumvent] the [respective] legal obligations of Parties under the Basel Convention and [where applicable] its amendments]." 139

The Guidance, under the heading 'Requirements', recites the requirements outlined in Article 11.1 of the Convention, notably that "agreements or arrangements should not derogate from" the ESM requirements of the Basel Convention and should "stipulate provisions which are not less environmentally sound." Then under 'Scope,' the Guidance states that the scope must have regard to the provisions, including obligations, of the Basel Convention as well as the ESM of wastes subject to the Convention.

The Guidance proposes a non-exclusive list of basic principles that may be included in preparing Article 11 agreements: proximity principle (disposal of waste as near as possible to its source of generation), integrated life-cycle principle, and the precautionary approach, noting that the basic principles that may be taken into account "will vary from country to country, recognizing that protection of environment and human health, cost and economic efficiency are considerations in developing a waste management strategy." The proposed elements to be included in an Article 11 agreement address the minimization of waste; assessment of disposal facilities and operations;

U.N. doc. UNEP/CHW/OEWG/3/24 (5 March 2004) and Dec. OEWG-II/3.

¹³⁵ U.N. doc. UNEP/CHW/TWG/LWG/2/2 (23 April 2002).

Report of the Conference of the Parties to the Basel Convention on the control of transboundary movements of hazardous wastes and their disposal, U.N. doc. UNEP/CHW.6/40, para. 91 (December 2002).

Dec. VI/18, U.N. doc. UNEP/CHW.6/40 (December 2002).

Draft Guidance Elements for Bilateral, Multilateral or Regional Agreements or Arrangements, U.N. doc. UNEP/CHW.6/15 Annex (August 2002) [hereinafter "Guidance Elements"].

legislation regulating facilities, the responsibilities of different actors involved in the process of disposal; enforcement; and exchange of information, among others.

Lastly, a COP Decision worth noting as an indication of the Parties concern with ESM is Decision III/1 (September 1995) on Amendment to the Basel Convention. By this decision, the COP decided to amend the Convention to, first, recognize "that the transboundary movements of hazardous waste, especially to developing countries, have a high risk of not constituting an environmentally sound management of hazardous wastes as required by this Convention," and second, to prohibit all transboundary movements of hazardous wastes from countries of the Organization for Economic Cooperation and Development (OECD) to non-OECD countries. The "Ban Amendment" has not received sufficient ratifications to enter into force, but it has been implemented in the European Union. Indeed it has been implemented in 33 of the 41 countries to which its export ban applies (Annex VII countries). The Ban Amendment shows the Parties concern for developing countries needs and the need for more stringent measures to achieve the objectives of the Convention in the face of the risks of movements of hazardous waste to countries that do not have the capacity to deal with waste in an environmentally sound manner.

3.5. Practice of States with respect to Art 11 Agreements

Article 11 of the Basel Convention is the exclusive mechanism under the Basel Convention which allows for bilateral, regional or multilateral agreements to supersede Basel in regulating the transboundary shipments of hazardous waste. Such agreements are called Article 11 Agreements. In accordance with Article 11 of the Convention, State Parties have notified the Basel Secretariat of the different bilateral, multilateral and regional agreements and arrangements they have entered into that fall under the purview of Article 11. These agreements and arrangements share certain commonalities, which can be instructive as to what Parties view as required for in an Article 11 Agreement.

Prior to the Basel Convention entering into force, international agreements regulating the transboundary shipment of hazardous waste included bilateral agreements between the United States and Mexico¹⁴³ and the United States and Canada¹⁴⁴ as well as a regional agreement among the OECD countries. During the negotiations leading to the Basel Convention, the United States commented that its existing bilateral agreements with Canada and Mexico are compatible with the Convention's ESM requirements.¹⁴⁵ Although the US has signed but not ratified the Basel Convention, both Canada and Mexico are Parties and have an obligation to ensure that their Article 11 Agreements are compatible with the ESM requirements of the Convention. According to the US EPA, its international agreements "share the basic principles of notification to the government of the exporting country, government-to-government notification to the importing government, and

Dec. III/1, U.N. doc. UNEP/CHW.3/35 (September 1995)

Regulation (EC) No. 1013/2006 on shipments of waste.

Article 11 agreements under the Convention, available at http://www.basel.int/article11/index.html.

La Paz Agreement, supra note 147.

US-Canada Agreement, *supra* note *147*.

Cyril Uchenna Gwam, *Travaux Preparatoires of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal*, 18 J. NAT. RESOURCES & ENVTL. L. 1, 66 (2003). *See also* http://www.epa.gov/epawaste/hazard/international/agree.htm (US EPA website on International Waste Agreements).

the consent of the importing government for exports and imports of hazardous wastes." ¹⁴⁶

The one multilateral agreement under Article 11 is the agreement among OECD member countries established by Council Decision C(2001)107/FINAL on the control of transboundary movements of wastes destined for recovery operations. This decision is generally regarded as compatible with the ESM of wastes as required by the Basel Convention and valid pursuant to Article 11 paragraph 2 of the Basel Convention. An earlier version of this agreement existed prior to the entering into force of the Basel Convention and established a notice and consent regime governing the transboundary movement of hazardous wastes for recovery among OECD member states. The current agreement resulted from an effort by the OECD "to harmonize the procedures and requirements of this OECD Decision with those of the Basel Convention and to eliminate duplicate activities between the two international organizations." Such revisions include the harmonization of waste lists and terms such as "waste" and "hazardous waste" as well as the addition of provisions concerning the return of wastes, financial guarantees, and a requirement for a recovery facility to provide a certificate of recovery after completion of the recovery operation, among others.

Following the entering into force of the Basel Convention on May 5, 1992, 10 bilateral agreements and 6 regional agreements have been reported to the Basel Secretariat as agreements under the Article 11. This includes, for example, the Bamako Convention, a regional agreement prohibiting the importation of hazardous wastes into Africa and regulating the movement of hazardous waste within Africa. The Bamako Convention limits the transboundary movement of hazardous wastes within the African continent by, for example, adopting a system of prior informed consent, obligating the parties to prevent export of hazardous waste for disposal unless the intended

International Trade in Hazardous Waste: An Overview (EPA 305-K-98-001/November 1998) available at http://www.epa.gov/compliance/monitoring/programs/rcra/importexport.html. See also Theodore Waugh, Where do We Go From Here: Legal Controls and Future Strategies for Addressing the Transportation of Hazardous Wastes Across International Borders, 11 FORDHAM ENVIL. L. J. 477, 509 (1999).

OECD Dec. C(2001)107/FINAL on the Control of Transboundary Movements of Wastes Destined for Recovery Operations, adopted on 14 June 2001 [C/M (2001) 13] and on 28 February 2002 as amended by [C/M (2002) 4]. [hereinafter "OECD Decision C(2001)107/FINAL"]. The agreement is implemented in the EU by Regulation (EC) No. 1013/2006 and Regulation (EC) No. 1418/2007, which replaced EU Council Regulation No. 259/93 (Feb. 1, 1993).

See OECD Guidance Manual for the Control of Transboundary Movements of Recoverable Wastes 9, available at www.oecd.org/dataoecd/57/1/42262259.pdf. [hereinafter "Guidance Manual"]

Decision of the Council Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations, OECD Dec. C(92)39/FINAL (Mar. 30, 1992). See also EU Council Regulation No. 259/93 (Feb. 1, 1993) (implementing the requirements of the Basel Convention and the OECD Decision).

Guidance Manual 9. See also OECD Dec. C(2001)107/FINAL, preamble para. 10, 12.

Guidance Manual 9. See also OECD Dec. C(2001)107/FINAL Sections 3.3.1, 3.1, 6.8, 5.3, 5.5.4, respectively.

Article 11 agreements under the Convention, available at http://www.basel.int/article11/index.html, supra note 86.

Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes Within Africa, adopted on Jan. 30 1991, entered into force on April 22, 1998, 30 ILM 773 (1991) [hereinafter "Bamako Convention"].

Bamako Convention, art. 6.

transport and disposal methods would be performed in an environmentally sound manner, ¹⁵⁵ and criminalizing the importation of hazardous waste into Africa. ¹⁵⁶ Notably, the Convention uses the same definition of ESM as the Basel Convention. ¹⁵⁷

The practice of State Parties with respect to Article 11 of the Basel Convention illustrates that Parties have sought to comply with, and in some cases impose stricter controls than, the Basel Convention in regulating the transboundary movement of hazardous waste by adopting common elements such as the requirement of Prior Informed Consent. Moreover, agreements such as the Bamako Convention and the OECD Council Decision demonstrate not only the possibility of more stringent standards but also the sentiment among States that stricter controls are necessary in order to properly govern the transboundary movement of hazardous wastes.

3.6 Conclusion

Article 11 of the Basel Convention is the exclusive mechanism by which Parties may enter into other international agreements regulating the transboundary movement of hazardous waste. The Hong Kong Convention regulates the transboundary movement of end-of-life ships, which have been determined to constitute hazardous waste under the Basel Convention. The Hong Kong Convention therefore must meet the criteria for a valid Article 11 Agreement. As the above analysis has shown, Article 11 requires the agreement to "stipulate provisions that are no less environmentally sound than that of the Convention, in particular taking into account the needs of developing countries." The travaux of the Basel Convention, COP Decisions, and the practice of States shows that an Article 11 Agreement must contain, at minimum, measures to ensure the ESM of waste and a strict control system based on prior informed consent.

4. CRITERIA TO DETERMINE EQUIVALENCE UNDER THE BASEL CONVENTION

Basel COP 9, by Decision IX/30 (June 2008), requested comments on appropriate criteria to be used by the Open-ended Working Group in assessing "whether the ship recycling Convention, as adopted, establishes an equivalent level of control and enforcement as that established under the Basel Convention, in their entirety." The request recalled the principles of the Basel Convention, in particular the need to minimize the generation and transboundary movements of hazardous waste, the need to ensure the ESM of such wastes, and the need to prevent the export of hazardous wastes to countries without their prior informed consent.

4.1. Status of the Debate over Equivalence Criteria

A number of States and NGOs have elaborated on the criteria to determine equivalence under Article 11 of the Basel Convention, including with respect to the particular issue of shipbreaking. The most common criteria found in the submissions by State Parties and relevant stakeholders¹⁵⁹

Bamako Convention, art. 4(3)(h)-(k).

Bamako Convention, art. 4(1).

¹⁵⁷ Compare Bamako Convention, art. 1(10), and Basel Convention, art. 2(8).

Dec. IX/30, *supra* note 1.

Environmentally sound management of ship dismantling: comments received pursuant to decision IX/30,

are the following:

- 1) Prior Informed Consent by the recycling state;
- 2) ESM of wastes by the establishment of mandatory standards, authorization and certification of facilities and ships, and inspection of facilities to ensure compliance with ESM;
- 3) Minimization of the generation of hazardous wastes;
- 4) Traceability of hazardous wastes by way of a tracking system;
- 5) Sovereign right of states to prohibit import / export;
- 6) Enforcement authority to tackle illegal shipments and violations;
- 7) Exchange of Information among parties, particularly relating to administrative, enforcement and emergency matters;
- 8) No trade or transfer of waste between Parties and non-Parties absent an agreement or arrangement guaranteeing equivalent Basel standards.

Despite these commonalities, there are also significant differences in the submissions to date. The EU and the United States shared the opinion that equivalence is to be measured by the achievement of the objective of the Basel Convention, namely the protection of human health and the environment against the adverse effects resulting from the generation, transboundary movement and management of hazardous wastes. The EU submitted that the Parties' decision to use the term "equivalent level of control" indicates "that they did not insist on an 'identical' level of control and did not require the Ship Recycling Convention to incorporate necessarily the same elements of control and enforcement as are established under the Basel Convention." ¹⁶⁰

By contrast, the NGO Platform on Shipbreaking submitted that equivalence requires the IMO Convention to be measured against the control obligations of the Basel Convention, where "control" is interpreted in a broad sense as a "concept encompassing the entire set of obligations, rights, objectives and principles from which control is derived." While acknowledging that "equivalent" does not necessitate identical regimes, the Platform suggested that equivalence requires, first and foremost, replication of the fundamental elements of the Convention, which includes scope, fundamental principles, rights of parties, and key objectives. In addition, equivalence requires replication of only the net practical effect of non-fundamental elements of the Convention such as specific obligations and requirements to implement the principles and objectives.

