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BOOK REVIEW

Raj Bhala *et al.*, *Scrutinizing RTAs: A Comparative Review of David Gantz, Regional Trade Agreements: Law, Policy and Practice (Durham: Carolina Academic Press, 2009)*

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## FROM BASEL TO HONG KONG: INTERNATIONAL ENVIRONMENTAL REGULATION OF SHIP-RECYCLING TAKES ONE STEP FORWARD AND TWO STEPS BACK

**SAURABH BHATTACHARJEE\***

*The increasing dominance of developing countries like India, China, Bangladesh and Pakistan in the global ship-breaking industry illustrates the paradoxical nature of economic globalization. While such operations provide access to employment and cheap material resources, they also pose serious long-term and irreversible harm to local environment and human health. In addition, the transnational character of the ship-breaking trade has militated against effective domestic oversight of its environmental hazards and has turned international regulation into an imperative.*

*This article reviews the international attempts to mitigate the environmental concerns underlying ship-breaking. The Basel Convention on the Transboundary Movement of Hazardous Wastes 1989 was one such attempt which however suffered from certain gaps in its implementation. These lacunae in the Basel regime have led to the adoption of the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships in May 2009. The paper compares the key features of this new Convention with the Basel regime and infers that while the former has made few significant breakthroughs in oversight of trade in end-of-life ships, not only does it ignore certain basic norms of international environmental law including the 'polluter pays principle' but it also contains the same gaping holes that were discovered during the application of Basel Convention to ship-breaking.*

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## I. INTRODUCTION

Ship-breaking exemplifies both the potentialities and the dangers of an increasingly globalised economy.

- International Federation for Human Rights (FIDH)<sup>1</sup>

This IMO Convention in the eyes of civil society stakeholders now must be deemed a failure.

- Syeda Rizwana Hasan, Recipient, Goldman Environmental Prize 2009<sup>2</sup>

The Convention is a tremendous step forward in terms of health and safety for workers in the industry and for protection of the environment from end-of-life ships...It will set standards where none previously existed.

- Lee Adamson, Spokesperson, International Maritime Organization<sup>3</sup>

The adoption of the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009<sup>4</sup> earlier in May this year has been hailed by various States and international agencies for “striking a right balance between the responsibilities and obligations of shipowners, ship recycling facilities, flag and Recycling States.”<sup>5</sup> It has been suggested that this Convention provides “a platform and an avenue for better regulation” of ship-recycling.<sup>6</sup>

Yet, the Hong Kong Convention has attracted strident criticisms from environmental activists for its departure from basic principles of international

<sup>1</sup> 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), available at: <http://www.fidh.org/IMG/pdf/bd1112a.pdf> (last visited Aug. 14, 2009) (hereinafter FIDH-*Floating Dustbins*).

<sup>2</sup> 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, Hong Kong, available at: [http://www.shipbreakingplatform.com/dmdocuments/submissions/IMOSpeechRIZWANA\\_HASAN.pdf](http://www.shipbreakingplatform.com/dmdocuments/submissions/IMOSpeechRIZWANA_HASAN.pdf) (last visited Nov. 6, 2009) (hereinafter Hasan).

<sup>3</sup> Dean Irvine, *Making the Ship Recycling Industry Clean Up its Act*, May 14 2009, available at: [http://www.ban.org/ban\\_news/2009/090514\\_clean\\_up\\_its\\_act.html](http://www.ban.org/ban_news/2009/090514_clean_up_its_act.html) (last visited Nov. 5, 2009).

<sup>4</sup> The Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, May 19, 2009, SR/CONF/45 (hereinafter Hong Kong Convention) (Yet to come into force). It shall come into force when ratified by at least 15 States with a combined tonnage of not less than 40% of world fleet and a combined ship recycling capacity of not less than 3% of the gross tonnage of their combined merchant fleet.

<sup>5</sup> *New international convention adopted to ensure safe and environmentally sound ship recycling*, International Conference on the Safe and Environmentally Sound Recycling of Ships, Hong Kong, May 11-15, 2009 available at: [http://www.imo.org/Newsroom/mainframe.asp?topic\\_id=1773&doc\\_id=11368](http://www.imo.org/Newsroom/mainframe.asp?topic_id=1773&doc_id=11368) (last visited Feb. 9, 2010).

<sup>6</sup> *Id.*

environmental law and hazardous waste trade law including the Basel Convention on the Control of Transboundary Movement of Hazardous Wastes and Their Disposal 1989.<sup>7,8</sup> Rizwana Hasan, of the Bangladesh Environmental Lawyers Association (BELA) and the winner of the Goldman Environmental Prize 2009,<sup>9</sup> denounced the Convention as a “useless piece of paper”.<sup>10</sup> The Global NGO Platform on Shipbreaking, a global coalition of non-governmental organisations campaigning against the human rights and environmental abuses associated with ship-breaking, also joined in the criticism and alleged that this Convention legitimized fatal techniques of ship-scraping<sup>11</sup> and would “obstruct the transition to safer and greener forms of ship recycling.”<sup>12</sup>

How far does the Hong Kong Convention address the environmental and occupational safety concerns inherent in ship-recycling? Is the criticism that this Convention is a mere smokescreen that departs from basic standards of international environmental law while according a veneer of legitimacy to toxic practices, well-founded and compelling? Or does the Hong Kong Convention indeed provide for an effective mechanism for ensuring environmentally sound recycling of end-of-life ships? The author seeks to address these questions through a comparison of the provisions of the Hong Kong Convention with the basic elements of the Basel Convention and inquire whether the former establishes an equivalent level of control or not.

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<sup>7</sup> Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, 1673 U.N.T.S. 126 (hereinafter Basel Convention).

<sup>8</sup> *Statement of Concern on the New IMO Convention on Shipbreaking*, (Joint Statement by 107 NGOs from across the World), April 27, 2009, available at: [http://www.shipbreakingplatform.com/dmdocuments/submissions/Statement\\_of\\_Concern\\_IMO\\_Convention.pdf](http://www.shipbreakingplatform.com/dmdocuments/submissions/Statement_of_Concern_IMO_Convention.pdf) (last visited Aug. 18, 2009).

<sup>9</sup> Global NGO Platform on Shipbreaking, *Legal Shipwreck: IMO Convention Legalizes Toxic Ship Dumping*, May 2009, available at: [http://www.shipbreakingplatform.com/dmdocuments/submissions/BP\\_May\\_2009.pdf](http://www.shipbreakingplatform.com/dmdocuments/submissions/BP_May_2009.pdf) (last visited Nov. 8, 2009). For a criticism of one of the earlier drafts, see Global NGO Platform on Shipbreaking, *Critique of Draft IMO “International Convention for Safe and Environmentally Sound Recycling of Ships”* (Prepared by the Basel Action Network), (March 15, 2006), available at: [http://www.ban.org/Library/IMO\\_Draft\\_Convention\\_CritiqueFINAL.pdf](http://www.ban.org/Library/IMO_Draft_Convention_CritiqueFINAL.pdf) (last visited Aug. 18, 2009) (hereinafter Global NGO Platform on Shipbreaking).

<sup>10</sup> See Hasan, *supra* note 2.

<sup>11</sup> See Global NGO Platform on Shipbreaking, *supra* note 9.

<sup>12</sup> International Federation for Human Rights (FIDH), *Economic, Social and Cultural Rights : New “ship recycling” convention legalizes scrapping toxic ships on beaches*, May 15 2009, available at: <http://www.fidh.org/New-ship-recycling-convention> (last visited Nov. 4, 2009).

Such a comparison will then be understood keeping in mind the peculiar backdrop of the global ship-breaking economy that on the one hand, exacerbates the environmental perils of recycling and on the other, renders it a sustainable necessity. The article further explains how the transnational nature of the industry necessitates regulation at the international level.

From this perspective, the history of regulatory regimes used to control the trade of end-of-life ships for recycling and the debate on the applicability of the Basel Convention to such trade will be reviewed. The author adopts the position that the Basel Convention does embrace export of end-of-life ships for recycling within its regulatory fold. At the same time, the vital gaps that have emerged in the practical application of the Convention to this industry have been acknowledged. In fact, the existence of these gaps was a key consideration behind International Maritime Organization's<sup>13</sup> endeavour to establish the Hong Kong Convention which aimed specifically at environmentally sound ship-recycling.<sup>14</sup>

However, while the Hong Kong Convention does contain certain radical breakthroughs, it also regrettably fails to meet one of its key objectives of plugging the regulatory gaps evident in the Basel Convention regime, thus defeating its very *raison d'être*. Finally, it is regrettably concluded that the new Convention is also conspicuously ambivalent in its adherence to the basic principles of international environmental law, a lacunae that may seriously undermine its potential as an effective source of regulation.

## II. SHIP-BREAKING AND THE ABSENCE OF ALTERNATIVES— A DILEMMA

Ship-breaking commonly refers to the process in which end-of-life ships are dismantled so that their steel hulls and other components can be salvaged and recycled back into the market.<sup>15</sup> On an average, over 700 ships are recycled every year<sup>16</sup> and it has increasingly become a major transnational industry. The prevailing

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<sup>13</sup> Hereinafter IMO.

<sup>14</sup> In pursuance of the Resolution No. A.980 (24) by its Assembly, the IMO finalized a draft that was adopted at the recent Hong Kong International Conference on the Safe and Environmentally Sound Recycling of Ships in 2009. Resolution No. A.980 (24), Amendments to the IMO Guidelines on Ship recycling (Resolution A.962(230). (Adopted on 1 December 2005), A24/Res. 980, available at: [http://www.imo.org/includes/blastDataOnly.asp/data\\_id%3D16305/980.pdf](http://www.imo.org/includes/blastDataOnly.asp/data_id%3D16305/980.pdf) (last visited Aug. 19, 2009).

<sup>15</sup> John F. Sawyer, *Shipbreaking and the North-South Debate: Economic Development or Environmental and Labor Catastrophe?*, 20 PENN ST. INT'L L. REV. 535 (2002) (hereinafter Sawyer).