Based on these submissions, the OEWG, after considerable debate, reached an agreement on the criteria to be used for a preliminary assessment of equivalence. The OEWG considered these criteria to be "an appropriate basis for further work, including discussion, to implement decision

40

U.N.Doc. UNEP/CHW/OEWG/7/INF/15 (1 March 2010).

Environmentally sound management of ship dismantling: compilation of comments received pursuant to decisions VIII/11 and OEWG-VI/7, U.N. doc. UNEP/CHW.9/INF/29 para 77, (29 April 2008).

Id., at para. 4. Proposed criteria by the NGO Platform on Shipbreaking are derived from the following sources: Basel Convention, art. 11; Dec. III/1, U.N. doc. UNEP/CHW.3/35 (September 1995); Dec. VII/26, U.N. Doc. UNEP/CHW.9/39 (June 2008); Dec. IX/30, U.N. Doc. UNEP/CHW.9/39 (June 2008).

Dec. OEWG-VII/12, supra note 9.

IX/30 [June 2008]." 163 The criteria agreed upon are the following:

Scope and applicability	Coverage of ships / wastes			
	Coverage and identification of hazardous materials			
	Management of life cycle of ship			
	■ Relationship between Party and non-Party			
	Jurisdiction			
Control	 Authorizations and Certifications 			
	Surveying, auditing and inspections			
	Designation of competent authorities / focal points			
	Standards (mandatory or voluntary)			
	Ability to prohibit import / export			
	 Traceability and transparency of hazardous materials until final treatment / ultimate disposal 			
	Prior notification and prior consent			
	 Certification of disposal / statement of completion of ship recycling 			
	■ Other control mechanisms			
Enforcement	 Illegal shipments, violations and sanctioning, including criminalization, of illegal traffic 			
	■ Dispute settlement			
	■ Duty to re-import			
Exchange of information	 Access to and dissemination of information 			
by Parties / Cooperation and coordination	Reporting obligations			
and coordination	 Transmission of information regarding import / export restrictions 			
	Among Parties to advance ESM through information exchange and technical assistance and capacity-building on best practices, technical guidelines, monitoring and public awareness.			

4.2. Gaps in OEWG criteria

The criteria proposed by the OEWG reflect the core proposals submitted by Parties in response to Decision IX/30 (June 2008). However, the criteria are lacking in several respects.

First, the criteria must keep in mind the requirements under Article 11 of the Basel Convention, as the Hong Kong Convention is evaluated as a multilateral agreement pursuant to Article 11. Article 11 requires the agreement to "not derogate from the environmentally sound management of

Id. See also Dec. IX/30, supra note 1.

hazardous wastes and other wastes as required by the Convention" and "stipulate provisions which are not less environmentally sound than those provided for by this Convention, in particular taking into account the interests of developing countries." As established above, this means that the Hong Kong Convention must integrate the provisions of the Basel Convention which are considered essential to the achievement of ESM in general and required to ensure ESM in shipbreaking in particular, as well as stipulate provisions which take into account the interests of developing countries.

The Basel Convention seeks to achieve ESM 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." ESM requires measures to minimize the generation of waste so well as minimize and strictly control the transboundary movement of waste. Indeed, the obligation to minimize transboundary movement of hazardous waste was cited in Basel COP Decision VII/26 (2004) and Decision IX/30 (2008). In this respect, the assessment criteria should also address:

- 1) the obligation of States to minimize transboundary movement of waste to the extent possible consistent with ESM (national self-sufficiency principle)
- 2) the regulation of downstream facilities involved in waste management and disposal

Consideration of these additional elements will allow for a proper analysis of equivalence of the Hong Kong Convention under Article 11 of the Basel Convention, particularly with respect to ESM.

The Basel Convention's perspective on how to achieve ESM in ship recycling in particular can be found in the "Technical Guidelines for the environmentally sound management of the full and partial dismantling of ships". In general, the Guidelines state that the achievement of ESM requires addressing not only the processes directly related to the actual dismantling facility but also aspects related to the ship undergoing dismantling and the crew undertaking the work. ESM includes measures to prevent the generation of waste by, for example, 'clean' ship design' preparations on the ship prior to dismantling such as the making of an inventory list and precleaning; functionalities in the ship dismantling facility such as containment; and the establishment of an Environmental Management Plan. It is therefore important to examine whether the Hong Kong Convention requirements are consistent with these measures.

Article 11.1 also requires the agreement to take into consideration "the interests of developing countries." It must be remembered that the Basel Convention was adopted as a response to mismanagement and at times unrestrained dumping of hazardous wastes in developing countries as a result of cost externalization by waste generators in industrialized countries. This is reflected in the Preamble of the Basel Convention which "[recognizes] the increasing desire for the prohibition

171

Basel Convention, art. 11
Technical Guidelines, *supra* note 44, at 23.
Basel Convention, Preamble 3, Article 4.2 (a).
Basel Convention, Preamble 10 and 18, Article 4.2 (d), Article 4.9.
Technical Guidelines, *supra* note 44.
Technical Guidelines, *supra* note 44, at 24.

Id.

Technical Guidelines, *supra* note 44, at 9-11.

of transboundary movements of hazardous wastes and their disposal in other States, especially developing countries" and "[takes] into account ... the limited capabilities of the developing countries to manage hazardous wastes and other wastes." Thus, the Art. 11 agreement must take into account the special needs and vulnerabilities of developing countries in light of their lack of capacity to manage waste.

Second, the criteria for equivalence must address the elements requested by the Basel COP for inclusion in the Hong Kong Convention. These include "mandatory requirements, including a reporting system for ships destined for dismantling, that ensure an equivalent level of control, "173 "mandatory requirements to ensure the environmentally sound management of ship dismantling, which might include pre-decontamination within its scope," 174 and "clear responsibilities of all stakeholders in ship recycling, including ship owners, ship recycling facilities, flag states and ship recycling States, also taking into account their current capacity and the common but differentiated responsibilities and sovereign rights of the Parties." 175 With respect to ESM, the COP encouraged the IMO "to promote the substitution of harmful materials in the construction and maintenance of ships by less harmful or, preferably, harmless materials, without compromising the ships' safety and operational efficiency." ¹⁷⁶ In addition, in the context of the Hong Kong Convention, the COP encouraged Parties "to fulfill their obligations under the Basel Convention where applicable, in particular their obligations with respect to prior informed consent, minimization of transboundary movements of hazardous wastes and the principles of environmentally sound management," 177 and "invited Parties, especially developed States, to encourage the establishment of domestic ship recycling facilities." 178

4.3 Conclusion

The criteria agreed by the OEWG capture most of the essential elements of the Basel Convention which should be considered in an evaluation of equivalence. Based on the requirements set forth by Article 11 of the Basel Convention, the Basel Technical Guidelines for the ESM of ships, and Decisions by the Basel COP, the assessment criteria should also consider the obligation of states to *minimize* the transboundary movement of hazardous waste and other wastes, the regulation of downstream facilities, and the interests of developing countries.

5. EVALUATION OF EQUIVALENCE OF THE HONG KONG CONVENTION

The following is an assessment of whether the Hong Kong Convention provides an equivalent level of control and enforcement as that established by the Basel Convention in its entirety, taking into account: "(i) the special characteristics of ships and international shipping; (ii) the principles of the Basel Convention and the relevant decisions of the Conference of the Parties; and (iii) the

Basel Convention, preamble, para. 7 and 20.

Dec. VII/26, supra note 1, at para. 5.

Dec. VII/26, , supra note 1, at para. 5. See also Dec. VIII/11, supra note 1, at para. 9.

Dec. VIII/11, , supra note 1, at para. 5. See also Dec. IX/30, supra note 1, at para. 3.

Dec. IX/30, *supra* note 1.

Dec. VII/26, supra note 1, at para. 1.

Dec. VII/26, *supra* note 1, at para. 3.

comments submitted by Parties and other relevant stakeholders, as appropriate."¹⁷⁹ In the form of the questions that follow, this analysis evaluates the Hong Kong Convention¹⁸⁰ on the basis of the criteria articulated by the Basel Convention OEWG. In addition, the table in the annex provides a comprehensive examination of the issues relevant to the determination of equivalence, comparing the Basel and Hong Kong Conventions, in accordance with Decision OEWG-VII/12 (May 2010).

5.1 Criteria Cluster 1: Scope and Applicability

5.1.1 "Coverage of wastes and identification of hazardous materials"

By Decision VII/26 (October 2004), the Basel COP determined that any ship that is intended for disposal constitutes a waste, regardless of its use. However, the Hong Kong Convention excludes from its jurisdiction government owned non-commercial ships and warships as well as ships under 500GT. Although the Hong Kong Convention requires each Party "to ensure by the adoption of appropriate measures that such ships act in a manner consistent with this Convention, so far as is reasonable and practicable," such a categorical exclusion based on usage or size is not consistent with the Basel Convention and the caveat of "reasonable and practicable" dilutes any requirement of consistency with the Basel Convention's standards.

The Hong Kong Convention also falls short in its coverage of hazardous materials found in ships, several of which constitute persistent organic pollutants. The materials required to be controlled or identified in the inventory of hazardous waste ¹⁸⁴ do not encompass all of the wastes defined as hazardous waste or other wastes under the Basel Convention. ¹⁸⁵ In particular, they ignore certain Basel wastes that have been identified by the Basel Technical Guidelines ¹⁸⁶ as relevant to shipbreaking as well as certain toxic and hazardous materials identified by the Special Rapporteur ¹⁸⁷ as normally present on end-of-life ships. The purpose of the Inventory is to provide ship-specific information on the actual Hazardous Materials present on board, in order to protect health and safety and to prevent environmental pollution at Ship Recycling Facilities. This is similar to the function of the movement document under the Basel Convention, ¹⁸⁸ but given its narrower coverage of dangerous substances, the Inventory mandated by the Hong Kong Convention does not provide sufficient information to ensure an equivalent level of protection.

Dec. IX/30, *supra* note 1.

The Articles, Regulations and Appendixes of the Hong Kong Convention are integral elements of the Convention, and thus equally binding on the Parties, unless expressly provided for otherwise. Hong Kong Convention, article 1.5.

Hong Kong Convention, arts. 3.2 and 3.3

Hong Kong Convention, art. 3.3

See Marcos A. Orellana, "Shipbreaking and Le Clemenceau Row," ASIL Insights, Vol. 10, Iss. 4 (Feb. 24, 2006), available at http://www.asil.org/insights060224.cfm.

Hong Kong Convention, Regulation 5.

See Basel Convention, art. 1 and Annexes I, II, III.

Technical Guidelines, *supra* note 44, at 28-29 (Table 3: Typical Releases from ship-dismantling industries) and Appendix B "List of Hazardous Wastes and Substances under the Basel Convention that are Relevant to Ship Dismantling."

Report of the Special Rapporteur, supra note 12, para. 19

See Basel Convention, art. 4.7(c) and Annex VB.

The Hong Kong Convention contains a procedure for proposing Amendments to the List of Hazardous Materials controlled by the Hong Kong Convention under Appendixes 1 and 2. However, this procedure allows for the consideration of cost to international shipping and other relevant sectors, along with the environment and human health. Such consideration is not consistent with the Basel Convention because the Basel Convention aims to control all wastes that have been identified as hazardous, possess hazardous characteristics, or are defined as hazardous by the domestic legislation of a Party of export, import, or transit, regardless of the economic cost of such regulation. Party of export, import, or transit, regardless of the economic cost of such regulation.

5.1.2 "Management of life cycle of the ship"

The Basel Convention adopts an integrated life-cycle approach to achieve the environmentally sound management (ESM) of waste, requiring strong controls from the generation of a hazardous waste to its storage, transport, treatment, reuse, recycling, recovery and final disposal. The Hong Kong Convention introduces measures that control the ship from its design, through construction, operation and dismantlement, but it does not go far enough to ensure the ESM of waste generated by shipbreaking.

For example, the Hong Kong Convention makes reference in the preamble "of the need to promote the substitution of hazardous materials in the construction and maintenance of ships by less hazardous, or preferably, non-hazardous materials, without compromising the ships' safety, the safety and health of seafarers and the ships' operational efficiency." However, the controls of hazardous materials imposed by the Hong Kong Convention do not provide controls additional to existing multilateral environmental agreements, and are weaker than the substitution principle of the Basel Convention. ¹⁹²

Moreover, the Hong Kong Convention focuses exclusively on ships and Ship Recycling Facilities and fails to properly address the standards applicable to downstream facilities and their management of waste generated from the recycling activity. ¹⁹³ The Hong Kong Convention requires the authorized Ship Recycling Facilities "to provide for and ensure safe and environmentally sound management of all Hazardous Materials and wastes removed from the ship recycled at that Ship Recycling Facility," ¹⁹⁴ and further requires the wastes to only be "transferred to a waste management facility authorized to deal with their treatment and disposal in a safe and environmentally sound manner." ¹⁹⁵ But the Convention is unclear as to who authorizes these downstream facilities and based on what standards. Under the Basel Convention, wastes transferred to downstream facilities

Hong Kong Convention, Preamble para 8.

Hong Kong Convention, Regulation 6(4.1.1.4).

Basel Convention, art. 1.1.

Basel Convention, Preamble para 3, art. 4.2(a)

See Hong Kong Convention, art. 2.10 (defining "Ship Recycling" to mean "the activity of complete or partial dismantling of a ship at a Ship Recycling Facility in order to recover components and materials for reprocessing and re-use, whilst taking care of hazardous and other materials, and includes associated operations such as storage and treatment of components and materials on site, but not their further processing or disposal in separate facilities.") and art. 2.11 (defining "Ship Recycling Facility" to mean "a defined area that is a site, yard, or facility used for the recycling of ships.")

Hong Kong Convention, Regulation 20.3.

Hong Kong Convention, Regulation 20.4

remain subject to the controls of the Convention, ¹⁹⁶ and the Basel Technical Guidelines state that disposal facilities must take into account certain design criteria, in order to minimize the negative effect on the surrounding environment. ¹⁹⁷ The Hong Kong Convention fails to address how ESM will be guaranteed at this final stage of the ship's disposal, and therefore fails to provide an equivalent level of control.

While the Hong Kong Convention fails to adequately address downstream facilities, the Basel Convention and its accompanying ESM provisions will continue to apply to the treatment of wastes by downstream facilities after the wastes have been removed from the ships. ¹⁹⁸

5.1.3 "Relationship between Parties and non-Parties"

The Hong Kong Convention allows for ships flying the flag of non-Parties to the Convention to be recycled in a Ship Recycling Facility authorized under the Convention, under the condition that it be given "no more favorable treatment." The vagueness of the requirement is in stark contrast to the Basel Convention where a Party is not permitted to export or import hazardous wastes from a non-Party, except under an Article 11 Agreement. ¹⁹⁹ As discussed above, Article 11 explicitly requires the alternative agreement or arrangement to "not derogate" from the ESM of waste under the Basel Convention and stipulate provisions which are "no less environmentally sound." The Hong Kong Convention's provisions on the relationship of Parties with non-Parties is not sufficiently stringent, as compared with the Basel Convention, in order to ensure that the non-Party acts in conformity with the standards set by the Hong Kong Convention.

5.1.4 "Jurisdiction of the Convention"

The jurisdiction of the Basel Convention extends from the State of export through any transit States, to the State of import. The transit State need not be a Party to be considered a 'concerned state' warranting notification. ²⁰⁰ In contrast, the Hong Kong Convention limits its jurisdiction to the Flag State of the ship, or other authority under which the ship is operating, any Port States which are Parties, and the State of the Ship Recycling Facility. ²⁰¹ Unlike Basel, the Hong Kong Convention does not address the role of transit states other than Party Port States.

Additionally, the Hong Kong Convention allows for States comprising of two or more territorial units to declare at the time of signature, ratification, acceptance, approval or accession whether the Convention extends to all territorial units or only some. This creates a potential legal loophole because certain States may operate ship recycling facilities in a port of their territory where they do not apply the Hong Kong Convention. This is not consistent with providing an equivalent level of control.

Furthermore, the jurisdiction of the Hong Kong Convention is also limited to certain types and size

Basel Convention, art. 2.2 and 2.5.

See Technical Guidelines, supra note 44, sec. 5.3

See Basel Convention, art. 4.2 (a)-(c).

Basel Convention, arts. 4.5 and 11.

Basel Convention, arts. 2.13 and 6.1.

Hong Kong Convention, arts. 2.2, 2.3, and 8.

Hong Kong Convention, art. 16.4.

of ships which have operated in more than one jurisdiction.²⁰³ Such exclusion of ships is not consistent with Basel.

5.2 Criteria Cluster 2: Control

The Basel Convention system of control, as embodied in Articles 4 and 6 of the Convention, is intended to achieve the protection of human health and the environment by requiring Parties to minimize the generation and transboundary movement of hazardous waste, ensure the ESM of waste, and abide by a strict notification procedure based on prior informed consent. By Article 11, the Parties to the Basel Convention laid down that such protection requires the Article 11 agreement to "not derogate" from the ESM requirements of the Basel Convention. An equivalent level of control therefore requires a control system that is consistent with the Basel Convention's ESM requirements.

5.2.1 Authorizations, Surveys and Certifications

Both the Hong Kong Convention and the Basel Convention require the authorization of facilities where the waste is managed and utilize guidelines to set performance standards for shipbreaking operations. Under the Basel Convention, Parties must prohibit persons under its national jurisdiction from transporting or disposing of hazardous wastes unless so authorized. 204 Parties of the Hong Kong Convention are directed to authorize Ship Recycling Facilities in accordance with the Convention's Regulations, 205 and are subsequently directed to establish a mechanism for authorizing Ship Recycling Facilities 206 taking into account the voluntary guidelines to be developed by the IMO. 207 Parties have a general obligation to ensure that Ship Recycling Facilities under their jurisdiction comply with the requirements of the Convention, 208 and must establish legislation, regulations and standards to ensure the Ship Recycling Facilities are designed, constructed and operated in a safe and environmentally sound manner. 209 However, the lack of mandatory minimum standards on authorization could lead to the initial authorization of facilities that are not properly equipped to conduct ESM. The UN Special Rapporteur has noted that the Hong Kong Convention is vague on the standards for authorizing ship-recycling facilities, ²¹⁰ and therefore insufficient to protect human health and the environment against the major hazards posed by shipbreaking.

For instance, the predominant method of shipbreaking at this time is beaching. According to the UN Special Rapporteur, the beaching method "fails to comply with generally accepted norms and standards aimed at ensuring the protection of workers and the environment from the adverse effects caused by the discharge of hazardous materials present on end-of-life vessels into the environment." This has been recognized by the Basel Technical Guidelines as well as by certain

```
Hong Kong Convention, art. 3.
```

Basel Convention, arts. 2.5 and 4.7(a).

Hong Kong Convention, Regulation 15.2.

Hong Kong Convention, Regulation 15.1 and 20.

Hong Kong Convention, art. 6.

Hong Kong Convention, Regulation 16.

Hong Kong Convention, art. 4.2.

See Report of the Special Rapporteur, supra note 12, at para. 62(a).

Report of the Special Rapporteur, supra note 12, at para 62(c). See also NGO Platform on Shipbreaking,

governments and companies.²¹² The Special Rapporteur has recommended that the Hong Kong Convention call for the gradual phase-out of the beaching method and move toward alternative methods more in line with ESM. The Hong Kong Convention's failure to address whether and how it would authorize recycling facilities that rely on non-ESM procedures such as the beaching method indicates a failure in its ability to ensure ESM consistent with Basel.²¹³

The International Certificate on Inventory of Hazardous Materials and the International Ready for Recycling Certificate, both required to be issued by the Administration (Flag State) prior to recycling, aim to ensure that the Ship Recycling Facility has the capacity to recycle the ship. They are a step in the right direction, but the regulations do not sufficiently mandate that the facility be able to recycle the ship in an environmentally sound manner. Specifically, the final survey conducted by the Administration, which is a prerequisite to the issuance of the International Ready for Recycling Certificate, does not explicitly require that the Ship Recycling Plan developed by the Ship Recycling Facility guarantee ESM, nor that the Ship Recycling Facility be able to manage the waste in an environmentally sound manner. Instead, the final survey must simply verify 1) a proper Inventory of Hazardous Materials, 2) that the Ship Recycling Plan "reflects the information contained in the Inventory of Hazardous Materials ... and contains information concerning the establishment, maintenance and monitoring of Safe-for-entry and Safe-for-hot work conditions, and 3) that the Ship Recycling Facility holds a valid authorization. 214 Because the issuance of the International Ready for Recycling Certificate is solely based on the successful completion of the final survey, ²¹⁵ and such issuance gives the green light for the start of recycling, 216 it is clear that the Certificate does not serve to sufficiently guarantee the ESM of the ship. This is inconsistent with the obligations under the Basel Convention whereby an export state must not allow the export of hazardous waste if it has reason to believe that their environmentally sound management and disposal would not be guaranteed in the prospective State of import. ²¹⁷

5.2.2 "Designation of competent authorities / focal points"

Under the Hong Kong Convention, the competent authority designated by the Party is responsible for receiving notification of the proposed transboundary movement of hazardous waste from the Ship Recycling Facility under its jurisdiction, approving the draft Ship Recycling Plan before recycling

OFF THE BEACH! Safe and green dismantling, 2009.

- Hong Kong Convention, Regulation 10.4.
- Hong Kong Convention, Regulation 11.11.
- Hong Kong Convention, Regulation 24.3
- Basel Convention, arts. 4.2(e) and 4.10.

See Technical Guidelines, supra note 44, at 10 (requiring ship dismantling yards to have containment measures); Resolution on an EU Strategy for Better Ship Dismantling, Eur. Parl. Doc. P6_TA(2009)0195 (calling "for an explicit prohibition on 'beaching' of end-of-life ships," and considering "that any technical assistance to South Asian countries within an EU framework should further aim at the phasing out of this grossly unsustainable and seriously flawed breaking method."); Maersk wants to end 'Beachings,' MAERSK (July 1, 2010, 2:46PM), http://www.maersk.com/AboutMaersk/News/Pages/20100701-145601.aspx.

Proposals to ban beaching, presented by NGOs, were rejected during the negotiations of the Hong Kong Convention. *See* Int'l Maritime Org. [IMO], Consideration of the draft International Convention for the sea and environmentally sound recycling of ships - Ensuring sustainable green and safe ship dismantling – concerning beaching and the establishment of a mandatory fund, submitted by Greenpeace International and FOEI, SR/CONF/14 (2) (Feb. 9, 2009), at para. 3-6.

can commence, and notifying the Administration (Flag State) upon completion of recycling. ²¹⁸ Although the notification procedure adopted by the Hong Kong Convention is quite different from that of the Basel Convention, as elaborated below, the designation of competent authorities under the Hong Kong Convention is consistent with the Basel Convention.

5.2.3 Mandatory requirements

The Hong Kong Convention has been structured so as to leave much of the details of the standards to voluntary guidelines. The following guidelines have been adopted or are being developed to assist in the Convention's implementation:

- 1. Guidelines for the development of the Inventory of Hazardous Materials, adopted by resolution MEPC.179(59);
- 2. Guidelines for safe and environmentally sound ship recycling;
- 3. Guidelines for the development of the ship recycling plan;
- 4. Guidelines for the authorization of ship recycling facilities;
- 5. Guidelines for survey and certification;
- 6. Guidelines for inspection of ships.

Although the development of these guidelines is important, it disregards the submissions by the Basel Parties emphasizing the importance of ESM and the inclusion of "mandatory requirements to ensure the environmentally sound management of ship dismantling, which might include predecontamination within its scope."²¹⁹

The COP to the Basel Convention agreed on the necessary measures to ensure ESM in ship recycling by the adoption of the "Technical Guidelines for the Environmentally Sound Management of the Full and Partial Dismantling of Ships." Yet, the Hong Kong Convention fails to fully incorporate and make mandatory the ESM requirements stipulated by the Technical Guidelines. In particular, the Hong Kong Convention fails to mandate preparations on the ship prior to dismantling such as precleaning and functionalities in the ship dismantling facility such as containment. ²²⁰

It should be noted that the Preamble of the Hong Kong Convention makes reference to the Technical Guidelines, and the Convention also states that "parties shall take measures to implement the requirements of the regulations ... taking into account ... relevant and applicable technical standards, recommendations and guidance developed under the Basel Convention." But such consideration is only voluntary.