<sup>16</sup> David Dodds, *Breaking Up Is Hard to Do: Environmental Effects of Shipwrecking and Possible Solutions under India's Environmental Law*, 20 PAC. MCGEORGE GLOBAL BUS. & DEV. L. J. 207, 211 (2007) (hereinafter Dodds).



practice within the maritime industry is to export obsolete vessels to major ship dismantling nations like India, China, Bangladesh, Pakistan and Turkey for scrap.<sup>17</sup> Availability of cheap and surplus labour, rudimentary environmental and labour standards and modest implementation thereof, huge domestic market for scrap steel, and topography suitable for simple beaching operations have lent a decisive competitive edge to the ship-breakers in these developing countries.<sup>18</sup>

The growth of ship-breaking operations in India, Bangladesh, Pakistan and China also illustrate the contradictory impulses of trade and economic globalization and present an acute dilemma for policy-makers. On one end, the ship-recycling industry provides valuable materials like steel to these economies at a relatively cheaper price. Indeed, ship-breaking yards in Alang, India contribute an estimated fifteen percent of the total steel output of the country.<sup>19</sup> In addition, millions of jobs are generated through ship-breaking operations. More than 40, 000 workers are directly employed by the Alang yards<sup>20</sup> and another million workers are dependent for their survival on the secondary industries that have sprung up from ship-breaking in India.<sup>21</sup>

At the same time, ship-dismantling can potentially cause serious long-term and irreversible harm to local environment and human health. Along with economically valuable materials like steel, old electrical items, machineries, furniture and plumbing, ship-breaking also generates a massive quantity of hazardous and toxic

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<sup>17</sup> In fact, India, Pakistan and Bangladesh have accounted for more than eighty percent (in terms of tonnage) of the larger end-of-life ships that were globally dismantled between 2004 and 2008. See Commission of the European Communities, *An EU Strategy for Better Ship Dismantling: Communication from the Commission to the European Parliament, the Council, the European Social and Economic Committee and the Committee of the Regions*, COM (2008) 767 final, (Nov. 2008), available at: [http://ec.europa.eu/environment/waste/ships/pdf/com\\_2008\\_767.pdf](http://ec.europa.eu/environment/waste/ships/pdf/com_2008_767.pdf) (last visited Aug. 13, 2009). See also Basel Convention Secretariat, *Background Note on the Technical Guidelines for the Environmentally Sound Management of the Full and Partial Dismantling of Ships*, UNEP/CHW.6/23, (Aug. 2002), available at: [http://www.basel.int/meetings/cop/cop6/cop6\\_23e.pdf#annex](http://www.basel.int/meetings/cop/cop6/cop6_23e.pdf#annex) (last visited Apr. 16, 2009) (hereinafter Basel Convention Secretariat).

<sup>18</sup> See FIDH-*Floating Dustbins*, *supra* note 1.

<sup>19</sup> See FIDH-*Floating Dustbins*, *supra* note 1. Similarly, Bangladesh which lacks any significant domestic iron output relies heavily on ship-breaking to supply steel to its factories. See Ataur Rahman & AZM Tabarak Ullah, *SHIP BREAKING: A Background Paper Prepared for the ILO's Sectoral Activities Programme*, (1999), available at: <http://www.ilo.org/public/English/protection/safework/sectors/shipbrk/shpbreak.htm> (last visited Aug. 10, 2009).

<sup>20</sup> See Basel Convention Secretariat, *supra* note 17.

<sup>21</sup> William Langewiesche, *The Shipbreakers*, ATLANTIC MONTHLY, (Aug. 2000), available at: <http://www.wesjones.com/shipbreakers.htm> (last visited Aug. 11, 2009).

substances like asbestos,<sup>22</sup> Polychlorinated Biphenyls (PCBs),<sup>23</sup> waste oils, Tributyltin Compounds (TBTs),<sup>24</sup> mercury, arsenic, and cadmium and metal paints.<sup>25</sup>

Not surprisingly, a Greenpeace study of major ship-breaking yards in Asia found that levels of TBTs in the sediments at the Alang shipyard in India were 10 to 100 million times higher than internationally recognized limits.<sup>26</sup> The same study revealed that five out of six soil samples taken from the workplace, living quarters and surrounding public areas, were contaminated with asbestos.<sup>27</sup>

The release of these toxic substances exposes the workers to the risk of serious health hazards including cancer, neurological disorders, reproductive effects such as reduced birth weight and gestational age and is also likely to cause irreversible damage to the local environment.<sup>28</sup> These lethal consequences on environment and human health necessitate very stringent oversight of ship-breaking operations.

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<sup>22</sup> Asbestos is a group of minerals that naturally occur as “long silky fibers.” It was widely used till very recently all over the world in construction and industry because of “its low conductivity rates, thermal insulation characteristics, resistance to abrasion and corrosion, and inflammability.” Ships constructed prior to 1980, it is believed, almost invariably contain asbestos used as “thermal insulator for pipes and bulkheads.” See Matt Cohen, *U.S. Shipbreaking Exports: Balancing Safe Disposal with Economic Realities*, 28-SPG ENVIRONS ENVTL. L. & POLY J. 237, 241 (2005) (hereinafter Cohen) (citing U.S. Environmental Protection Agency, *A Guide for Ship Scrappers, Tips for Regulatory Compliance*, EPA 315-B-00-001, at 3-3 (April 2000) available at: <http://www.epa.gov/oecaerth/resources/publications/civil/federal/shipscrapguide.pdf> (last visited Feb. 11, 2010).

<sup>23</sup> PCBs are man-made mixtures of up to 209 chemicals known as chlorinated hydrocarbons. See Agency for Toxic Substances and Disease Registry, *ToxFAQs for Polychlorinated Biphenyls (PCBs)* (Feb. 2001), available at: <http://atsdr.cdc.gov/tfacts17.html> (last visited Aug. 11, 2009) (hereinafter Toxic & Disease Agency).

<sup>24</sup> TBTs are toxic compounds that prevent the growth of algae and other marine organisms and are widely used in the anti-fouling paint covering the outside hulls of ships. Most ships have TBTs used in the anti-fouling paint covering outside hulls of ships. See Cohen, *supra* note 22.

<sup>25</sup> See Cohen, *supra* note 22.

<sup>26</sup> Judit Kanthak & Nityanand Jayaraman, *Ships for Scrap III, Steel and Toxic Wastes for Asia: Findings of a Greenpeace Study on Workplace and Environmental Contamination in Alang-Sosya Shipbreaking Yards, Gujarat, India*, Greenpeace Report 15 (2001), available at: <http://www.ban.org/Library/ALANG%202000%20final.pdf> (last visited Aug. 14, 2009).

<sup>27</sup> *Id.*

<sup>28</sup> According to the U.S. Environment Protection Agency (EPA), “exposure to asbestos fibers can result in asbestosis (scarring of the lungs leading to disability or death), and various types of cancer including mesothelioma, lung cancer, and various cancers of the stomach, colon, and rectum.” See Cohen, *supra* note 22.

The dilemma is further accentuated by the absence of economically viable and environmentally safe alternatives to recycling of ships.<sup>29</sup> As most ships have a limited life span of around 20-30 years, they are decommissioned at the end of their life-cycle because of safety reasons.<sup>30</sup> According to the International Labour Organization (ILO), around 1900 ships must be decommissioned every year to maintain the current average age of the world cargo fleet.<sup>31</sup> The number of ships that would need to be scrapped is increasing, particularly as old single-hulled tankers are currently being phased out.<sup>32</sup>

This imperative for phasing out end-of-life ships, combined with the absence of alternatives, has rendered ship-breaking almost into a sustainable necessity. The difficulty of dispensing away with ship-breaking is illustrated by the experience of

Asbestos is not alone in its toxicity. Agency for Toxic Substances and Disease registry states, "bioaccumulation of PCBs in the environment can lead to a number of human health risks ranging from skin conditions to cancer of the liver and biliary tract." See Toxic & Disease Agency, *supra* note 23.

Contact with TBTs can lead to abdominal pain, vomiting, psycho-neurological disturbances, and partial paralysis. Recognizing its dangerous effects on the environment the IMO has agreed to mandatorily phase out and eventually prohibit the use of TBTs. See IMO, Marine Environment Protection Committee – 41<sup>st</sup> session: 30 March – 3 April 1998, available at: [http://www.imo.org/Newsroom/mainframe.asp?topic\\_id=109&doc\\_id=343](http://www.imo.org/Newsroom/mainframe.asp?topic_id=109&doc_id=343) (last visited July 23, 2009).

<sup>29</sup> The primary alternative is mothballing or the indefinite storage of ships. Anchoring ships at ports require regular maintenance so that they can be kept float. As a result, mothballing entails exorbitant maintenance costs and also imposes serious safety and environmental risks to the areas where they are docked. See Sawyer, *supra* note 15, at 543; Dodds, *supra* note 16, at 212; and Marcos A. Orellana, *Shipbreaking and Le Clemenceau Row*, ASIL Insights, Vol.10, Issue 4, February 24, 2006, available at: <http://www.asil.org/inisht060224.cfm> (hereinafter Orellana).

Other options like dry-docking (wherein a ship is removed from the water and grounded on to the beach) and sinking ships to form artificial reefs are also seen as prohibitively expensive and environmentally perilous. See Dodds, *supra* note 16, at 213 and Occupational Safety and Health Administration, *Process: Dry Docking and Launching*, available at: <http://www.osha.gov/SLTC/shipbuildingrepair/drydocking.html> (last visited Aug. 16, 2009). See also *Sinking of John McCain's Old Aircraft Carrier Denounced: Navy's Plan to Dump "USS Forrestal" Instead of Recycling Called "Irresponsible"*, available at: [http://www.ban.org/ban\\_news/2009/090727\\_sinking\\_of\\_old\\_aircraft\\_carrier\\_denounced.html](http://www.ban.org/ban_news/2009/090727_sinking_of_old_aircraft_carrier_denounced.html) for a concrete example of environmental opposition to plans of sinking ships to form artificial reefs.

<sup>30</sup> Dodds, *supra* note 16, at 15, 211.

<sup>31</sup> International Labour Organization, *Worker Safety in Ship-Breaking Industry*, 32 (2001) (Prepared by Bjorn Anderson available at: <http://www.ilo.org/public/english/dialogue/sector/papers/shpbreak/wp-167.pdf> (last visited Aug. 16, 2009) (hereinafter ILO-*Worker Safety*).

<sup>32</sup> See Orellana, *supra* note 29.

the National Defense Reserve Fleet (NDRF) in the United States. The U.S. Government had imposed a moratorium on the export of federally-owned ships due to environmental and humanitarian concerns around ship-breaking. This coupled with the high cost of domestic ship-scraping resulted in the accumulation of more than 250 ships in storage that were awaiting disposal. Retention of these ships entailed massive maintenance, storage and security costs.<sup>33</sup> The Environmental Protection Agency (EPA) estimated that just the maintenance costs between 1998 and 2004 for these ships were around \$58 million.<sup>34</sup>

Further, the difficult choice confronting policy-makers and regulators on the question of ship-breaking was implicitly acknowledged in the case of *Basel Action Network (BAN) v. Maritime Administration (MARAD)*.<sup>35</sup> This case centered on the award of a pilot programme contract to a foreign shipyard for disposal of old NRDF ships. The Basel Action Network (BAN) and the Sierra Club filed a suit in September 2003 seeking an injunction against the export of these NRDF ships, citing violations of various federal environmental laws and the Administrative Procedure Act (APA). One of the contentions put forth by BAN was that the pilot plan violated the best value provision of the National Maritime Heritage Act (NMHA).<sup>36</sup> They argued that better value domestic scrappers were available and towing across rough seas posed an unnecessary environmental hazard. The District Court, however, found that MARAD had demonstrated *prima facie* that their export program represented the best value and only subjected minimal harm to the environment due to adequate safeguards.<sup>37</sup> The position of the District Court was arguably a judicial acknowledgement of the fact that in certain cases, a well-run programme of export for ship-breaking may be environmentally more defensible than other alternatives.<sup>38</sup>

In this context, it is submitted that international regulatory framework must be reflective of this dilemma and cannot simply completely eliminate ship-breaking or ban exports of end-of-life ships for ship-breaking in the developing countries. A total prohibition on export of end-of-life ships would only result in, as demonstrated by the example of NRDF ships, accumulation of such phased out ships and create another lethal environmental and safety hazard.