5.2.4 "Ability to prohibit import or export"

The Basel Convention explicitly allows Parties to prohibit the export or import of hazardous wastes or other wastes for disposal.²²² In contrast, the Hong Kong Convention does not consider the

49

Hong Kong Convention, art. 2.3 and Regulation 24. 2 and 25.

Dec. VII/26, supra note 1, at para. 5. See also Dec. VIII/11, supra note 1, at para. 9.

Technical Guidelines, *supra* note 44, at 9-11.

Hong Kong Convention, Regulation 3.

Basel Convention, art. 4.1.

concept of import or export. The Hong Kong Convention allows the Administration (Flag State) to prohibit recycling by denying the issuance of an International Certificate for Ready Recycling, but it does not have a recognized ability to prohibit export. Such denial may be based on deficiencies discovered during the final survey with respect to the Inventory of Hazardous Materials, the Ship Recycling Plan (SRP), or authorization of the Ship Recycling Facility. The Recycling State similarly has the ability to prohibit recycling by denying approval of the draft SRP, the does not have a recognized ability to prohibit import. This presents a significant problem, as ships could theoretically be transferred to the territory of the Recycling State and abandoned if the SRP is denied. This is exacerbated by the absence in the Hong Kong Convention of a "duty to reimport" as exists under the Basel Convention, as elaborated below.

5.2.5 "Traceability and transparency of hazardous materials until final treatment / ultimate disposal"

The Basel Convention requires Parties to use a movement document to ensure traceability of hazardous materials. The content of the movement document is outlined in Annex VB of the Convention. The Hong Kong Convention's equivalent of the movement document is the International Ready for Recycling Certificate, issued by the Administration (Flag State) to mark the beginning of the movement. The International Ready for Recycling Certificate must contain the particulars of the ship, the SRF, the IHM, and the SRP after approval by the Recycling State. When the recycling is to begin, the SRF must issue a Report of Planned Start of Ship Recycling to the Competent Authorities of the Recycling State, containing the name and address of the SRF as well as the International Ready for Recycling Certificate. Although the two processes differ in that the SRF need not sign the Certificate upon receipt of the waste, the issuance of the Report is functionally equivalent.

However, it must be remembered that under the Hong Kong Convention, the transparency and traceability of the hazardous materials is limited to the Ship Recycling Facility (SRF). Hazardous materials that are transferred out of the SRF for treatment and disposal are no longer traceable.

5.2.6 "Prior notification and prior consent"

The Basel Convention requires Parties to prohibit export if the State of import has not consented in writing to the specific import. ²²⁷ In contrast, the Hong Kong Convention adopts a reporting mechanism that does not require the Ship Recycling State to consent to each ship which enters its jurisdiction.

Under the Hong Kong Convention, the Ship Recycling Facility (SRF) must notify the Competent Authority of the Recycling State of the shipowner's intent to recycle the ship at the facility and provide details on the ship, the inventory of hazardous materials, and the draft Ship Recycling Plan (SRP).²²⁸ In order for the shipbreaking to begin, the Competent Authority must approve the draft

Hong Kong Convention, Regulation 10.4

Hong Kong Convention, Regulations 9 and 24.

Basel Convention, arts. 4.7(c) and 6.9.

Hong Kong Convention, Appendix 4.

Basel Convention, art. 4.1(c) and 6.

Hong Kong Convention, Regulation 24.2.

SRP,²²⁹ but Parties are able to choose either explicit or tacit approval of the SRP in contradiction to the PIC procedure of the Basel Convention which requires explicit approval for each waste shipment.

The inadequacy of tacit approval with the objective of the Basel Convention was acknowledged during the negotiations of the Basel Convention. The Basel Secretariat also noted during the Second Session of the Joint ILO/IMO/BC Working Group on Ship Scrapping that in order to provide for an equivalent level of control, the IMO should consider mandating an IMO Guideline which states:

"The recycling State should check that any potentially hazardous wastes which might be generated during the recycling operation can be safely handled before it accepts the ship for recycling." ²³¹

This recommendation is reflected in the requirement that the Recycling State approve the draft SRP prior to recycling, as assurance that the capabilities of the Ship Recycling Facility match the ship to be recycled. But the option of tacit approval undermines the protections provided by this provision.

The Basel Convention not only requires the explicit consent of the import state but also of the transit states. The Hong Kong Convention fails to require notification to and consent by the transit state. The transit state does have some rights to inspect ships as a Port State, in order to determine whether there is on board either an International Certificate on Inventory of Hazardous Materials or an International Ready for Recycling Certificate, ²³³ but the Hong Kong Convention does not expressly require the consent of Port States or other transit states for the transboundary movement of the end-of-life vessel. In other words, such states are not authorized to consent or deny a ship's entry. The Basel Secretariat commented on this deficiency during the Joint Working Group session referenced above, noting that the Basel Convention control system requires the prior informed consent of transit states and recommending the following to the IMO:

"To establish a reporting system for ships destined for dismantling that ensures a level of control equivalent to that under the Basel Convention, the question of transit States could be addressed." ²³⁴

Accordingly, the Hong Kong Convention fails to provide an equivalent level of control by excluding

Report of the Joint Working Group, U.N. Doc. ILO/IMO/BC WG 2/11, Annex 4, para. 14 (December 2005) (quoting Annex to IMO General Assembly resolution A.962(23), para. 9.4.1.3).

234

Hong Kong Convention, Regulation 9.4. States must declare at the time of joining the Convention "whether it requires explicit or tacit approval of the Ship Recycling Plan before a ship may be recycled in its authorized Ship Recycling Facility(ies)." Art. 16.6. "Where a Party requires tacit approval of the Ship Recycling Plan, the acknowledgement of receipt shall specify the end date of a 14-day review period. The Competent Authority shall notify any written objection to the Ship Recycling Plan to the Ship Recycling Facility, Ship Owner and Administration within this 14-day review period. Where no such written objection has been notified, the Ship Recycling Plan shall be deemed to be approved." Regulation 9.4.2.

See *supra* section 3.3.

Basel Convention, art. 6.4. The transit State, however, may decide not to require prior written consent for transit transboundary movements of hazardous wastes; in this case, if no response is received by the State of export within 60 days, the State of export may allow the export to proceed through the State of transit.

Hong Kong Convention, art. 8.

Report of the Joint Working Group, U.N. Doc. ILO/IMO/BC WG 2/11, Annex 4, para. 16 (December 2005)

transit States from the operation of control protections, as well as by establishing a tacit consent approval mechanism that undermines the safeguards established by Basel.

5.2.7 "Certification of disposal / Statement of Completion of ship recycling"

The Statement of Completion mandated by the Hong Kong Convention goes beyond the Basel Convention by requiring the Ship Recycling Facility (SRF) to "report on incidents and accidents damaging human health and/or the environment." The Competent Authority must also send a copy of the Statement to the Administration that issued the International Ready for Recycling Certificate. However, such reports will not address activities downstream of the SRF.

5.2.8 Other control mechanisms: minimization of transboundary movement

The OEWG criteria fails to address the fact that the Basel Convention seeks to control the transboundary movement of hazardous waste not only by regulating but also by limiting its movement to circumstances where the state of export does not have the technical capacity to recycle in an ESM manner and where the recycling state has a need for such raw materials. Similarly, the Basel Convention encourages Parties to ensure the availability of disposal facilities within their own jurisdiction, where possible, and dispose of the waste in the State where it was generated as far as is compatible with ESM. The Hong Kong Convention fails to incorporate this national self-sufficiency principle.

5.3 Criteria Cluster 3: Enforcement

5.3.1 "Illegal shipments, violations, and sanctioning, including criminalization, of illegal traffic"

The Basel Convention criminalizes the illegal traffic of waste.²³⁹ In contrast, the Hong Kong Convention provides much more discretion to the flag state and ship recycling state to establish sanctions to address violations of requirements pertaining to ships and Ship Recycling Facilities, respectively.²⁴⁰ The sanctions are required to be "adequate in severity to discourage violations of the [Hong Kong Convention] wherever they occur."²⁴¹ The Parties to the Hong Kong Convention are free to adopt measures that are weaker than the Basel Convention, such as civil penalties.

5.3.2 "Dispute settlement"

The dispute settlement provisions in the two Conventions are essentially equivalent. The Basel Convention differs in encouraging the Parties to first seek settlement through negotiations or other peaceful means of their choice, and to resort to judicial settlement by the International Court of

Hong Kong Convention, Regulation 25.
Basel Convention, art. 4.9.
Basel Convention, art. 4.2(b),
Basel Convention, Preamble 8.
Basel Convention, arts. 4.3 and 9
Hong Kong Convention, art. 10.
Hong Kong Convention, art. 10.3.

Justice or arbitration only upon failure to reach a settlement otherwise. ²⁴² The Hong Kong Convention does not state a preference for the means chosen to settle a dispute. ²⁴³

5.3.3 "Duty to re-import"

The Basel Convention requires the state of export to re-import the waste under two circumstances: first, if the shipment cannot be completed in accordance with the terms of the contract and an alternative disposal arrangement cannot be made within a given timeframe, and second, if the shipment is deemed illegal traffic, unless re-importation is impracticable. There is no equivalent provision under the Hong Kong Convention. The absence of a duty to reimport creates a major deficiency and risks the possibility of ships being abandoned on the beaches of Recycling States.

5.4 Criteria Cluster 4: Exchange of information by Parties, Cooperation and Coordination

5.4.1 "Access to and dissemination of information"

Under the Basel Convention, Parties are obligated to provide the States concerned with information about a proposed transboundary movement of waste, stating the effects of the movement on human health and the environment, and to cooperate with other Parties and interested organizations in disseminating information on the transboundary movement of hazardous wastes and other wastes in order to improve ESM and prevent illegal traffic. The Parties are also required to inform each other, through the Secretariat, on any changes in the designation of their competent authorities, national definitions of hazardous waste, decisions not to consent to the import of waste, decisions to limit or ban the export of waste, and upon the request of another Party, notifications concerning any given transboundary movement of hazardous waste and the response to it.

The requirements under the Hong Kong Convention are similar, though it gives the IMO greater discretion in determining what information to disseminate. Each Party must report to the IMO, and the IMO is obligated to disseminate "as appropriate," information on the list of authorized recycling facilities, competent authorities, names and responsibilities of recognized organizations and nominated surveyors authorized to act on the Party's behalf, an annual list of ships flying the Party's flag with International Ready for Recycling Certificates, an annual list of ships recycled within the Party's jurisdiction, information on violations, and actions taken on ships and facilities under the Party's jurisdiction.²⁴⁸

5.4.2 "Reporting obligations"

The reporting obligations under the Basel Convention are more comprehensive than that of the

Hong Kong Convention, art. 14.

Basel Convention, art. 20.

Basel Convention, arts. 8 and 9.2.

Basel Convention, art. 4.2(f).

Basel Convention, art. 4.2(h).

Basel Convention, art. 13.2

Hong Kong Convention, art. 12.

Hong Kong Convention. The reporting obligations under the Hong Kong Convention include those referenced above (Section 5.4.1) as well as the obligation of Recycling States, upon request, to report on the basis of its decision to authorize the Ship Recycling Facility. In contrast, only the Basel Convention requires Parties to report on the quantity and characteristics of the waste exported or imported, the disposal method used, efforts to minimize the transboundary movement of waste, information on the measures adopted to implement the Convention, information on measures undertaken for development of technologies for the reduction and/or elimination of the production of waste, and information on available qualified statistics compiled by them on the effects on human health and environment of the generation, transportation, and disposal of wastes.

5.4.3 "Transmission of information regarding import / export restrictions"

The Basel Convention permits States to prohibit import or export of waste, and Parties must inform the Secretariat of such restrictions. The Hong Kong Convention does not have equivalent reporting provisions.

5.4.4 "Among Parties to advance ESM through information exchange and technical assistance and capacity building on best practices, technical guidelines, monitoring and public awareness."

Both the Basel Convention and the Hong Kong Convention require Parties to provide technical assistance and cooperate in achieving the objective of the respective Convention. Under the Basel Convention, Parties are required to cooperate in monitoring the effects of waste management on human health and the environment; advancing low-waste technologies and transferring technology and management systems related to ESM, subject to their national laws, regulations and policies; and developing appropriate technical guidelines. The Hong Kong Convention requires Parties to provide support to other Parties, upon request and "as appropriate," in training personnel; ensuring the availability of relevant technology, equipment and facilities; initiating joint research and development programmes; and undertaking other actions aimed at effective implementation of the Convention and its guidelines. Parties to the Hong Kong Convention also commit to cooperate in the transfer of management systems and technology in respect of the environmentally sound recycling of ships, subject to their national laws, regulations and policies. These obligations in the Hong Kong Convention are essentially equivalent to that of Basel.

However, one key component missing from the Hong Kong Convention is the establishment of regional or sub-regional centers for training and technology transfer and an accompanying voluntary funding mechanism, similar to those available under the Basel Convention. This is elaborated on below.

-

Hong Kong Convention, art. 7.
Basel Convention, art. 13.3

²⁵¹ Basel Convention, art. 4.1(a), 13.2

Basel Convention, art. 10.

Hong Kong Convention, art. 13.1.

Hong Kong Convention, art. 13.2.

Basel Convention, art. 14.

5.5 Consideration of the interests of Developing countries

A key criterion that is missing from the proposed OEWG criteria is consideration of the interests of developing countries, a factor that is signaled in the preamble and mandated by Article 11 of the Basel Convention as well as in other instances. The consideration for developing countries is built into the entire policy framework of the Basel Convention. For example, the establishment of centers for training and technology transfer and provision of funding and the prohibition of exports to Parties when there is reason to believe the wastes will not be managed in an environmentally sound manner clearly imply special concern for countries lacking in funds or capacity.

The Hong Kong Convention assigns the obligation to ensure ESM largely on the recycling state, ²⁵⁹ but does not contain a provision for a ship-recycling fund or other financing mechanism to assist Ship Recycling Facilities in complying with the Convention's requirements. The Technical Guidelines note that "with regards to physical measures, lacking funding may be the primary hindrance in achieving compliance to ESM." ²⁶⁰ This is the case because most shipbreaking takes place in developing countries. Such funding is therefore essential to meeting the objectives of the Hong Kong Convention, yet the Convention fails to provide such funding.

Additionally, during the negotiations for the Hong Kong Convention, shipbreaking states such as Bangladesh and India insisted on more stringent requirements on the shipowner, such as the precleaning of the ship, in consideration of the lack of capacity of their own facilities. 261 However, the Hong Kong Convention simply requires that "Ships destined to be recycled shall: [...] conduct operations in the period prior to entering the Ship Recycling Facility in order to minimize the amount of cargo residues, remaining fuel oil, and wastes remaining on board." ²⁶² This is in contrast to the Basel Convention which requires that "each Party shall require that hazardous wastes or other wastes, to be exported, are managed in an environmentally sound manner in the State of import or elsewhere," and shall take appropriate measures to "not allow the export of hazardous wastes or other wastes to a State [...], particularly developing countries, [...] if it has reason to believe that the wastes in question will not be managed in an environmentally sound manner." Parties to "ensure that persons involved in the management of hazardous wastes and other wastes takes 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." ²⁶³ The Technical Guidelines identified pre-cleaning as one such necessary measure, and the Special Rapporteur has agreed that "stronger stipulations as to

²⁵⁸ Basel Convention, art. 4.2(e), 4.10.

See Basel Convention arts. 4.2(e), 4.13, 10.4.

²⁵⁷ Id

Basel Convention, art. 4.2.

Technical Guidelines, *supra* note 44, Sec. 6.1.

See Int'l Maritime Org. [IMO], Consideration of the draft International Convention for the sea and environmentally sound recycling of ships - Preparation of oil tanker for ship re cycling, submitted by India, SR/CONF/26 (April 2, 2009); Int'l Maritime Org. [IMO], Consideration of the draft International Convention for the sea and environmentally sound recycling of ships - Proposed amendments to the draft International Convention for the safe and environmentally sound re cycling of ships, submitted by Bangladesh, SR/CONF/12 (Feb. 6, 2009).

Hong Kong Convention, Regulation 8.2.

Basel Convention, arts. 4.8 and 4.2(e).

decontamination requirements prior to dismantling should have been made in the IMO Convention." ²⁶⁴

In consideration of the capacity of developing countries, the Hong Kong Convention's failure to provide funding, combined with its limited assignment of responsibilities on ship-owning states or flag states in ensuring ESM throughout the life-cycle of a ship, imposes a heavy burden on developing countries in complying with the Convention and appears to be in contravention of the requirement under Article 11 of the Basel Convention to take into account the interests of developing countries in protecting human health and the environment.

6. Conclusion

Shipbreaking is having a significant harmful effect on human health and the environment. The "beaching method" has caused severe pollution, occupational disease and even death in India, Bangladesh and Pakistan. These are not localized concerns: shipbreaking based on beaching results in the release of toxic chemicals including asbestos; persistent organic pollutants; and heavy metals such as lead, cadmium, mercury and arsenic. Most of these and the other chemicals released in shipbreaking migrate across borders via environmental transport, raising issues of global concern.

International institutions such as the International Labor Organization and the International Maritime Organization (IMO), as well as Parties to the Basel Convention on the Control of Transboundary Movements of hazardous Wastes and Their Disposal have taken action to address shipbreaking. In 2009, the IMO adopted the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships.

The Hong Kong Convention includes certain features that, if fully implemented, could reduce the environmental, health, and human rights impacts of shipbreaking. These include assurance of gas free for hot work prior to recycling as well as comprehensive inventory of hazardous materials on board new ships. However, the Hong Kong Convention lacks certain elements of the Basel Convention that are essential to achieving the objective of the environmentally sound management of waste.

The Basel Conference of the Parties is expected to consider in October 2011 whether the Hong Kong Convention establishes a level of control that is equivalent to the Basel Convention, taking into account comments by the Parties and other stakeholders. This determination of equivalence derives from Article 11 of the Basel Convention, which is the exclusive mechanism by which Basel Parties may enter into other international agreements regulating the transboundary movement of hazardous waste.

This analysis has applied the criteria regarding equivalence articulated by the Open-Ended Working Group to the Basel Convention and has found that the Hong Kong Convention does not provide a level of control that is equivalent to that provided by the Basel Convention. For example, the Hong Kong Convention is limited in scope and applicability, categorically excludes certain types of ships, and fails to regulate certain hazardous wastes. The Hong Kong Convention's procedures for authorizing recycling facilities and certifying ships do not provide sufficient mandatory minimum

Report of the Special Rapporteur, supra note 12, at para. 62(b). See also supra Section 2.3 on rulings by the High Court of Bangladesh in the M.T. Enterprise case which mandated pre-cleaning.

standards to ensure that shipbreaking is conducted without adverse effects to human health and the environment. The Hong Kong Convention's prior informed consent mechanism is far weaker than that of the Basel Convention, and it allows transboundary movement of wastes upon the tacit, rather than express, consent of the recycling State. The Hong Kong Convention does not require the criminalization of illegal transfer of hazardous waste, unlike the Basel Convention. The Hong Kong Convention lacks the duty to re-import waste illegally transferred, which is an important component of the Basel Convention. Moreover, the Hong Kong Convention contains no provision equivalent to the Basel requirement that its Parties must minimize the transboundary movement of waste. In light of these limitations, the Hong Kong Convention does not ensure the protection of human rights and the environment threatened by shipbreaking.

Accordingly, the Basel Convention's Conference of the Parties should find that the Hong Kong Convention fails to establish a level of control and enforcement that is equivalent to the Basel Convention. The Conference of the Parties should conclude that end-of-life ships shall remain subject to the regulatory framework of the Basel Convention. It should further decide that the Basel Convention will continue to engage the shipbreaking issue in order to achieve the Convention's overall goal to protect human health and the environment against the adverse effects that may result from the generation, transboundary movement and management of ships as hazardous wastes.

ANNEX 1: Proposed Criteria for Equivalence and Evaluation of Equivalence

[as adapted from Annex to Decision OEWG-VII/12 (UNEP/CHW/OEWG/7/21)]

Criteria		Basel Convention	Hong Kong Convention	Comments to facilitate a preliminary assessment of equivalent level of control and enforcement
Scope and applicat	bility			
What? Coverage wastes	ge of ships /	Wastes: Article 2.1 (Definition of "wastes"), Article 1 (Scope of the Convention)],	Ships: Article 2.7 (Definition of "ship") Article 3 (Application)	Basel does not exempt military or other State- owned waste – including ships – from its scope. The scope of HKC is not equivalent to Basel because it categorically excludes the following ships:
		Ships: Article 2.1 Decision VII/26: "a ship may become waste as defined in article 2 of the Basel Convention and at the same time it may be defined as a ship under other international rules"	Wastes: Article 2.9 (definition of "hazardous material")	 (a) Less than 500 GT or 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; (b) Warships, naval auxiliary, or other ships owned or operated by a Party and used, for the time being, only for government non-commercial service; HKC requires each Party to "ensure, by the adoption of appropriate measures, that such ships act in a manner consistent with this Convention, so far as is reasonable and practicable." However, this caveat weakens any requirement for consistency.
13.0	ge and cation of ous materials	Article 1 (excerpt): "1. The following wastes that are subject to transboundary movement shall be "hazardous wastes" for the purposes of this Convention: (a) Wastes that belong to any category contained in Annex I, unless they do not possess any of the characteristics contained in Annex III; and	Article 2.9: defining 'hazardous material' as "any material or substance which is liable to create hazards to human health and/or the environment." Regulation 6 (Procedure for proposing amendments to Appendices 1 and 2) Regulation 7 (Technical Groups) Appendix 1: Controls of Hazardous Materials.	HKC should cover all wastes identified as hazardous in ship-recycling under Basel. It presently excludes certain Basel wastes that have been identified by the Basel Technical Guidelines as relevant to shipbreaking.

		1/11.		
		under paragraph (a) but are defined as, or are considered to be, hazardous wastes by the domestic legislation of the Party of export, import or transit."	Appendix 2 : Minimum list of items for the Inventory of Hazardous Materials.	
		Annex I : Categories of wastes to be controlled		
		Annex III: List of hazardous characteristics		
		Annex VIII(List A): Wastes which are characterized as hazardous under Article 1.1 (a)(conditions attached).		
		Annex IX (List B): Wastes which are not covered by Article 1.1 (a) (conditions attached).		
		Basel Convention Technical Guidelines for the Environmentally Sound Management of the Full and Partial Dismantling of Ships, Annex B		
When?	Management of life	Article 2.2 (def. of management)	Article 2.10 (def. of 'ship recycling')	Basel's integrated life-cycle approach sets strong
	cycle of ship?	Article 2.5 (def. of 'approved site or facility')	Article 2.11 (def. of 'ship recycling facility')	controls from the generation of a hazardous waste to its storage, transport, treatment, reuse, recycling, recovery and final disposal. Article 4
		Article 2.8 (def. of ESM)	Regulation 4 (Controls of ship's Hazardous Materials)	specifies the Parties' obligations to minimize the generation of waste and the transboundary movement of waste, and otherwise to ensure the
		Decision VII/26		ESM of waste until its final disposal.
		"a ship may become waste as	Preparation for Ship Recycling	
		defined in article 2 of the Basel Convention and that at the same	Regulation 8.2 and 8.3 (General Requirements)	HKC controls the ship from its design, through construction, operation and the recycling stage.
		time it may be defined as a ship under other international rules"	Regulation 9 (Ship Recycling Plan).	However, the Convention fails to set standards for
			Regulation 10 (Surveys)	downstream disposal facilities because thedefinition of ship recycling excludes processing
			Regulation 11 (Issuance and	of components and materials after removal and

		Article 4.2: "Each Party shall take the appropriate measures to" (a) minimize the generation of waste. (b): ensure availability of adequate disposal facilities for ESM of waste, located domestically to the extent possible. (c): ensure those managing the waste take steps necessary to prevent pollution and otherwise minimize consequences to human health and the environment. (d): minimize transboundary movement of waste and otherwise conduct such movement in a manner that will protect human health and the environment against resulting adverse effects. Article 4.8: each Party is required to ensure the ESM of waste.	endorsement of certificates) Regulation 20 (Safe and environmentally sound management of Hazardous Materials) Appendix 1: Controls of Hazardous Materials. Appendix 5: Form for Authorization of Ship Recycling Facilities Appendix 6: Form of Report of Planned start of ship recycling Appendix 7: Form of Statement of completion of ship recycling	disposal in separate facilities. The controls set forth in Regulation 20 for treatment and disposal are not sufficient to ensure the ESM of waste as required by Basel.
Who?	Relationship between Party and non-Party	Art. 4.5: Parties must prohibit export, import to/from non-Parties. Art. 11 (Bilateral, Multilateral, Regional Agreements)	 Art. 3.4: Non-Parties may recycle ships in Party SRFs. Art. 6 (Authorization of Ship Recycling Facilities) Regulation 8: Ships must only be recycled in authorized SRFs. 	HKC controls on trade with non-Parties are not as stringent as that of Basel. HKC Art. 3.4 requires ships of non-Parties to receive "no more favorable treatment" but are not prohibited from using Partyowned Ship Recycling Facilities. This is in contrast to the Basel prohibition of export or import to/from non-Parties absent an Article 11 agreement which guarantees certain equivalent levels of control.
Where?	Jurisdiction	Art. 1: wastes subject to transboundary movement among Parties Art. 2.3 (def. of 'transboundary movement'): "any movement of	Art. 2.2 (def. of 'Administration'): Government of the State whose flag the ship is entitled to fly, or under whose authority it is operating. Art. 2.3 (def. of 'Competent	Basel regulates the transboundary movement of waste, from the State of export through any Transit States, to the State of import. The Transit state need not be a Party to be considered a 'concerned state' warranting notification.