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<sup>33</sup> See Cohen, *supra* note 22, at 247.

<sup>34</sup> See Cohen, *supra* note 22, at 247.

<sup>35</sup> 285 F. Supp. 2d 58 (D.D.C. 2003) (hereinafter *BAN v. MARAD*).

<sup>36</sup> 16 U.S.C. § 5401.

<sup>37</sup> See *BAN v. MARAD*, *supra* note 35, at 62.

<sup>38</sup> See Cohen, *supra* note 22, at 247.

### III. THE GLOBAL RACE-TO-BOTTOM, FLAGS OF CONVENIENCE AND THE NEED FOR AN INTERNATIONAL REGIME

A critical facet of ship-breaking operations is that its deleterious effects, discussed in the previous section, have been accentuated by the concentration of the industry in India, Bangladesh, Pakistan and China.

An International Labour Organization (ILO) study noted that most end-of-life ships are directly beached under its own power in the shipyards of Alang in India<sup>39</sup> as the extreme tidal changes in the Indian sub-continent allow for such beaching during high tides.<sup>40</sup> This technique requires ships to be delivered in operational shape so that they are able to use their own power to directly run up against the beach. The need to keep ships operational effectively precludes all remedial measures prior to export as any removal of material would make the ship unfit for voyage.<sup>41</sup> As a result, the beaching of ships takes place without any remedial or preventive measures. Another serious peril is that as a vessel is forced onto the beach, large quantities of PCBs, TBTs and lead are rubbed off its hull into the beach. A wide spectrum of debris and pollutants are thus generated which enter the water and sediment and contaminate the local ecosystem.<sup>42</sup>

The hazards posed by these primitive operations are further exacerbated by the scant likelihood of any imminent technical improvement in ship-breaking operations in these countries due to the global “race to bottom”. While India has occupied the largest market-share for years,<sup>43</sup> it is facing stiff competition from other South Asian countries in attracting end-of-life ships to its yards. Liberal regulatory regimes enable ships to be dismantled at lower costs and are thus seen as a vital determinant of success in this highly competitive business. Historically too, ship-breaking industries have suffered in countries after adoption of more restrictive regimes. For example, recent introduction of environmental and safety laws in China, a major breaking nation, has made the industry less profitable in that country.<sup>44</sup> Similarly, Indian ship-breakers complain<sup>45</sup> that their business grew at a

<sup>39</sup> See ILO-*Worker Safety*, *supra* note 31.

<sup>40</sup> Gary Cohn & Will Englund, *The Shipbreakers: The Curious Captains of a Reckless Industry*, THE BALTIMORE SUN, Dec. 7, 1997, available at: <http://www.pulitzer.org/archives/6146> (last accessed Aug. 29, 2009). See also NGO Platform on Shipbreaking, *Off The Beach: Safe and Green Ship Dismantling*, (2009) available at: <http://www.shipbreakingplatform.com/dmdocuments/reports/offthebeach.pdf> (last visited Nov. 2, 2009).

<sup>41</sup> See ILO-*Worker Safety*, *supra* note 31.

<sup>42</sup> See ILO-*Worker Safety*, *supra* note 31.

<sup>43</sup> See FIDH-*Floating Dustbins*, *supra* note 1.

<sup>44</sup> Paul J. Bailey, *Is There A Decent Way to Break Up Ships*, ILO Discussion Paper, Sectoral Activities Programme, (2000), available at:

lesser rate after the restrictions imposed on the directions of the Supreme Court of India in the *Research Foundation for Science and Technology v. Union of India*.<sup>46</sup> In light of this race to the bottom, ship-breaking nations have very little incentive to unilaterally introduce regulatory measures and safeguards to mitigate the environmental perils of ship-breaking.

As opposed to these ship-breaking nations, countries like Norway, Netherlands and Denmark that export end-of-life ships to the developing countries have been more vigilant in monitoring such exports. They have been proactive in their efforts to apply the Basel Convention and the EEC Waste Shipment Regulation 1993<sup>47</sup> to control and scrutinize the export of ships for dismantling. For example, the Norwegian Ministry of Environment initiated a fact-finding study entitled “Decommissioning of ships – Environmental protection and ship demolition practices”<sup>48</sup> in 1998. This study was followed by another project in 2000 which proposed normative standards on a comprehensive set of issues including contamination of resources affecting human health as well as workers’ conditions.<sup>49</sup>

However, such efforts are undermined by the utter ease with which ship-owners can avert the jurisdiction of a more vigilant State by changing the registration of ship. This is achieved by the traditional maritime practice of “Flag of Convenience” (FOC) under which ships often fly the flag of countries that have open registries (also referred to as FOC Countries),<sup>50</sup> which enables ship-owners to avoid restrictive regulatory regimes by changing registration to those FOC countries that have open registries and minimal regulation.<sup>51</sup> Admittedly, both

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<http://www.ilo.org/public/english/dialogue/sector/papers/shpbreak/> (last visited Aug. 17, 2009).

<sup>45</sup> Manas Dasgupta, *Slow Death for Ship Breaking Industry*, THE HINDU (Chennai), Mar. 6, 2006, available at: <http://www.hindu.com/2006/03/06/stories/2006030603181400.htm> (last visited Apr. 18, 2009).

<sup>46</sup> 2003 (9) SCALE 303.

<sup>47</sup> Council Regulation 259/93, 1993 OJ (L 30) 1

<sup>48</sup> DNV report No. 99-3065.

<sup>49</sup> Decommissioning of ships – Environmental standards (DNV report No. 2000-3156/3157/ 3158/3159 and 3169).

<sup>50</sup> FOC is the practice under which a ship flies the flag of a country other than the country of ownership to reduce operational costs. FOC Countries are selected on the basis of cheap registration fees, low or no taxes, weak regulatory oversight and freedom to employ cheap labour. According to the International Transport Workers’ Federation (ITF), there are 32 FOC countries. See International Transport Workers’ Federation, *FOC Countries*, available at: <http://www.itfglobal.org/flags-convenience/flags-convenience-183.cfm> (last visited Apr. 17, 2009).

<sup>51</sup> Asia N. Wright, *Beyond the Sea and Spector: Reconciling Port and Flag State Control Over Cruise Ship Onboard Environmental Procedures and Policies*, 18 DUKE ENVTL. L. & POL’Y J. 215, 220 (2007) (hereinafter Wright).

Port<sup>52</sup> and Flag States<sup>53</sup> have concurrent jurisdiction over a vessel in territorial seas under the law of the sea<sup>54</sup> and the State from which an end-of-life ship (registered in a FOC country) is being exported for dismantling could exercise jurisdiction as the Port State. However, according to the United Nations Convention on the Law of the Sea,<sup>55</sup> a Port State can interfere with a foreign-flagged vessel only if the latter has released pollutants in the territorial sea<sup>56</sup> or exclusive economic zone of the Port State.<sup>57</sup> Therefore given that end-of-life ships, in the ordinary course, do not cause any pollution in the territorial seas of the State of export, they could not be subjected to jurisdiction of those States.

Thus, the FOC system and the consequent ease with which ship-breakers can escape jurisdiction of States, act as a strong impediment in the way of effective control over export of end-of-life ships merely through stringent domestic legal regimes.

Critics have argued that “the most efficient way to control the sale of ships is in the ship-breaking nations”.<sup>58</sup> However, the author contends that the race-to-bottom between ship-breaking States alluded to earlier and the immense economic benefits arising out of ship-scraping operations act as a significant disincentive to the adoption of very strict standards comparable to those adopted in Europe and North America.

Thus, the combination of practical difficulties in implementing national laws and the unwillingness of ship-breaking States to adopt very rigorous norms mean that there is a need for a system of international supervision of the entire industry that can balance the concerns of environmentalists with the economic benefits of ship-breaking.

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<sup>52</sup> 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> (last visited Feb. 9, 2010).

<sup>53</sup> The common legal understanding of “Flag State” is the administration or the government of the state whose flag the ship is entitled to fly. MAR. INT’L SECRETARIAT SERVS., *SHIPPING INDUSTRY GUIDELINES ON FLAG STATE PERFORMANCE 4 n.1* (2d ed. 2006), available at: <http://www.marisec.org/flag-performance/flag-performance.pdf> (last visited Feb 9, 2010).

<sup>54</sup> Andrew Schulkin, *Safe Harbours: Crafting an International Solution to Cruise Ship Pollution*, 15 GEO. INT’L ENVTL. L. REV. 105, 106 (2002).

<sup>55</sup> United Nations Convention on the Law of the Sea, Dec. 10, 1982, 1833 U.N.T.S. 397 (hereinafter UNCLOS).

<sup>56</sup> See UNCLOS, *Id.*, art. 19.

<sup>57</sup> See Wright, *supra* note 51.

<sup>58</sup> See Sawyer, *supra* note 15, at 562.

## IV. EXISTING REGULATIONS UNDER INTERNATIONAL LAW

In the preceding sections, the transnational character of the ship-breaking industry, the prevalent race-to-bottom between major ship-breaking countries and the undesirability of complete prohibition on ship-breaking or export of end-of-life ships for ship-breaking were discussed. This part of the article will examine the presently operating avenues under International Law for regulating the environmental aspects of ship-breaking operations and how they grapple with some of the earlier discussed peculiarities of the ship-breaking industry.

The major international law instruments that have been used till date for regulation of the international trade in end-of-life ships meant for ship-breaking include the Basel Convention 1989,<sup>59</sup> the Stockholm Convention on Persistent Organic Pollutants 2001<sup>60</sup> and the UNCLOS.<sup>61</sup>

A. *Basel Convention*

The Basel Convention imposes very stringent restrictions on the transboundary movement of hazardous wastes so as to protect human health and the environment against adverse effects of such transboundary movements and disposal of the same.<sup>62</sup> It was enacted in response to growing international concern over disposal of hazardous wastes by generators from developed higher income countries (HICs) in developing low income countries (LICs).<sup>63</sup>

This Convention is based upon three foundational objectives: (a) minimization of the amount and hazard level of generated wastes,<sup>64</sup> (b) promotion of disposal of

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<sup>59</sup> See Basel Convention, *supra* note 7.

<sup>60</sup> Stockholm Convention on Persistent Organic Pollutants, May 22, 2001, U.N. Doc. UNEP/POPS/CONF/4, 40 I.L.M. 532 (hereinafter Stockholm Convention).

<sup>61</sup> *Supra* note 55.

<sup>62</sup> 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](http://www.basel.int/ships/commentsOEWG6/EU.doc) (last visited Aug. 11, 2009) (hereinafter European Committee *Basel-Ship Recycling Convention Assessment*).

<sup>63</sup> Such dumping of wastes in countries lacking the necessary regulatory or safety infrastructure had resulted in many serious environmental crises and caused alarms within the international community. Jason L. Gudofsky, *Transboundary Shipments of Hazardous Waste for Recycling and Recovery Operations*, 34 STAN. J. INT'L L. 219, 220-221 (1998) (hereinafter Gudofsky).