	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 at least two States are involved in the movement." Art. 2.9 (def. of 'area under the national jurisdiction of a State') Art. 2.10 (def. of 'State of export') Art. 2.11 (def. of 'State of import') Art. 2.12 (def. of 'State of transit') Art. 2.13 (def. of 'States concerned') Art. 4.12: limitations to the jurisdiction of the Convention. Art. 11 (Bilateral, Multilateral, and Regional Agreements and	Authority'): governmental authority designated by a Party as responsible for the SRF operating within its jurisdiction Art. 3: 3.1: Convention applies to 1) ships entitled to fly the flag of a Party or operating under its authority; 2) Ship Recycling Facilities operating under the jurisdiction of a Party. 3.2, 3.3: exclusions. Ships must have operated in more than one jurisdiction, subject to exclusions listed in 3.2 and Art. 8 (Inspection of ships): Ship may be subject to inspection in a port or offshore terminal of a Party.	Unlike Basel, HKC jurisdiction is limited to the Flag State of the ship, or other authority under which the ship is operating, any Port States which are Parties, and the State of the SRF. It fails to address the role of transit states that are not Parties to the Convention. HKC allows for States comprising of two or more territorial units to declare at the time of signature, ratification, acceptance, approval or accession whether the Convention extends to all territorial units or only some. This creates a potential legal loophole because certain States may operate ship recycling facilities in a port of their territory where they do not apply HKC. This is not consistent with providing an equivalent level of control. HKC jurisdiction is also limited to certain types and size of ships which have operated in more than one jurisdiction. Such exclusion of ships is not consistent with Basel.
	Arrangements)	Art. 16.4 : ability to decide jurisdiction over territorial units.	
Control			
Authorizations and certifications	Art. 2.5 (def. of Approved site or facility): site or facility which is authorized or permitted to operate for purposes of disposal by the state of import. Art. 4.2: general obligations to take measures to ensure ESM	Art. 4.1 (Controls related to Ship Recycling): general obligation to require ships flying its flag to comply with the Convention and take effective measures to ensure such compliance. Art. 5 (Survey and Certification of ships)	Under HKC, the Administration (Flag State) is responsible for surveying and certifying the ship as ready for recycling, while the Recycling State is responsible for authorizing the Ship Recycling Facility as compliant with the standards set by the Convention.
	Art. 4.7: authorization required to	Regulation 8.6 : Administration must	Specific requirements for authorizing SRFs are not clear until the voluntary guidelines, currently being

transport or dispose

Art. 4.8: each Party is required to ensure the ESM of waste.

Art. 4.9: export allowed only if

- a) the State of export lacks capacity
- b) wastes in question are required as raw material for recycling or recovery industries in State of import
- c) or transboundary movement is in accordance with other criteria to be decided by the Parties and consistent with the Convention objectives.

Art. 4.10: export state cannot transfer its obligation to ensure the ESM of waste.

certify the ship as ready for recycling

Regulation 8.3: tanker must arrive ready for certification as safe-for-entry and/or safe-for-hot work.

Regulation 11 (Issuance or endorsement of a certificate): Administration issues International Certificate on Inventory Hazardous Waste, upon successful completion of survey, and International Ready for Recycling Certificate, upon successful completion of final survey.

Regulation 12 (Issuance or endorsement of a certificate by another Party)

Regulation 13 (Form of the certificates)

Regulation 14 (Duration and validity of the certificates)

Art. 4.2 (Controls related to Ship Recycling): general obligation to require SRFs operating under its jurisdiction to comply with the Convention and take effective measures to ensure such compliance.

Art. 6 (Authorization of Ship Recycling Facilities): Authorization is conducted by the Recycling State

Regulation 8.1: ships must only be recycled at authorized SRFs.

Regulation 15.2 (Controls on Ship Recycling Facilities): Parties must

developed, are adopted. (ref. Regulation 16.1) Lack of mandatory minimum standards on authorization could lead to the initial authorization of facilities that are not properly equipped to conduct ESM.

HKC Regulations governing issuance of the International Ready for Recycling Certificate do not sufficiently mandate that the facility be able to recycle the ship in an environmentally sound manner. This runs counter to the Basel obligation on the export state to ensure the ESM of waste.

Basel requires the authorization of all waste management facilities, including collection, transport, interim and final recovery and disposal. In contrast, HKC only regulates the first dismantling- and recycling site, but not any interim facilities or installations for subsequent processing and disposal of waste.

		establish mechanism for authorizing SRFs that will ensure compliance.	
		Regulation 16 (Authorization of Ship Recycling Facilities): SRFs must be authorized by competent authority of recycling state. Authorization can be valid no more than 5 years.	
		Regulation 17 (General Requirements): SRFs must only accept ships that they are authorized to recycle.	
		Regulation 18 (Ship Recycling Facility Plan)	
		Regulation 19 (Prevention of adverse effects to human health and the environment)	
		Regulation 20 (Safe and environmentally sound management of Hazardous Materials)	
		Regulation 21 (Emergency Preparedness and Response)	
		Regulation 22 (Worker safety and training)	
Surveying, auditing and inspection	Art. 4.2: general obligations to take measures to ensure ESM Art. 4.8: each Party is required to ensure the ESM of waste. Art. 4.9: export allowed only if a) the State of export lacks capacity b) wastes in question are required as raw material for recycling or recovery industries in State of	Art. 8 (Inspection of Ships): inspection is limited to verifying existence of International Certificate on Inventory of Hazardous Materials or an International Ready for Recycling Certificate, unless clear grounds exist to believe there is a violation. Regulation 10 (Surveys): prior to recycling, ships must be subject to an initial survey, renewal survey, and final survey. The Administration is	The final survey conducted by the Administration (Flag State), which is a prerequisite to the issuance of the International Ready for Recycling Certificate, does not sufficiently guarantee that the ship will be managed by the SRF in an environmentally sound manner. The final survey must simply verify 1) a proper IHM, 2) the SRP reflects the information contained in the IHM and contains information concerning the establishment, maintenance and monitoring of Safe-for-entry and Safe-for-hot work conditions, and 3) the SRF holds a valid authorization. There is no requirement that the Flag

			,
	import c) or transboundary movement is in accordance with other criteria to be decided by the Parties and consistent with the Convention objectives. Art. 4.10: export state cannot transfer its obligation to ensure the ESM of waste.	responsible for ensuring completeness and efficiency of the survey. Regulation 18 (Ship Recycling Facility Plan): SRP must be authorized by the board or governing body of the Recycling Company and include systems for monitoring performance of ship recycling, record-keeping, and reporting harm.	State ensure the ESM of waste as required for exporting states under Basel.
		Art. 8 (Inspection of Ships)	
		Regulation 15.3 (Controls on Ship Recycling Facilities): Parties must establish mechanisms to ensure compliance by the SRF, including inspection, monitoring, enforcement, and auditing.	
		Regulation 16 (Authorizations of Ship Recycling Facilities)	
Designation of competent authorities / focal points	Art. 5 (designation of competent authorities and focal point)	Article 2.3: definition of "competent authority" Regulation 15.4: Parties must designate one or more Competent authorities and a single contact point for matters relating to SRFs.	Under HKC, the competent authority designated by the Party is responsible for receiving notification of the proposed transboundary movement of hazardous waste from the SRF under its jurisdiction, approving the draft SRP before recycling can commence, and notifying the Administration upon completion of recycling.
			While the notification procedures differ between Basel and HKC, the designation of competent authorities is essentially equivalent.
Standards (mandatory / voluntary)	Art. 2.8 (Definitions): ESM of wastes Art. 4.2 (b)(c)(d)(e)(g)(h): Parties have a general obligation to ensure ESM of waste, including to prohibit	Regulation 19 (Prevention of adverse effects to human health and the environment): SRFs must establish and utilize procedures to prevent adverse effects to human health and the	HKC leaves much of the details of the standards to voluntary guidelines. This disregards Parties' insistence on mandatory requirements to ensure ESM. The Basel Technical Guidelines on the dismantling of ships provides certain measures that

the transboundary movement of wastes unless Parties are convinced of ESM.

Art. 4.8: each Party is required to ensure the ESM of waste in the State of import or elsewhere, taking into account Technical Guidelines on the ESM of waste.

environment, taking into account IMO Guidelines.

Regulation 20 (Safe and environmentally sound management of Hazardous Wastes): SRFs must ensure safe and environmentally sound removal and management of all Hazardous Materials contained in a ship. SRFs must ensure all Hazardous Materials detailed in the Inventory are identified, labeled, packaged and removed to the maximum extent possible prior to cutting, taking into account IMO Guidelines.

Regulation 1.6: Definition of "safe-for-entry"

Regulation 1.7: Definition of "safe-for-hot work"

Regulation 3 (Relationship with other standards, recommendations and guidance)

Voluntary Guidelines:

- 1. Guidelines for the development of the Inventory of Hazardous Materials, adopted by resolution MEPC.179(59);
- 2. Guidelines for safe and environmentally sound ship recycling;
- 3. Guidelines for the development of the ship recycling plan;
- 4. Guidelines for the authorization of ship recycling facilities;

"must" be followed to achieve ESM. In particular, the Guidelines mandate pre-cleaning and containment and does not accept 'beaching' (impermeable floors are prescribed for full ship containment).

HKC regulations should mandate these measures in order to ensure ESM by the SRF.

Ability to prohibit import / export	Art. 4.1(b): Parties must not export to a Party that has prohibited imports and given notification. Art. 4.2(e): Parties must take measures to prohibit export to a Party that has prohibited imports by legislation. Art. 4.2(g): Parties must take measures to prevent import if ESM is questionable.	5. Guidelines for survey and certification; 6. Guidelines for inspection of ships. Art. 9.3 (Detection of Violations): Parties can exclude the ship from its ports if detected to be in violation of the Convention. Regulation 9.4 (Ship Recycling Plan): Competent Authority of the Recycling State must explicitly or tacitly approve of the SRP.	Basel explicitly allows Parties to prohibit the export or import of hazardous wastes or other wastes for disposal. Under HKC, the Administration can prohibit recycling by denying the issuance of an International Certificate for Ready Recycling, but it does not have a recognized ability to prohibit export. The Recycling State can prohibit recycling by denying approval of the draft SRP, but it does not have a recognized ability to prohibit import.
Traceability and transparency of hazardous materials until final treatment / ultimate disposal	Art. 4.7(c): Parties must require all movements of hazardous waste to be accompanied by a movement document from the commencement of movement to final disposal. Annex VB (form of Movement Document) Art. 6 (Transboundary Movement between Parties): PIC procedure	Regulation 5 (Inventory of Hazardous Materials) Appendix 2 (Minimum List of Items for the Inventory of Hazardous Materials) Regulation 11 (Issuance and endorsement of certificates) Regulation 24 (Initial notification and reporting requirements): SRFs must notify the Competent Authority in writing of the intent to recycle, and include the Inventory of Hazardous Materials. SRF must report to the Competent Authority the planned start of recycling and include the International Ready for Recycling Certificate. Regulation 25 (Reporting upon completion)	The processes for tracing hazardous materials under Basel and HKC differ in that the SRF need not sign the International Ready for Recycling Certificate upon import of the waste. However, in that the SRF's issuance of the Report of Planned Start of Ship Recycling is premised on the Recycling State's approval of the SRF's SRP, they may be viewed as functionally equivalent. Unlike Basel, hazardous materials that are transferred out of the SRF for treatment and disposal are no longer transparent nor traceable. This is inconsistent with Basel.
Prior notification	Art. 4.1(c): State of Import must	Regulation 24: initial notification and	HKC allows Parties to choose either explicit or tacit approval of the SRP, in contradiction to the PIC

and prior consent	consent in writing Art. 6: State of export, or the generator or exporter, must notify in writing the State of import and each State of transit. Shipment may only commence upon receipt of written consent.	reporting requirements. 24.1: shipowner must notify the Administration in writing of its intention to recycle. 24.2: SRF must notify the Competent Authority of the intent to recycle and other details listed in 24.2 (details on the ship, shipowner, company, and draft recycling plan)	procedure of Basel, which requires explicit approval for each waste shipment. Basel not only requires the explicit consent of the recycling state but also all transit states. HKC fails to require notification to and consent by the transit state.
		Regulation 9.4 (Ship Recycling Plan): Competent Authority of the Recycling State must explicitly or tacitly approve of the SRP.	
		Regulation 24.3: SRF must report to Competent authority when ship acquires International Ready for Recycling Certificate, in order to commence recycling. Report must include the International Ready for Recycling Certificate.	
Certification of disposal / statement of completion of ship recycling	Art. 6.9 : disposer must notify exporter and competent authority of receipt and disposal of waste.	Regulation 25 (Reporting upon completion): the shipowner must issue a Statement of Completion to the Competent Authority, which then notifies the Flag state.	HKC Statement of Completion goes beyond the Basel notification requirements by requiring the SRF to report on incidents and accidents damaging human health and/or the environment. However, such reports do not address activities downstream of the SRF
[Other control mechanisms] Minimization of transboundary movement	Art. 4.2(b): Parties should ensure the availability of disposal facilities within their own jurisdiction, where possible. Art. 4.9: Parties should limit transboundary shipment of waste to circumstances where the state of export does not have the capacity to	No reference.	Basel seeks to control the trasboundary movement of waste not only by regulating but also by limiting its movement. Basel adopts the national self-sufficiency principle, which requires States to dispose of waste in the State where it was generated, as far as is compatible with ESM. HKC utterly disregards this concept.

Enforcement Illegal shipments, violations and sanctioning, including criminalization, of	recycle in an ESM manner or where the recycling State is in need of such raw materials. Art. 4.3: illegal traffic is criminal Art. 4.4: parties must take measures to implement and enforce the provisions, including by preventing and punishing unlawful conduct.	Art. 9: Detection of Violations Art. 10: Violations, shall be prohibited by national laws of Flag State (ship) or Recycling State (Facility), and sanctions should be severe enough to discourage	Basel criminalizes the illegal traffic of waste. HKC provides much more discretion to the flag state and ship recycling state to establish sanctions to address violations of requirements pertaining to ships and SRFs, respectively. Parties are free to
illegal traffic Dispute Settlement	Art. 9: Illegal Traffic Art. 20: settlement through negotiation then ICJ/Arbitration.	violations. Art. 14 (Dispute Settlement)	adopt measures that are weaker than that of Basel. HKC and Basel provisions are essentially equivalent.
Duty to re-import	Art. 8: duty to re-import if movement cannot be completed in accordance with contract. Art. 9.2: if deemed illegal traffic, duty to re-import, unless impracticable.	None	HKC does not address this duty, even in the instance of Violations (Art. 10). In light of the inability of Recycling States to deny the import of ships, the absence of a duty to reimport creates a major deficiency and risks the possibility of ships being abandoned on the beaches of Recycling States
Exchange of Information by Parties / cooperation and coordination			
Access to and dissemination of information, e.g. administrative, enforcement, emergency matters	Art. 4.2(f): inform concerned States with information about a proposed transboundary movement. Art. 4.2(h): cooperate in disseminating information in order to improve ESM and prevent illegal traffic. Art. 13: Transmission of information	Art. 12: Communication of information to Parties via the IMO Art. 9 (Detection of Violations). Art. 10 (Violations)	Obligations under the HKC and Basel Convention are similar, although the HKC gives the IMO greater discretion in determining what information to disseminate. Each Party must report to the IMO, and the IMO is obligated to disseminate "as appropriate."
Reporting	Art. 13 (Transmission of Information)	Art. 7 (Exchange of Information)	Reporting obligations under the Basel Convention are more comprehensive. Only Basel requires

	obligations	13(2), 13(3)	Art. 12: Communication of information to Parties via the IMO	Parties to report on the quantity and characteristics of the waste exported or imported, the disposal method used, efforts to minimize the transboundary movement of waste, information on the measures adopted to implement the Convention, information on measures undertaken for development of technologies for the reduction and/or elimination of the production of waste, and information on available qualified statistics compiled by them on the effects on human health and environment of the generation, transportation, and disposal of wastes.
	Transmission of information regarding import / export restrictions	Art. 4.1(a) Art. 13(2)	Art. 12.1: report on a list of authorized facilities.	The Basel Convention permits States to prohibit import or export of waste, and Parties must inform the Secretariat of such restrictions. The HKC does not have any equivalent reporting provisions.
	Among Parties to advance ESM, through information exchange and technical assistance and capacity building on best practices, technical guidelines, monitoring and public awareness.	Art. 10: International Cooperation	Art. 13: Technical assistance and cooperation "in respect of the safe and environmentally sound recycling of ships."	Both the Basel Convention and the HKC require international cooperation to enhance the ESM of waste. However, HKC lacks the establishment of regional or sub-regional centers for training and technology transfer and an accompanying voluntary funding mechanism, similar to those available under Basel.
EXTRA	Consideration of the Interests of Developing Countries	Art. 11 Art. 14: Funding provided to developing States to assist in compliance with the Convention. Art. 4.2(e), 4.10: transboundary shipment is prohibited unless the exporting state can guarantee the ESM of waste by the recycling State.		HKC assigns the obligation to ensure ESM largely on the recycling state, but does not contain a provision for a ship-recycling fund or other financing mechanism to assist SRFs in complying with the Convention's requirements. In that most SRFs are located in developing countries, this is incompatible with the Basel Art. 11 requirement of considering the interests of developing countries. HKC should also consider the lack of capacity of

	many developing countries and require stronger
	stipulations on pre-cleaning.

BIBLIOGRAPHY

TREATIES

- Vienna Convention on the Law of Treaties, May. 23, 1969, 1155 U.N.T.S. 331.
- United Nations Convention on the Law of the Sea [UNCLOS], Dec. 10, 1982, 1833 U.N.T.S. 3, 397.
- Agreement on Cooperation for the Protection and Improvement of the Environment in the Border Area, Aug. 14, 1983, US-Mex., TIAS No. 10, 827, 22 ILM 1025-26
- Agreement Between the Government of Canada and the Government of the United States of America Concerning the Transboundary Movement of Hazardous Waste and Other Waste, Oct. 28, 1986, available at http://www.basel.int/article11/canada-us-e.doc.
- Basel Convention on the Control of Transboundary Movement of Hazardous Wastes and Their Disposal, Mar. 22, 1989, 1673 U.N.T.S. 57
- Bamako Convention on the Ban of Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa, Jan. 30, 1990, 30 I.L.M. 773.
- Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, May 19, 2009.

DECISIONS OF THE BASEL COP

- Dec. II/10 of the Conference of the Parties to the Basel Convention, U.N. doc. UNEP/CHW.2/30 (March 1994).
- Dec. V/28 on the Dismantling of ships, U.N. Doc. UNEP/CHW.5/29 (December 1999).
- Basel Convention Technical Guidelines for the Environmentally Sound Management of the Full and Partial Dismantling of Ships, Appendix B, U.N. Doc. UNEP/CHW.6/23 (August 2002).
- Report of the Conference of the Parties to the Basel Convention on the control of transboundary movements of hazardous wastes and their disposal, U.N. doc. UNEP/CHW.6/40 (February 2003).
- Dec. VI/18, Draft guidance elements, for bilateral, multilateral or regional agreements or arrangements, U.N. doc. UNEP/CHW.6/40 (February 2003).
- Dec. VI/24 on the Technical Guidelines for the Environmentally Sound Management of the Full and Partial Dismantling of Ships, U.N. Doc. UNEP/CHW.6/40 (February 2003).
- Dec. VII/26 on Environmentally Sound Management of Ship Dismantling, U.N. Doc. UNEP/CHW.7/33 (October 2004).
- Dec. VIII/11 on Environmentally Sound Management of Ship Dismantling, U.N. Doc. UNEP/CHW.8/16 (December 2006).
- Dec. IX/30 on Dismantling of Ships, U.N. Doc. UNEP/CHW.9/39 (June 2008).
- Environmentally sound management of ship dismantling and the Joint Working Group of the

- *U.N.Doc. UNEP/CHW.9/34*, International Labour Organization, the International Maritime Organization and the Basel Convention on Ship Scrapping (April 2008).
- Environmentally sound management of ship dismantling: compilation of comments received pursuant to decisions VIII/11 and OEWG-VI/7, U.N. Doc. UNEP/CHW.9/INF/29 (April 2008).

DOCUMENTS OF THE OPEN-ENDED WORKING GROUP OF THE BASEL CONVENTION

- Dec. OEWG-II/3, Guidance elements for bilateral, multilateral or regional agreements or arrangements for the implementation of the Basel Protocol on Liability and Compensation, U.N.Doc. UNEP/CHW/OEWG/2/12 (December 2003).
- Guidance elements for bilateral, multilateral or regional agreements or arrangements, U.N. Doc. UNEP/CHW/OEWG/3/24 (March 2004).
- Dec. OEWG-VII/12, Environmentally sound dismantling of ships, U.N. Doc. UNEP/CHW/OEWG/7/21 (14 May 2010).
- Environmentally sound management of ship dismantling: comments received pursuant to decision IX/30, U.N. Doc. UNEP/CHW/OEWG/7/INF/15 (March 2010).

DOCUMENTS OF THE AD HOC WORKING GROUP OF THE BASEL CONVENTION

- Report of the Organizational Meeting of the Ad Hoc Working Group of Legal and Technical Experts with a Mandate to Prepare a Global Convention on the Control of the Transboundary Movements of Hazardous Wastes, U.N. Doc. UNEP/WG.180/3 (October 1987).
- Report of the Working Group, U.N. Doc. UNEP/WG.182/3 (February 1988).
- Report of the Ad Hoc Working Group on the Work of its Second Session, U.N. Doc. UNEP/WG.186/3 (June 1988).
- Report of the Ad Hoc Working Group on the Work of its Third Session, U.N. Doc. UNEP/WG.189/3 (November 1988).
- Final Report of the Ad Hoc Working Group, U.N. Doc. UNEP/IG.80/4 (March 1989).

DOCUMENTS OF THE OPEN-ENDED AD HOC COMMITTEE FOR THE IMPLEMENTATION OF THE BASEL CONVENTION

- Report of the First Meeting of the Open-Ended Ad Hoc Committee for the Implementation of the Basel Convention, U.N. doc. UNEP/CHW/C.1/1/9 (October 1993).
- Report of the Second Meeting of the Open-Ended Ad Hoc Committee for the Implementation of the Basel Convention, U.N. doc. UNEP/CHW/C.1/2/14 (December 1994).
- Report of the Fourth Meeting of the Open-Ended Ad Hoc Committee for the Implementation of the Basel Convention, U.N. doc. UNEP/CHW/C.1/4/1 (December 1994).
- Report of the Third Meeting of the Open-Ended Ad Hoc Committee for the Implementation of the Basel Convention, U.N. doc. UNEP/CHW/C.1/3/23 (July 1997).