<sup>64</sup> Every generator/exporter is required to develop waste minimization policies. All states are therefore required to develop technologies and policies that decrease the amount of waste generated. Article 4 establishes a responsibility on the part of a party to properly minimize the production and manage the movement of hazardous wastes.



wastes as close as possible to the source of generation, and (c) “environmentally sound management” and disposal of hazardous waste.<sup>65</sup>

The Convention affirms and institutionalizes the principle of Prior Informed Consent (PIC).<sup>66</sup> Exporting State parties are also obliged under Article 4(2)(e) to bar an export if it believes that the wastes will not be managed in an environmentally friendly manner.<sup>67</sup> The exporter is also required to prohibit the export of hazardous waste to State parties that have prohibited the importation of such wastes.<sup>68</sup>

The Convention obligates States to introduce appropriate legislation to criminalize and punish illegal traffic.<sup>69</sup> Finally, the Exporting States are required to take back or adequately dispose of hazardous waste that was illegally exported as a result of conduct on the part of the exporter or generator.<sup>70</sup>

#### B. *The Stockholm Convention on Persistent Organic Pollutants 2001*

The Stockholm Convention is designed to end the production and use of a class of the world’s most poisonous chemical known as persistent organic pollutants (POPs).<sup>71</sup> This Convention is relevant for the purposes of regulation of ship-breaking as PCBs, one of the toxic materials generated while scrapping a ship, are included in the list of prohibited POPs under the Convention. Therefore, Article 3(2) of the Convention, which specifically limits the import and export of PCBs unless environmentally sound disposal and use are provided for, could arguably be used to limit export of end-of-life ships. Further, the Convention also bans disposal operations that may lead to recovery, recycling, reclamation, direct

<sup>65</sup> See Basel Convention, *supra* note 7, at para.4 of the Preamble.

<sup>66</sup> Article 6 institutes a series of notice and consent procedures with respect to the transboundary movement of hazardous wastes. Under Article 4(1)(c), a party cannot export waste without obtaining prior consent from the importing country.

<sup>67</sup> “Each Party shall take the appropriate measures to... not allow the export of hazardous wastes or other wastes to a State... if it has reason to believe that the wastes in question will not be managed in an environmentally sound manner”. See Basel Convention, *supra* note 7, art. 4(2)(e).

<sup>68</sup> Article 4 (2) (e): “Each Party shall take the appropriate measures to: ... Not allow the export of hazardous wastes or other wastes to a State or group of States belonging to an economic and/or political integration organization that are Parties, particularly developing countries, which have prohibited by their legislation all imports...” See Basel Convention, *supra* note 7, art. 4(2)(e).

<sup>69</sup> See Basel Convention, *supra* note 7, art. 4, (paras.3 and 4).

<sup>70</sup> See Basel Convention, *supra* note 7, art. 9, para.2.

<sup>71</sup> Persistent Organic Pollutants (POPs) are a class of chemicals that persist in the environment and are capable of long-range transport, bioaccumulate in human and animal tissue and have significant impacts on human health and the environment.

reuse or alternative uses of POPs.<sup>72</sup> It is argued that due to the strong likelihood of generation of PCBs in ship-breaking, exports of ships for ship-breaking operations would be embraced by these prohibitions.<sup>73</sup>

However, its potential for regulating ship-breaking would be limited as a result of its primary concern being only PCBs and not ship-breaking issues. Lastly, it also lacks the institutional mechanism equipped to deal with the specific features of international end-of-life ship trade.

### C. *The United Nations Convention on the Law of the Sea (UNCLOS)*

It has been argued that the transboundary movement across ocean of end-of-life ships containing hazardous materials is prohibited under the UNCLOS.<sup>74</sup> Article 19 of the Convention states that “passage of a foreign ship shall be considered to be prejudicial to the peace, good order or security of the coastal state if in the territorial State it engages in...any act of willful and serious pollution contrary to this Convention.”<sup>75</sup> Moreover, Article 21 of the Convention empowers States to impose conditions on the right to innocent passage in their territorial seas for the sake of environmental protection.<sup>76</sup> However as stated earlier,<sup>77</sup> the passage of end-of-life ships, by itself, ordinarily does not cause any pollution in the territorial seas and thus its linkage with the aforementioned provisions is indeed very tenuous.

### D. *International Maritime Organization (IMO) Guidelines, 2003*

As a response to the growing clamour for regulation of the international trading of ships for ship-breaking, IMO, the primary international agency for coordinating the development of rules on maritime issues, instituted a set of voluntary guidelines aimed at improving the ship disposal process in December 2003.<sup>78</sup> Known as the IMO Guidelines on Ship Recycling, it adopts a “Green

<sup>72</sup> See Stockholm Convention, *supra* note 60, art. 6(1)(d)(iii).

<sup>73</sup> See Cohen, *supra* note 22, at 257.

<sup>74</sup> See Dodds, *supra* note 16, at 222.

<sup>75</sup> See UNCLOS, *supra* note 55, art. 19. See Dodds, *supra* note 16, at 222.

<sup>76</sup> Article 21 (1): “The coastal State may adopt laws and regulations, in conformity with the provisions of this Convention and other rules of international law, relating to innocent passage through the territorial sea, in respect of all or any of the following:..(f) the preservation of the environment of the coastal State and the prevention, reduction and control of pollution thereof...”, UNCLOS, *supra* note 55.

<sup>77</sup> *Supra* Section III.

<sup>78</sup> International Maritime Organization, Resolution A. 962 (23): IMO Guidelines on Ship Recycling (2003) *available at*: [http://www.imo.org/includes/blastDataOnly.asp/data\\_id%3D11404/ResShiprecycling962.pdf](http://www.imo.org/includes/blastDataOnly.asp/data_id%3D11404/ResShiprecycling962.pdf) (last visited Aug. 17, 2009) (hereinafter IMO Guidelines).

Passport” approach to ship breaking.<sup>79</sup> It is envisaged that this “Green Passport”, a document containing an inventory of all materials potentially hazardous to human health or the environment, used in the construction of a ship, would accompany the ship throughout its working life.<sup>80</sup> It also encourages shipbuilders and designers to use alternatives to hazardous materials in designing their ships.<sup>81</sup> Owners of existing ships are directed to develop a “Ship Recycling Plan” which would include the identification of suitable recycling facilities under IMO guidelines.<sup>82</sup>

However, the voluntary character and the lack of enforcement mechanisms have seriously inhibited the potential of these guidelines as an effective instrument of regulation over the ship-breaking industry.<sup>83</sup>

The fact that the IMO Guidelines are merely voluntary in nature and the UNCLOS and the Stockholm Convention deal only with the margins of the issue meant that the discourse on international regulation of the ship-breaking business has been overwhelmingly centered on the Basel Convention and its suitability for the industry.<sup>84</sup>

#### V. BASEL CONVENTION: DOES IT COVER SHIP-BREAKING?

As mentioned earlier, international legal monitoring of ship-breaking till date has been primarily mediated through the Basel Convention regime. The 6<sup>th</sup> Conference of Parties to the Basel Convention, 2002, issued a set of Technical Guidelines for the Environmentally Sound Management of the Full and Partial Dismantling of Ships.<sup>85</sup> National Courts in Turkey,<sup>86</sup> Netherlands<sup>87</sup> and India have alluded to the Basel Convention when confronted with litigation on export and import of ships for recycling. Indeed, the Indian Supreme Court extensively relied

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<sup>79</sup> *Id.*, at p. 8.

<sup>80</sup> Sokratis Dimakopoulos, *The IMO's Work on Ship Recycling*, (2005) available at: [http://www.imo.org/includes/blastDataOnly.asp/data\\_id%3D17986/TheIMO.pdf](http://www.imo.org/includes/blastDataOnly.asp/data_id%3D17986/TheIMO.pdf) (last visited Aug. 18, 2009).

<sup>81</sup> See IMO Guidelines, *supra* note 78.

<sup>82</sup> *Id.*

<sup>83</sup> See Cohen, *supra* note 22, at 257.

<sup>84</sup> See Dodds, *supra* note 16, at 222.

<sup>85</sup> Technical Guidelines for the Environmentally Sound Management of the Full and Partial Dismantling of Ships, UNEP/CHW.6/23, (Aug. 2002), available at: [http://www.basel.int/meetings/cop/cop6/cop6\\_23e.pdf#annex](http://www.basel.int/meetings/cop/cop6/cop6_23e.pdf#annex) (last visited Aug. 16, 2009).

<sup>86</sup> *Cemsan Ship Dismantling Metal and Steel Industry Trade Limited Company v. Ministry of Environment, Ankara*, Case No. 2002/496, Decision No. 2003/1184, Unofficial Translation available at: <http://www.basel.int/ships/Turkey300903e.pdf> (last visited Aug. 10, 2009).

<sup>87</sup> *Stichting Greenpeace Nederland v. State Secretary for Housing, Spatial Planning and the Environment* (2007), Case No. 200606331/1, available at: [www.basel.int/ships/caselaw/gpnetherlands.doc](http://www.basel.int/ships/caselaw/gpnetherlands.doc) (last visited Aug. 16, 2009).

on the basic principles and procedural norms of the Basel Convention while formulating its directives for environmentally sound management of ship-breaking in the case of *Research Foundation for Science and Technology v. Union of India* in 2003.<sup>88</sup>

Yet critics – particularly the shipping industry<sup>89</sup> and the ship-breaking States<sup>90</sup> - have argued that the Basel Convention is restricted only to transboundary movement of hazardous wastes and its ambit does not extend to ships. Such opposition posits that end-of-life ships remain ships till their dismantling and are thus not “wastes” at the time of their export.<sup>91</sup> As a result, it is argued that the export of end-of-life ships cannot be thus regulated through the regime established under the Basel Convention.

It is argued in this article however that the opposition to the use of Basel Convention to regulate the export of vessels for dismantling does not have firm support in the text of the Convention or the emerging practice there under. On the contrary, there is considerable support for the assertion that end-of-life ships meant for export for dismantling and containing hazardous materials indeed fall under the category of “hazardous wastes” for the purposes of the Basel Convention.<sup>92</sup>

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<sup>88</sup> *Supra* note 46.

<sup>89</sup> International Chamber of Shipping, Communication to the Secretariat to the Basel Convention, (Jan. 9, 2004), available at: <http://www.basel.int/meetings/ocwg/followup/ics-ii-4e.doc> (last visited Aug. 14, 2009).

<sup>90</sup> For Indian Government’s opposition to the use of Basel Convention in the context of shipbreaking, See Sunita Dubey, *Legal Challenges in Shipbreaking in India: A Close Look at the Alang Shipbreaking Yard Case*, COMBAT LAW, Vol. 2, Issue 4, November 2003, available at: [http://www.combatlaw.org/information.php?article\\_id=322&issue\\_id=13](http://www.combatlaw.org/information.php?article_id=322&issue_id=13) (last visited Aug. 18, 2009).

<sup>91</sup> The Government of India had adopted this stance while allowing the import of the Danish ship, Riky in 2005 even in face of opposition by the Government of Denmark. See Gopal Krishna, *The Scrapping of Riky*, INDIA TOGETHER, March 23, 2006, available at: <http://www.indiatogether.org/2006/mar/env-riky.htm>. (last visited Nov.6, 2009). See also V. Venkatesan, *Breaking Rules*, FRONTLINE, Dec. 16, 2005, available at: <http://www.flonnet.com/fl2225/stories/20051216002304500.htm> (last visited, Nov.5, 2009). The Indian Government had taken a similar position with regard to the import of the decommissioned aircraft carrier, Le Clemenceau from France in January 2006. See Nityanand Jayaraman, *Dump on us: We’re Indians*, INFOCHANGE, January 2006, available at: <http://infochangeindia.org/200601096426/Other/Features/Dump-on-us-We-re-Indians.html> (last visited Nov. 5, 2006).

French Government had also contested the application of the Basel Convention, albeit on a separate ground that warships were exempted by the Convention. See Orellana, *supra* note 29.

<sup>92</sup> Geir Ulfstein, *Legal Aspects of Scrapping of Vessels: A Study for the Norwegian Ministry of Environment*, (1999) available at: <http://www.ban.org/Library/dismant.PDF> (last accessed on April 9, 2009) (hereinafter Ulfstein).

Basel Convention defines hazardous wastes under Art. 1 (1) as: (i.) Wastes that belong to any category contained in Annex I, unless they do not possess any of the characteristics contained in Annex III;<sup>93</sup> and ii. Wastes that are not covered 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.<sup>94</sup> Thus under this definition, any substance (unless already defined as hazardous wastes by national legislation of one of the concerned States) must satisfy the definition of “wastes” under the Convention and possess one of the characteristics specified in Annex III.

In light of this, it is submitted that ships destined for ship breaking operations clearly fall within the definition of “wastes” as defined by the Basel Convention. The Convention defines “wastes” as: “substances or objects which are disposed of or are intended to be disposed of or are required to be disposed of by the provisions of national law.”<sup>95</sup> The term “disposal” is further defined in Article 2, paragraph 4 to mean “any operation specified in Annex IV to this Convention”.<sup>96</sup>

Annex IV includes “final disposal” operations and operations which “lead to recovery, recycling, reclamation, direct re-use or alternative uses”. The destinations listed in Annex IV, paragraph B include “R4 Recycling/reclamation of metals and metal compounds”.<sup>97</sup> As the primary intention and destination for exporting ships destined for ship breaking to India and other developing countries is recycling and reclamation of metals, such ships unquestionably falls within the ambit of this entry. Consequently, the dismantling of ships would be classified as “disposal”.<sup>98</sup> In turn, it could be convincingly argued that ships which are intended for export for dismantling would satisfy the definition of ‘waste’ under Article 2, paragraph 1 of the Basel Convention.

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<sup>93</sup> See Basel Convention, *supra* note 7, art. 1(1)(a).

<sup>94</sup> *Id.*, art. 1(1)(b).

<sup>95</sup> *Id.*, art. 2(1).

<sup>96</sup> *Id.*, art. 2(4).

<sup>97</sup> *Id.*, at R4, para B, Annex IV.

<sup>98</sup> The decision of the Council of States in Netherlands in *Stichting Greenpeace Nederland v. the State Secretary for Housing, Spatial Planning and the Environment (MV Otapan)* (*Supra* note 87) provides guidance on the contentious issue of whether ship-breaking could be characterized as ‘disposal’ or not. One of the issues in that case was whether the dismantling of the ship, MV Otapan (bound for Turkey for recycling) could be classified as a disposal operation or recovery operation. There were different procedural requirements for the two categories. The Council inferred from the scrapping plan that the treatment of the waste comprised of several stages and that the first part of the operation was to remove the asbestos from the ships. The Council also observed that the plan emphasized that the removal of asbestos was necessary for all further operations. Thus, the Council concluded that the waste treatment process had been wrongly classified as a ‘recovery operation’ and must be classified as a ‘disposal operation’.

This position is well-supported by Decision VII/26 taken at the Seventh Conference of the Parties in October 2004 which noted “that a ship may become waste as defined in Article 2 of the Basel Convention and that at the same time it may be defined as a ship under other international rules.”<sup>99</sup> The Decision further recognised “that many ships and other floating structures are known to contain hazardous materials and that such hazardous materials may become hazardous wastes as listed in the annexes to the Basel Convention.”<sup>100</sup>

It is pertinent to note in this context that the decisions of the Conference of Parties (COP) command highest legal level of importance as authoritative interpretation of the text of the Convention. It has been argued that decisions of COP could be “regarded as an agreement *inter partes* modifying or supplementing the MEA within the meaning of Article 39 or Article 41(1) (b) of the Vienna Convention on the Law of Treaties”.<sup>101</sup> Article 39 provides for amendment of treaties by parties<sup>102</sup> whereas Article 41(1)(b) allows *inter partes* modification of multilateral treaties.<sup>103</sup> Thus, COP Decisions are inarguably binding on all the State-parties.

It is evident from the definition of “wastes” in the Convention and the decision of the Conference of Parties that end-of-life ships destined for ship breaking operations are included within the definition of “wastes”. Thus, if such phased out ships meant for export for ship-breaking can indeed be considered as “wastes” under the Basel Convention, they would also attract the regulations prescribed in the Convention if they fall under the category of “hazardous wastes”.

As mentioned earlier, the Convention defines hazardous wastes under Article 1(1) as: “wastes that belong to any category contained in Annex I and possess any of the

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<sup>99</sup> Decision VII/26, Seventh Conference of Parties of the Basel Convention (2004) UNEP/CHW.7/33, available at: <http://www.basel.int/meetings/cop/cop7/docs/33eRep.pdf> (last visited Aug. 16, 2009) (hereinafter Decision VII/26).

<sup>100</sup> *Id.*

<sup>101</sup> Robin R. Churchill & Geir Ulfstein, *Autonomous Institutional Arrangements in Multilateral Environmental Agreements: A Little Noticed Phenomenon in International Law*, 94 AM. J. INT'L L. 628, 641 (2000).

<sup>102</sup> “A treaty may be amended by agreement between the parties. The rules laid down in Part II apply to such an agreement except in so far as the treaty may otherwise provide.” See Vienna Convention on the Law of Treaties, May 23, 1969, 1155, U.N.T.S. 331.

<sup>103</sup> “Two or more of the parties to a multilateral treaty may conclude an agreement to modify the treaty as between themselves alone if ... (b) the modification in question is not prohibited by the treaty and: (i) does not affect the enjoyment by the other parties of their rights under the treaty or the performance of their obligations; (ii) does not relate to a provision, derogation from which is incompatible with the effective execution of the object and purpose of the treaty as a whole.” *Id.*

characteristics contained in Annex III; and wastes that are considered to be, hazardous wastes by the domestic legislation of the Party of export, import or transit.<sup>104</sup> Annex I provides that any material containing constituents such as, but not limited to, asbestos,<sup>105</sup> PCBs,<sup>106</sup> mercury,<sup>107</sup> cadmium<sup>108</sup> is a hazardous waste as long as possess any of the hazardous characteristics listed in Annex III.” Scientific studies reveal that elements like asbestos, and PCBs are highly “toxic” – one of the characteristics listed in Annex III.<sup>109</sup> Thus, any material that contains asbestos and PCBs would be classified as “hazardous wastes” under Article 1(1) read with Annex I and Annex III.

This proposition is bolstered by Annex VIII to the Convention which was added through an amendment in 1997.<sup>110</sup> Annex VIII contains the “A” list of waste streams that are presumed to be hazardous (*i.e.* possessing a hazardous characteristic). This list includes, among others, materials commonly contained in end-of-life ships like “waste asbestos (dusts and fibres)”<sup>111</sup>; “Wastes, substances and articles containing, consisting of or contaminated with polychlorinated biphenyl (PCB), polychlorinated terphenyl (PCT), polychlorinated naphthalene (PCN) or polybrominated biphenyl (PBB), or any other polybrominated analogues of these compounds, at a concentration level of 50 mg/kg or more.”<sup>112</sup>

It is very important to note in this context that the Basel Convention does not specify any threshold concentration level with respect to the hazardous characteristics for asbestos.<sup>113</sup> Thus, the very presence of asbestos mentioned in the aforesaid list will lead to a presumption of being “hazardous”. Consequently, most end-of-life ships would also be presumed to be hazardous given that almost all of them certainly contain traces of asbestos.<sup>114</sup> This presumption under Annex

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<sup>104</sup> See Basel Convention, *supra* note 7, art. 1(1).

<sup>105</sup> See Basel Convention, *supra* note 7, at Y36, Annex I.

<sup>106</sup> See Basel Convention, *supra* note 7, at Y39, Annex I.

<sup>107</sup> See Basel Convention, *supra* note 7, at Y29, Annex I.

<sup>108</sup> See Basel Convention, *supra* note 7, at Y26, Annex I.

<sup>109</sup> See Basel Convention, *supra* note 7, at Annex III, UN Class 9, Code H11.

<sup>110</sup> The amendment whereby Annex VIII was added to the Convention entered into force on 6 November 1998, six months following the issuance of depositary notification C.N.77.1998 of 6 May 1998 (reflecting Decision IV/9 adopted by the Conference of the Parties at its fourth meeting).

<sup>111</sup> See Basel Convention, *supra* note 7, at A 2050, List A, Annex VIII.

<sup>112</sup> See Basel Convention, *supra* note 7, at A 3180, List A, Annex VIII.

<sup>113</sup> Admittedly, the Convention sets a level of 50 parts per million for PCBs below which they are presumed to be non-hazardous. Asbestos is however presumed to be hazardous. See Basel Action Network, *The SS BLUE LADY (ex Norway, France): India's International and National Obligations to Prohibit the Illegal Traffic in Toxic Waste Vessels*, May 26 2006, available at: <http://www.ban.org/Library/IndiaLegalObligations26May2006.pdf> (last visited Nov. 4, 2009).

<sup>114</sup> FIDH-*Floating Dustbins*, *supra* note 1.

VIII would become conclusive when read in combination with earlier discussed principles of Article 1(1), Annex I and Annex III.

Therefore, it is submitted that end-of-life ships can be considered hazardous waste according to the definition provided in Article 1(1), and consequently, they can be subjected to the jurisdiction of the Basel Convention.

The fact that such end-of-life ships can be still be considered “ships” under the international maritime laws is irrelevant for the purposes of the determining its status under the Basel Convention. As noted by an expert:

No distinction is made between cases where the waste can still be considered a ship under international law, and cases where such status no longer exists. Neither is there any distinction between cases where the waste is still used for other purposes, such as transport of cargo by vessels, and where waste is sent directly to disposal. Consequently, a vessel is to be regarded as waste whether or not it still is to be considered a ship, or it is still used for transport of cargo, as long as the decision has been taken to scrap the vessel.<sup>115</sup>

The aforesaid discussion reveals that an end-of-life ship containing hazardous materials in its structure and meant for export would indeed be considered as “hazardous wastes” under the Basel Convention. However, the actual implementation of the Basel Convention norms to export of end-of-life ships has been fraught with certain practical hurdles. The next section discusses the flaws that have plagued the implementation of the Basel norms to ship-breaking.