DOCUMENTS OF THE LEGAL WORKING GROUP OF THE BASEL CONVENTION

 Legal aspects of the full and partial dismantling of ships, U.N. Doc. UNEP/CHW/LWG/5/4 (May 2002)

DOCUMENTS OF THE TECHNICAL WORKING GROUP AND LEGAL WORKING GROUP OF THE BASEL CONVENTION

 Draft Guidance Elements for Bilateral, Multilateral or Regional Agreements or Arrangements, prepared by the Technical Working Group and Legal Working Group of the Basel Convention at its Second Joint Meeting, U.N. doc. UNEP/CHW/TWG/LWG/2/2 (23 April 2002).

IMO DOCUMENTS

- Int'l Maritime Org. [IMO], Report of the Marine Environment Protection Committee on its fifty-third session, MECP 53/24 (18) (July 25, 2005).
- Int'l Maritime Org. [IMO], *New legally binding instrument on ship recycling*, Assemb. Res. A.981(24), (Dec. 1, 2005).
- Int'l Maritime Org. [IMO], Consideration of the draft International Convention for the sea and environmentally sound recycling of ships Non-Party recycling facilities, submitted by Australia, SR/CONF/9 (Feb. 6, 2009).
- Int'l Maritime Org. [IMO], Consideration of the draft International Convention for the sea and environmentally sound recycling of ships Proposal for clarifying the requirements in regulation 10 of the draft Convention, submitted by Norway, SR/CONF/11 (Feb. 6, 2009).
- Int'l Maritime Org. [IMO], Consideration of the draft International Convention for the sea and environmentally sound recycling of ships Proposed amendments to the draft International Convention for the safe and environmentally sound re cycling of ships, submitted by Bangladesh, SR/CONF/12 (Feb. 6, 2009).
- Int'l Maritime Org. [IMO], Consideration of the draft International Convention for the sea and environmentally sound recycling of ships Ensuring sustainable green and safe ship dismantling concerning beaching and the establishment of a mandatory fund, submitted by Greenpeace International and FOEI, SR/CONF/14 (2) (Feb. 9, 2009).
- Int'l Maritime Org. [IMO], Consideration of the draft International Convention for the sea and environmentally sound recycling of ships - Draft conference resolution on the best practices for fulfilling requirements of the Convention, submitted by Denmark, SR/CONF/16 (March 6, 2009).
- Int'l Maritime Org. [IMO], Consideration of the draft International Convention for the sea and environmentally sound recycling of ships - Preparation of oil tanker for ship re cycling, submitted by India, SR/CONF/26 (April 2, 2009).
- Int'l Maritime Org. [IMO], Consideration of the draft International Convention for the sea and environmentally sound recycling of ships - Proposed amendment to the draft Convention: Improvement in the communication of information (articles 9 and 12) and clarification on the ship recycling plan approval process (regulation 9), submitted by France, SR/CONF/28 (April 6, 2009).

- Int'l Maritime Org. [IMO], Consideration of the draft International Convention for the sea and environmentally sound recycling of ships Proposal to amend article 12.2 and regulation 15.4 single contact point, submitted by Malta, SR/CONF/31 (April 20, 2009).
- Int'l Maritime Org. [IMO], Consideration of the draft International Convention for the sea and environmentally sound recycling of ships Proposal to amend Article 16 and Regulation 9, submitted by United Kingdom, SR/CONF/35 (May 1, 2009).
- Int'l Maritime Org. [IMO], Consideration of the draft International Convention for the sea and environmentally sound recycling of ships - Environmental comparison of the beaching method with other methods of recycling of ships, submitted by India, SR/CONF/36 (May 1, 2009).
- Int'l Maritime Org. [IMO], Consideration of the draft International Convention for the sea and environmentally sound recycling of ships Proposed amendment to the draft International Convention for the safe and environmentally sound recycling of ships, submitted by Bangladesh, SR/CONF/37 (May 4, 2009).
- Int'l Maritime Org. [IMO], Consideration of the draft International Convention for the sea and environmentally sound recycling of ships - Proposed amendments to paragraph 3 of article 3, submitted by Korea, SR/CONF/40 (May 7, 2009).

EU DOCUMENTS

- Regulation No. 259/93 of 1 February 1993 on the supervision and control of shipments of waste within, into and out of the European Community.
- Council Regulation (EC) No 120/97 of 20 January 1997 amending Regulation (EC) No 259/93 on the supervision and control of shipments of waste within, into and out of the European Community, Official Journal L 022, 24/01/1997.
- European Directive 2002/95/EC.
- European Directive 2002/96/EC.
- European Directive 2006/12/EC.
- European Directive 2008/98/EC.
- Regulation No. 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste, Official Journal L 190, 12/7/2006.
- Regulation No. 1418/2007 of 29 November 2007 concerning the export for recovery of certain waste listed in Annex III or IIIA to Regulation (EC) No 1013/2006 of the European Parliament and of the Council to certain countries to which the OECD Decision on the control of transboundary movements of wastes does not apply (Text with EEA relevance).
- Resolution on an EU Strategy for Better Ship Dismantling, EUR. PARL. DOC. P6 TA(2009)0195.
- Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee of the regions – an EU strategy for better ship dismantling, COM(2008)767 final (Nov. 19, 2008).

 Basel Convention, Summary of Treaty, available at http://ec.europa.eu/world/agreements/prepareCreateTreatiesWorkspace/treatiesGeneralD ata.do?step=0&redirect=true&treatyId=528.

OECD DECISIONS

- Decision of the Council Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations, OECD Dec. C(92)39/FINAL (Mar. 30, 1992).
- Decision concerning the Control of Transboundary Movements of Wastes Destined for Recovery Operations, OECD Dec. C(2001)107/FINAL adopted on 14 June 2001 [C/M (2001) 13] and on 28 February 2002 as amended by [C/M (2002) 4].

CASE LAW

- Colombian-Peruvian asylum case, Judgment of November 20th 1950: I.C.J. Reports 1950.
- Case concerning rights of nationals of the United States of America in Morocco, Judgment of August 27th, 1952: I.C.J. Reports 1952.
- Arbitral Award of 31 July 1989, Guinea-Bissau v. Senegal [1991] ICJ Rep. 53.
- Conseil d'Etat, contentieux n. 288801, 6ème et 1ère sous-sections rèunies, Lecture du 15 Fevrier 2006.
- Council of State of The Hague, Case number: 200105168/2, June 19, 2002.
- Council of State of The Hague, Case number: 200606331/1, February 21, 2007.

REPORTS OF IGOS

- Draft Guidance Elements for Bilateral, Multilateral or Regional Agreements or Arrangements,
 U.N. Doc. UNEP/CHW.6/15, Annex (August 2002).
- Report of the joint working group, Joint ILO/IMO/BC working group on ship scrapping, ILO/IMO/BC WG 2/11 (December 2005).
- UNEP, Marine Litter: A Global Challenge (2009).
- Report of the Special Rapporteur on the adverse effects of the movement and dumping of toxic and dangerous products and wastes on the enjoyment of human rights, U.N. Doc. A/HRC/12/26(15 July 2009).
- Environmentally sound management of ship dismantling: comments received pursuant to decision IX/30, Annex, U.N. Doc. UNEP/CHW/OEWG/7/INF/15 (March 2010).
- Basel Secretariat, Ship Recycling Technology & Knowledge Transfer Workshop, The Basel Convention and its application to ship recycling (14 – 16 July 2010, Izmir, Turkey).
- Press Release, at www.basel.int/press/press-releases/14May2010-e.doc (2010).
- Article 11 agreements under the Convention, at http://www.basel.int/article11/index.html.
- U.S. EPA, International Trade in Hazardous Waste: An Overview (1998).

■ The World Bank, *The Ship Breaking and Recycling Industry in Bangladesh and Pakistan* (Report No. 58275-SAS) (December 2010).

BOOKS AND LAW REVIEWS

- Anderson, Aage Bjorn, International Labour Organization, Worker Safety in Ship-Breaking Industry (2001).
- Anderson, H. Edwin, The Nationality of Ships and Flags of Convenience: Economics, Politics, and Alternatives, 21 Tul. Mar. L. J. 139 (1996).
- Bhattacharjee, Saurabh, From Basel to Hong Kong: International Environmental Regulation of Ship-Recycling Takes One Step Forward and Two Steps Back, 1(2) TRADE L. & DEV. 193, 203 (2009).
- Cohen, Matt, U.S. Shipbreaking Exports: Balancing Safe Disposal with Economic Realities, 28 Environs: Envtl, L. & Pol'y J. 237 (2004-2005).
- Choksi, Sejal, The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal: 1999 Protocol on Liability and Compensation, 28 Ecology L.Q. 509, 516 (2001).
- Gwam, Cyril Uchenna, Travaux Preparatoires of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, 18 J. NAT. RESOURCES & ENVTL. L. 1, 66 (2003).
- Hunter, David, International Environmental Law and Policy (2011).
- Puthucherril, Tony George, From shipbreaking to sustainable ship recycling Evolution of a legal regime, Legal ASPECTS OF SUSTAINABLE DEV. (Martinus Nijhoff Publishers, 2010).
- Waugh, Theodore, Where do We Go From Here: Legal Controls and Future Strategies for Addressing the Transportation of Hazardous Wastes Across International Borders, 11 Fordham Envtl. L. J. 477, 509 (1999).

REPORTS AND STATEMENTS BY NGOS

- Basel Action Network and Greenpeace International, Shipbreaking and the legal obligations under the Basel Convention, submitted to the Legal Working Group of the Basel Convention, U.N. Doc. UNEP/CHW/LWG/5/4/Add.1 (21 May 2002).
- International Federation for Human Rights (FIDH), Where do the 'floating dustbins' end up? Labour Rights in Shipbreaking Yards in South Asia: The cases of Chittagong (Bangladesh) and Alang (India) (2002).
- International Federation for Human Rights (FIDH), "New ship recycling Convention legalizes scrapping toxic ships on beaches" (May 15, 2009), available <u>athether./www.fidh.org/Newship-recycling-convention-legalizes-scrapping</u>.
- Basel Action Network and Greenpeace International, Shipbreaking and the legal obligations under the Basel Convention (2002).
- Greenpeace-FIDH (International Federation for Human Rights), End of Life Ships The

- Human Cost of Breaking Ships (2005).
- NGO Platform on Shipbreaking, OFF THE BEACH! Safe and green dismantling (2009).
- Bangladesh Environmental Lawyers Association, List of Selected Public Interest Litigation of BELA, http://www.belabangla.org/activities.htm#Public%20Interest%20Litigation%20%28PIL%29.
- Rizwana Hasan, Final Speech of the NGO Platform on Shipbreaking before the International Conference on the Safe and Environmentally Sound Recycling of Ships (May 15, 2009), available at http://www.ban.org/Library/RizwanaSpeechIMO.html.

OTHER SOURCES

- The Daily Star, "Ship-breaking ordered shut," March 18, 2009, available at http://www.thedailystar.net/newDesign/news-details.php?nid=80213
- European Maritime Safety Agency, Improving Port State Control (2007), available at http://www.emsa.europa.eu/Docs/psc/leaflet-psc.pdf.
- Hollis, Duncan, "Will the new ship recycling Convention sink or swim?" (May 27, 2009), available at http://opiniojuris.org/2009/05/27/will-the-new-ship-recycling-convention-sinkor-swim.
- IHS Fairplay, 2009 Lloyd's Register of Ships.
- International Transport Workers' Federation, FOC countries (2011).
- Maersk wants to end 'Beachings,' MAERSK (July 1, 2010, 2:46PM), http://www.maersk.com/AboutMaersk/News/Pages/20100701-145601.aspx
- Mikelis, Nikos, The Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, (PPT) presented at the UN Conference on Trade and Development: Multi-year Expert Meeting on Transport and Trade Facilitation (10 December 2010), available at http://www.unctad.org/Templates/Page.asp?intItemID=5754&lang=1&print=1.
- Orellana, Marcos A., "Shipbreaking and Le Clemenceau Row," ASIL Insights, Vol. 10, Iss. 4 (Feb. 24, 2006), available at http://www.asil.org/insights060224.cfm.
- US EPA website on International Waste Agreements, at http://www.epa.gov/epawaste/hazard/international/agree.htm.