#### VI. BASEL REGIME AND END-OF-LIFE SHIPS: DIFFICULTIES IN IMPLEMENTATION

Even as doubts about the applicability of the Basel Convention to end-of-life ships have gradually been dispelled, questions have emerged as to the actual utility of these norms in light of certain peculiar features of the ship-breaking economy. While the control of waste movements through the procedure of prior informed consent (“PIC”) functions relatively well for most hazardous wastes, the Basel Convention is applied to relatively few end-of-life ships.<sup>116</sup>

Admittedly, the control and enforcement mechanism has largely been complied with in cases of movements of some smaller end-of-life ships from one European country to another, such as ferries and fishing vessels. However, implementation of the mechanism has been considerably more difficult with

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<sup>115</sup> See Ulfstein, *supra* note 92.

<sup>116</sup> See European Committee *Basel-Ship Recycling Convention* Assessment, *supra* note 62.



transfer of larger merchant-vessels from one continent to another except for those rare cases where ship-owners voluntarily notify the transfer to a Recycling State.<sup>117</sup>

Two of the major hurdles to effective application of the Basel Convention to export of ships for ship-breaking are the challenges in identifying in practice when a ship becomes waste, and identifying which country is to be regarded as the “State of export” under the Basel Convention in unclear cases.<sup>118</sup>

#### A. *Identification of Waste*

Though at a normative level, it is relatively clear that 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, there is considerable ambiguity over practical identification of the point at which a ship becomes “waste”.<sup>119</sup>

Very few merchant ships comply with PIC and the notification requirements of the Basel Convention, though most of them contain substantial amount of hazardous materials on board.<sup>120</sup> One major issue is that many consider a ship not to be classified as waste and therefore not subject to transboundary waste legislation. As the European Union noted in its report:

[S]ome stakeholders and Recycling States, in so far as they give reasons, define a ship that arrives under its own power as not being waste, even though it is intended for metal recycling (a recovery operation, R4, in Annex IVB of the Basel Convention) and the decision to sell it for this purpose was taken by the owner often weeks or months before.<sup>121</sup>

Alongside the reluctance of ship-owners to classify ships as wastes, an additional complication is the near impossibility of determining the specific point at which the “intention” of disposal is developed. Very often, ownership is changed in the middle of a voyage. Similarly, ships often carry cargo even in their last voyage to Asia for dismantling, where they offload the cargo in one of the local ports. Thus, regulators are unable to identify the precise point where a ship becomes waste.<sup>122</sup>

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<sup>117</sup> *Id.*

<sup>118</sup> *Id.*

<sup>119</sup> United Kingdom, *Comment on Legal Aspects of Full and Partial Dismantling of Ships: Report on the Implementation of the Decisions Adopted by the Conference of the Parties at its Sixth Meeting*, available at: [\\_www.basel.int/meetings/cop/cop7/docs/i10a1e.doc](http://www.basel.int/meetings/cop/cop7/docs/i10a1e.doc) (last visited, Aug. 17, 2009).

<sup>120</sup> *Id.*

<sup>121</sup> See European Committee *Basel-Ship Recycling Convention Assessment*, *supra* note 62.

<sup>122</sup> H. Edwin Anderson, *The Nationality of Ships and Flags of Convenience: Economics, Politics, and Alternatives*, 21 TUL. MAR. L. J. 139, 163 (1996).

### B. *State of Export*

An associated difficulty with regulation of transboundary movement of end-of-life ships relates to the question of the identity of the “State of export”. This question is particularly vexing in cases where the decision to dismantle the ship, and thus “dispose of it in the sense of Article 2(1) of the Basel Convention”, is taken while the vessel is at sea.<sup>123</sup>

Moreover, in the case where a ship calls at a final port before heading for the Recycling State, it is doubtful whether the Port State can be regarded as the State of export and may not consider a need to exercise the Basel role of Competent Authority with respect to the ship.<sup>124</sup>

Further, any export ban that may exist, as it does under the EC Waste Shipment Regulation for example, is very difficult to apply if a ship has already left the territorial waters of the State where that ban is in force, and the owner then decides to send it for dismantling in other parts of the world.<sup>125</sup>

These practical difficulties seriously undermine the viability of applying the Basel Convention norms to the export of end-of-life ships and thus compromise their actual effectiveness. These limitations were acknowledged by the decision of COP VII. The Conference requested “the Open-ended Working Group to consider the practical, legal and technical aspects of the dismantling of ships in the context of achieving a practical approach to the issue of ship dismantling.”<sup>126</sup> The emphasis on a “practical approach” was undoubtedly an implicit admission of the difficulties in implementing the provisions of Basel Convention.

Indeed, these difficulties in the implementation of the Basel Convention in the context of ship-breaking highlighted the need for a separate mandatory international instrument specifically designed for the unique elements of the global ship-breaking economy and thus paved the path for the Hong Kong Convention.

## VII. HONG KONG CONVENTION - KEY ELEMENTS OF REGULATION

As a response to the gaps in the Basel Convention regime and the request of the Conference of Parties to the Basel Convention, the Marine Environment

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<sup>123</sup> See European Committee *Basel-Ship Recycling Convention Assessment*, *supra* note 62.

<sup>124</sup> *Id.*

<sup>125</sup> *Id.*

<sup>126</sup> See Decision VII/26, *supra* note 99.

Protection Committee (MEPC)<sup>127</sup> of the IMO agreed that it should develop a “new mandatory instrument on recycling of ships, with a view to providing legally-binding and globally applicable regulations for international shipping and for recycling facilities.”<sup>128</sup> Subsequently, the IMO Assembly passed a resolution in December 2005<sup>129</sup> requesting the MEPC to develop a mandatory instrument regulating, inter alia, the design, construction and preparation of ships so as to facilitate safe recycling, safe and environmentally sound operation of recycling facilities and establishment of an appropriate enforcement mechanism.<sup>130</sup>

Thereafter, the 54<sup>th</sup> Session of MEPC in March 2006 convened a Working Group on ship-recycling to draft the text. This Working Group also included representatives from the International Labour Organization (ILO) and the Basel Convention Secretariat.<sup>131</sup> The text of the Convention was finalized in the 58<sup>th</sup> Session of MEPC in October 2008 and, as mentioned earlier, later adopted during the International Conference of the IMO Member-States in May 2009.<sup>132</sup>

This section of the paper discusses some of the key elements of the regulatory mechanism that has been envisaged under the Convention. A survey of the salient features of control and enforcement would lead to a more in-depth comparison with the features postulated in the Basel Convention.

#### *A. Control over Design, Construction, Operation and Maintenance*

The provisions of this Convention are intended to be holistic, covering “cradle-to-grave” regulation that spans across every aspect of the entire life-cycle of a ship. Thus, it includes regulations for the “design, construction, operation and preparation for ships so as to facilitate safe and environmentally sound recycling

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<sup>127</sup> 53<sup>rd</sup> Session of the IMO Marine Environmental Protection Committee, July 2005. For an unofficial report of the Session, see The American Club, *Report From the 53<sup>rd</sup> Session of the IMO Marine Environmental Protection Committee*, available at: [http://www.american-club.com/alerts/MEPC\\_53.pdf](http://www.american-club.com/alerts/MEPC_53.pdf) (last visited, Feb. 9, 2009).

<sup>128</sup> Nikos Mikelis, *Developments and Issues on Recycling of Ships*, Paper presented at the East Asian Seas Congress, (2006), available at: [http://www.imo.org/includes/blastDataOnly.asp/data\\_id%3D17980/Developments.pdf](http://www.imo.org/includes/blastDataOnly.asp/data_id%3D17980/Developments.pdf) (last visited Aug. 18, 2009) (hereinafter Mikelis).

<sup>129</sup> Resolution A. 981 (24), *supra* note 14.

<sup>130</sup> See Mikelis, *supra* note 128.

<sup>131</sup> *Id.*

<sup>132</sup> Basel Convention Secretariat, *Note on 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*, (Apr. 14, 2008), UNEP/CHW.9/34, available at: [www.basel.int/meetings/cop/cop9/docs/34e.doc](http://www.basel.int/meetings/cop/cop9/docs/34e.doc) (last visited Aug. 16, 2009).

but without compromising their safety and operational efficiency”.<sup>133</sup> It requires Parties (both Flag States as well as Port States) to “prohibit and/or restrict the installation and use of hazardous materials listed in Appendix 1 to the Convention” on ships flying their flags or “whilst in their ports, shipyards, ship repair yards or offshore terminals” respectively.<sup>134</sup>

*B. Inventory of Hazardous Materials, Survey and Certification*

Another major element of control and enforcement envisaged is the obligation on each ship to develop and maintain an “Inventory of Hazardous Materials”.<sup>135</sup> This obligation is to subsist throughout the operating life of a vessel.<sup>136</sup> The inventory is subject to verification by the Flag State.<sup>137</sup> Every ship has to comply with the survey and certification requirements prescribed by the Flag State.<sup>138</sup>

Existing ships however have a grace-period of five years within which they need to develop the inventory.<sup>139</sup> Such inventory is mandatory for new ships right from commencement of their operations.<sup>140</sup>

Regulations 10 and 11 specify the types of the surveys that every ship needs to undergo prior to obtaining the necessary certifications. These include an initial survey before the ship is put in service and before the issue of the International Certificate on Inventory of Hazardous Materials,<sup>141</sup> a renewal survey at a maximum interval of every five years,<sup>142</sup> a survey after any change, replacement or significant repair of the structure,<sup>143</sup> and a final survey prior to the ship is taken out of service<sup>144</sup> for recycling after which an International ready for Recycling Certificate shall be issued.<sup>145</sup>

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<sup>133</sup> See Mikelis, *supra* note 128.

<sup>134</sup> See Hong Kong Convention, *supra* note 4, at Regulation 4.

<sup>135</sup> *Id.*, at Regulation 5.

<sup>136</sup> *Id.*, at Regulation 5.3.

<sup>137</sup> *Id.*, at Regulation 5.1.

<sup>138</sup> *Id.*, art. 5.

<sup>139</sup> *Id.*, Regulation 5.2.

<sup>140</sup> *Id.*, Regulation 5.1.

<sup>141</sup> *Id.*, Regulation 10.1.1.

<sup>142</sup> *Id.*, Regulation 10.1.2.

<sup>143</sup> *Id.*, Regulation 10.1.3.

<sup>144</sup> *Id.*, Regulation 10.1.4.

<sup>145</sup> *Id.*, Regulation 11. 11.

### C. *Authorization for Recycling Facilities*

The Convention also requires prior authorization of every ship recycling facility by its State. Article 6 requires each Party to ensure that ship-recycling facilities operating under its jurisdiction are authorized in accordance with the regulations contained in the Annex. Article 4(2) also imposes a general obligation on the Parties to ensure that the ship recycling facilities comply with the requirements of the Convention, and shall take effective measures to do so.

### D. *Notification and Reporting Obligations*

Ship-owners and recycling facilities are duty-bound under the Convention to inform their respective States of their intention to recycle a ship.<sup>146</sup> This enables the Flag State administration to prepare for the survey and issue of the International Ready for Recycling Certificate by the Convention.<sup>147</sup>

A recycling facility preparing to receive a ship has to notify its State (competent authority)<sup>148</sup> and, when the ship has acquired the International Ready for Recycling Certificate, report the planned start date for recycling to its competent authority.<sup>149</sup> Further, a “statement of completion” is to be issued by the recycling facility, when the recycling of a ship is completed in accordance with the Convention.<sup>150</sup>

### E. *Sharing of Information with the IMO*

Parties are required by Article 12 to submit to the IMO a list of authorized recycling facilities, annual lists of ships that are recycled or deregistered to be recycled, and information on violations of the Convention and actions taken towards ships and recycling facilities.<sup>151</sup> It is hoped that such dissemination of information will assist towards effective enforcement, monitoring and implementation of the Convention.<sup>152</sup>

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<sup>146</sup> *Id.*, Regulation 24.1.

<sup>147</sup> *Id.*

<sup>148</sup> *Id.*, Regulation 24.2. It also specifies the details of information that must be provided in the notification.

<sup>149</sup> *Id.*, at Regulation 24.3.

<sup>150</sup> *Id.*, at Regulation 25.

<sup>151</sup> Article 7 also obliges Recycling State Parties to provide, on request of other Parties or the IMO, relevant information on which its decision for the authorisation of a recycling facility was based.

<sup>152</sup> See Mikelis, *supra* note 128.

#### F. *Inspection of Ships by Port States*

Article 8 provides for inspection of ships by Port States. Ships in ports and offshore terminals can be inspected by duly authorised officers. Critically, such inspection is however normally limited to only verifying that there is on board a valid International Certificate on Inventory of Hazardous Materials.<sup>153</sup>

#### G. *Regulatory Enforcement and Detection of Violations*

The Convention envisages a robust enforcement mechanism whereby Parties are expected to cooperate with each other in the detection of violations.<sup>154</sup> It foresees investigations to be undertaken at ports and empowers Parties to warn, detain, dismiss or exclude a ship from their ports as a result of the findings of violation.<sup>155</sup> If any State-Party has sufficient evidence indicating that a ship recycling facility is operating in violation of the Convention, it shall request the State Party with jurisdiction over it to make an inspection and report its findings.<sup>156</sup>

Article 10 is a very significant provision in the context of enforcement as it obliges Parties to prohibit violations and establish sanctions through their domestic legislations.

### VIII. BASEL AND HONG KONG: A COMPARISON

A comparative analysis of the Basel Regime and the provisions of the Hong Kong Convention is necessary to examine whether the latter adheres to its original objectives of removing the infirmities in the former.

Comparisons with the Basel Convention also have critical normative significance for the Hong Kong Convention. Article 11 of the Basel Convention requires that any bilateral or multilateral agreement regarding transboundary movement of hazardous wastes must not stipulate provisions which are less environmentally sound than those provided for by this Convention.<sup>157</sup> Thus, the Hong Kong Convention must establish an equivalent level of control as the Basel Convention before it can satisfy the criteria under Article 11 of the latter instrument. This was also amplified by the Eighth Conference of Parties of the Basel Convention (COP VIII) in its Decision VIII/11 where it called upon the

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<sup>153</sup> See Hong Kong Convention, *supra* note 4, art. 8.1.

<sup>154</sup> *Id.*, art. 9.1.

<sup>155</sup> *Id.*, art. 9 (paras 2 and 3).

<sup>156</sup> *Id.*, art. 9.4.

<sup>157</sup> See Basel Convention, *supra* note 7, art. 11.

IMO to ensure that the new Convention establishes an equivalent level of control as that has been established under the Basel Convention.<sup>158</sup> The Ninth Conference of Parties (COP IX) to the Basel Convention too in June 2008 had requested the Open-Ended Working Group of the Convention to assess preliminarily whether the draft International Convention for the Safe and Environmentally Sound Recycling of Ships, establishes control and enforcement levels equivalent to those in the Basel convention.<sup>159</sup>

The scope and ambit of the obligation under Article 11 has been a matter of debate in relation to whether it imposes an obligation to establish identical level of control. Incidentally, Article 11 aroused conflicting reactions right from the very inception of the Convention. While some argued that it provided the space for countries to negotiate more stringent norms where necessary, detractors of the provision argued that the concept “equivalent level of control” was vague and allowed States to circumvent their Basel obligations.<sup>160</sup>

However, it is submitted that the doctrine of “equivalent level of control” under Article 11 must be given a liberal interpretation. The very use of the term “equivalent” by the COP VIII indicates that the State Parties did not insist on an “identical level of control”.<sup>161</sup> Thus, Article 11 does not require exact reproduction of the elements of control present in Basel Convention in the new Hong Kong Convention. It is only expected that the net result of the new Convention should not compromise on the “environmentally sound management of hazardous wastes” provided in the Basel Convention.<sup>162</sup>

At the same time, it must be reiterated though that Article 11 only laid down the minimum mandate and that in order to fulfill its purpose, the Hong Kong Convention does need to go beyond this floor requirement and plug all the identified loopholes in the Basel Convention.

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<sup>158</sup> Decision VIII/11, Eighth Conference of Parties of the Basel Convention (2006) UNEP/CHW.8/16, available at: <http://www.basel.int/meetings/cop/cop8/docs/16REISSUED.pdf> (last visited Apr. 19, 2009).

<sup>159</sup> *Conference of the Parties to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal*, Bali, Indonesia, June 23-27, 2008, Report of the Conference of the Parties to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal on Its Ninth Meeting, at 2, 5, U.N. Doc. UNEP/CHW.9/39.

<sup>160</sup> Karen Dowson, *Wag the Dog: Towards a Harmonization of the International Hazardous Waste Transfer Regime*, 19 No. 1 CAN. J.L. & SOC'Y 1, 16 (2004).

<sup>161</sup> See European Committee *Basel-Ship Recycling Convention Assessment*, *supra* note 62.

<sup>162</sup> *Id.*

Another point to be noted about the obligation under Article 11 is that it is not just limited to control mechanisms and procedures. Instead, it is argued that equivalence must extend to some of the basic principles of the Basel Convention including its definition of hazardous wastes, the obligations to minimize the generation and transboundary movement of hazardous wastes, prior informed consent and notification mechanism, State responsibility, criminalization of illegal traffic, disclosure of full inventory of the ships, etc.<sup>163</sup>

#### A. *One Step Forward*

An appraisal of the Hong Kong Convention and the Basel Convention provisions makes it amply clear that the former does contain many significant improvements over the latter, thereby enhancing the prospects of more effective regulation of transfer of end-of-life ships for recycling.

##### 1. Cradle-to-Grave Approach

For example, the cradle-to-grave approach of the Hong Kong Convention, wherein it regulates design, construction, operation and maintenance of ships and also requires maintenance of inventory of hazardous materials during the entire lifetime of a ship, is a radical progress from the Basel framework. Such an approach is more forward looking in so far as it has the potential of eliminating altogether the hazards involved in ship-breaking.<sup>164</sup> Changes in ship designs may in future completely eliminate the generation of hazardous materials during recycling process. Thus, the primary environmental concern arising out of ship-breaking could be addressed at the very source. As the Global NGO Platform on Shipbreaking noted: “the establishment of a framework for eliminating or restricting the use of hazardous materials in ship construction is clearly necessary to ensure that end-of-life ships will no longer be source of contamination and occupational disease.”<sup>165</sup>

##### 2. Uniform Technical Standards

Further, the new Convention lays down a uniform set of technical standards for ship recycling facilities and procedures as an integral part of the instrument itself. These standards are postulated in Regulations contained in Annex I. This is a marked improvement over the Basel Convention where a separate set of Technical Guidelines, distinct from the main body itself, had been prepared.<sup>166</sup> Thus, the

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<sup>163</sup> *Id.*

<sup>164</sup> See Mikelis, *supra* note 128.

<sup>165</sup> See Global NGO Platform on Shipbreaking, *supra* note 9.

<sup>166</sup> See Mikelis, *supra* note 128.



Hong Kong Convention paves the path for standardization of the ship-breaking process across jurisdictions and is likely to act as a bulwark against the race-to-bottom between various ship-breaking countries.

### 3. Reporting with IMO

Another critical improvement over the Basel convention is the duty of State Parties to share information on the details of authorized ship-recycling facilities, ships recycled and instances of violation with the IMO under Article 12. Such dissemination and centralized storage of information is likely to provide for markedly easier monitoring of export of end-of-life ships and compliance with the Convention.<sup>167</sup>

#### B. *Two Steps Back*

However in spite of these major advances over the Basel Convention, there are certain critical lacunae in the provisions of the Hong Kong Convention that raise serious question marks over its ability to provide for environmentally sound management of ship-recycling comparable in the least to those in the Basel regime.<sup>168</sup>

#### 1. Exclusion of Domestic, Government-Owned and Naval Vessels

For example, the Convention excludes from its ambit ships engaged solely in domestic voyages.<sup>169</sup> It is submitted that such a distinction is bereft of any purposive basis. The aim of the convention is to regulate the environmental impact of ship-recycling, particularly in the process of transfer of ship from one country to another.<sup>170</sup> The environmental impact of recycling of an end-of-life ship has very little, if any, nexus with the character of its earlier usage. As such, recycling a ship that has been used solely for domestic voyages would pose similar environmental hazards, as dismantling a ship that has been used at a transnational level. Therefore, it should be subjected to equivalent regulation and oversight and their exclusion from the purview of the Convention beggars reason.

Similarly, warships and government-owned ships are excluded from the regulatory regime envisaged by the Convention. Such exclusions are also completely inconsistent with the spirit of the Hong Kong Convention.<sup>171</sup> The

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<sup>167</sup> *Id.*

<sup>168</sup> See Global NGO Platform on Shipbreaking, *supra* note 9.

<sup>169</sup> See Hong Kong Convention, *supra* note 4, art.3.3.

<sup>170</sup> Basel Convention Secretariat, *Report of the Working Group on Ship Recycling established by the Fifty-Sixth session of the Marine Environment Protection Committee of the International Maritime Organization*, (July 2007), UNEP/CHW/OEWG/46/INF/1042.

<sup>171</sup> See Mikelis, *supra* note 128.

environmental hazards posed by State-owned ships and warships are no less than those posed by ordinary vessels. On the contrary, warships, because of their huge size, contain vast amount of hazardous materials like asbestos and PCBs<sup>172</sup> and need to be subjected to stricter regulation.

This argument would also apply to the exclusion of the term “aquatic” from the definition of “ship” in Article 2.<sup>173</sup> This means that inland waterway vessels would be exempted from the application of the Convention. It is again reiterated that the environmental impact of recycling has no nexus with the past usage of the vessel and if such an inland waterway vessel is being exported for dismantling, it must also be subjected to the regulatory framework proposed under the Convention.

## 2. Dilution of Prior Informed Consent

Another fatal weakness of the proposed Convention is the way it has diluted the principle of PIC. Notifications are envisaged between the ship-owner and the Flag State on the one hand, and the recycling facility and its competent authority on the other. The Convention does not provide for direct “State to State reporting”, *i.e.* notification between Flag State and the Recycling State and requires no reporting to other transit States.<sup>174</sup> Consequently, there is no express need for consent from the Recycling State or any of the Transit States. Thus, the doctrine of PIC is almost turned on its head.<sup>175</sup>

It should be emphasized though, that the relatively weak formulation of the Recycling State’s right to object to a ship recycling may have limited practical relevance. The Recycling State can use the Port-State authority under UNCLOS to refuse permit entry into its territory, provided it exercises the right through establishing it in domestic legislation.<sup>176</sup> Moreover, the Recycling State can also use the powers vested under Article 9<sup>177</sup> once it establishes that a ship has violated the provisions of the Convention.

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<sup>172</sup> For example, the French aircraft carrier, *Clemenceau* that had become the subject of huge controversy due to its proposed export to India in 2006, was alleged to have contained between 190 to 250 tons of asbestos. Greenpeace International, *The Saga of the Clemenceau: Fact Sheet*, (2006), available at: <http://www.greenpeace.org/raw/content/international/press/reports/the-clemenceau-fact-sheet.pdf> (last visited Aug. 18, 2009).

<sup>173</sup> See Hong Kong Convention, *supra* note 4, art. 2.

<sup>174</sup> See European Committee *Basel-Ship Recycling Convention Assessment*, *supra* note 62.

<sup>175</sup> See Global NGO Platform on Shipbreaking, *supra* note 9.

<sup>176</sup> See European Committee *Basel-Ship Recycling Convention Assessment*, *supra* note 62.

<sup>177</sup> See Hong Kong Convention, *supra* note 4, art. 9.

However, there is a legitimate concern that States may experience practical difficulties in preventing the entry in absence of prior knowledge about the impending entry of the ship.<sup>178</sup> Parties need time and information to arrive at an informed decision on the nature of toxic materials contained in a ship. The absence of a State-to-State prior notification requirement deprives States of time and information required to take meaningful action.<sup>179</sup> Moreover, environmentalists have expressed the fear that beaching of an end-of-life ship is almost irreversible.<sup>180</sup> Thus, recycling may become a *fait accompli* once a ship manages to surreptitiously gain entry and beach itself for dismantling.

A related omission in the Convention is the inability of a Flag State sending its vessel for recycling to another State to refuse consent to a ship even if it has grounds to believe that the Recycling State is unable or unwilling to adhere to environmentally sound disposal of the waste.<sup>181</sup> Admittedly, the Flag State can, under Article 7, request relevant information from the Recycling State on the basis for the decision to authorize the facility. If such information is not forthcoming, it might refuse to issue the “Ready-for-Recycling” certificate. However, this refusal can easily be made ineffective by a re-flagging of the ship to another State.<sup>182</sup>

### 3. No Criminalization of Illegal Traffic

Unlike the Basel Convention,<sup>183</sup> the Hong Kong Convention fails to impose express obligations on State Parties to criminalize illegal traffic in hazardous wastes through national legislations. Article 10 does require States to prohibit violation of the convention and impose sanctions for such violations. However, the requirement to impose sanctions does not extend to imposing criminal penalties.

### 4. Trade with Non-Parties

The Basel Convention categorically prohibited any trade in hazardous wastes between parties and non-parties as well. On the other hand, the Hong Kong Convention does not apply to export of end-of-life ships between parties and non-parties. This could act as a significant disincentive against States signing and ratifying the Convention. As the EU noted:

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<sup>178</sup> *Id.*

<sup>179</sup> See Global NGO Platform on Shipbreaking, *supra* note 9.

<sup>180</sup> V Venkatesan, *Dilution of a Principle*, FRONTLINE, Nov.16, 2007, available at: <http://www.hinduonnet.com/fline/fl2422/stories/20071116505108000.htm> (last visited Aug. 19, 2009).

<sup>181</sup> See Global NGO Platform on Shipbreaking, *supra* note 9.

<sup>182</sup> European Community, *supra* note 62.

<sup>183</sup> “The Parties consider that illegal traffic in hazardous wastes or other wastes is criminal.” See Hong Kong Convention, *supra* note 4, art. 4.3.

[r]ecycling States might be expected to support the Ship Recycling Convention if it is apparent that the majority of ship-owners will send their ships only to facilities which comply with the new rules, and if the costs of improving the recycling industry are outweighed by the economic benefits.<sup>184</sup>

However, the fact that ship-owners can export their ships to non-parties also may suggest to Recycling States that they may be able to secure orders for dismantling even without joining the Convention.

Admittedly, Article 3, paragraph 4 stipulates that Parties shall accord no more favourable treatment to ships from non-party States.<sup>185</sup> However, the exact scope of this provision is not clear and this vagueness may undermine the level of actual protection. Moreover, such trade will not be subjected to the information dissemination requirements with the IMO and thus may also hinder effectual regulation.

Thus, we see that major lacunae like exclusion of many naval and domestic ships, dilution of prior informed consent norms, absence of criminalization and provisions for trade with non-parties negate few radical advances achieved under the text of the new Hong Kong Convention and seriously undermine the protection accorded under it.

In addition to these rollbacks from the Basel Convention regime, the Hong Kong Convention also contains a critical gap that had plagued the former as well. There is no independent mechanism for third party audit which can verify the compliance of the recycling facilities and States with the provisions of the Convention. A draft provision on an independent mechanism<sup>186</sup> was under discussion during the initial stages of drafting. However, it was subsequently dropped from the text.<sup>187</sup> This is a major loophole as the Recycling States have an economic incentive for generously granting certification to even those facilities which may not be complying with environmentally sound management of wastes.<sup>188</sup>

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<sup>184</sup> See European Committee *Basel-Ship Recycling Convention Assessment*, *supra* note 62.

<sup>185</sup> See Hong Kong Convention, *supra* note 4, art. 3.4.

<sup>186</sup> See European Committee *Basel-Ship Recycling Convention Assessment*, *supra* note 62.

<sup>187</sup> Basel Convention Secretariat, *Report of the Work of the Marine Environment Protection Committee of the International Maritime Organization at its 57<sup>th</sup> Session on Ship Recycling*, (May 9, 2008), [UNEP/CHW.9/INF/28](http://www.basel.int/meetings/cop/cop9/docs/i08a1e.pdf), available at: <http://www.basel.int/meetings/cop/cop9/docs/i08a1e.pdf> (last visited Aug. 16, 2009).

<sup>188</sup> See Global NGO Platform on Shipbreaking, *supra* note 9.

Not only does the Hong Kong Convention ignore some of the key principles of Basel Convention, it also fails, as explained in the next section, to incorporate the most fundamental principles of international environmental law.

## IX. HONG KONG CONVENTION AND PRINCIPLES OF INTERNATIONAL ENVIRONMENTAL LAW

The relationship of the provisions of Hong Kong Convention with the fundamental principles of international environmental law is a mixed one with several key principles being ignored or partially adopted.

### A. Sustainable Development

It must be acknowledged at the outset that the new Convention seeks to incorporate the principle of sustainable development.<sup>189</sup> By not completely banning export of End-of-life Ships for dismantling (as suggested by the BAN Amendment to Basel Convention<sup>190</sup>), it recognizes the right to development of the Recycling States.<sup>191</sup> It acknowledges the reality that an outright ban on export of vessels for ship-breaking would deprive India, China, Pakistan, Turkey and Bangladesh of the massive social and economic benefits of ship-breaking in terms of generation of materials and livelihood.<sup>192</sup> This position demonstrates a nuanced appreciation of the fact that a complete prohibition on export of ships would have

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<sup>189</sup> See *Rio Declaration on Environment and Development*, U.N. Conference on Environment and Development, June 13, 1992, U.N. Doc. A/Conf.151/5/Rev.1, reprinted in 31 I.L.M. 874, principles 4 and 5 (hereinafter Rio Declaration).

<sup>190</sup> Basel Convention's Decision II/12 and III/1 (the Basel Ban Amendment) completely prohibited the transfer of hazardous wastes from OECD to non-OECD countries. Till date, 65 countries have ratified the Amendment. However, it has not come into force as yet as Article 17 (5) requires ratification by at least three-fourth of the state-parties. However, the European Union fully implemented the Basel Ban Amendment through the European Waste Shipment Regulation, 1999 making it legally binding in all EU member states. Council Regulation (EC) No 1420/1999 of 29 April 1999 establishing common rules and procedures to apply to shipments to certain non-OECD countries of certain types of waste.

<sup>191</sup> See *Declaration on the Right to Development* GA Res. 128 (XCVIII), UN GAOR, 41st Sess., Supp. No. 53, UN.Doc. A/Res/41/128 (1986), available at: <http://www.un.org/documents/ga/res/41/a41r128.htm>>; See Rio Declaration, *supra* note 188, principle 3; and *United Nations Millennium Declaration* GA Res. 55/2(LV), U.N. GAOR, U.N. Doc. A/Res/55/2 (2000), United Nations General Assembly resolution 55/2 of 8 September, 2000, available at: <http://www.un.org/rn/Hennium/declaration/ares552e.htm>, art. 11.

<sup>192</sup> Lisa Widawsky, *In My Backyard: How Enabling Hazardous Waste Trade to Developing Nations Can Improve the Basel Convention's Ability to Achieve Environmental Justice*, 38 ENVTL. L. J. 577, 612 (2008).

acted as a barrier to entry of ship-breaking States into the Convention. It would also have stunted any incentive to build safe and environmentally sound recycling facilities in these countries.<sup>193</sup>

By allowing export of such end-of-life ships for recycling, the new Convention further recognizes that ship-breaking (with safeguards) is an environmentally sustainable means of disposal of end-of-life ships (particularly in light of absence of any less harmful alternative and the ecological value of reusing materials).

Thus, it is argued that Hong Kong Convention through its regulatory regime seeks to achieve a balance between the right to development and environmental protection without sacrificing either one of the two at the altar of the other.

### B. *Polluter Pays Principle*

The “polluter pays” principle has become a firmly established principle of international environmental law.<sup>194</sup> The essence of this principle is that the person who introduces a pollutant should also be responsible for the removal of that pollution and must bear the appurtenant financial costs.<sup>195</sup> The burden to remove the hazardous materials from a ship must thus fall on the owner of the ship and not on the country operating the dismantling ship yards.

However, the Hong Kong Convention fails to incorporate this principle. The Flag State or the ship-owner has not been allocated any responsibility for the clean-up. The Convention completely neglects the responsibility of pre-cleaning or prior decontamination that, as discussed in the preceding section, has been already been recognized by several national courts. Polluter-pays principle would mandate that a vessel must be stripped of all its hazardous materials in the Flag State by the ship-owner prior to export as the primary responsibility of clean-up should rest on the latter as a “polluter”. An expansive definition of polluter would include the ship-owner as well, as he has been the primary user of the ship, the object

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<sup>193</sup> *Id.*

<sup>194</sup> See Rio Declaration, *supra* note 188, principle 16. See also Article 174 of the EC Treaty OECD Council, *Recommendation on Guiding Principles Concerning the International Economic Aspects of Environmental Policies*, C (72) 128 (1972), available at: <http://sedac.ciesin.org/entri/texts/oecd/OECD-4.01.html>; Article 73(2) of the Agreement on the European Economic Area, 1994 OJ (L 1) 3; *Vellore Citizens Welfare Forum v. Union of India*, (1996) 5 S.C.C. 647; *Indian Council for Enviro-Legal Action v. Union of India*, A.I.R. 1996 SC 1446.

<sup>195</sup> ANTON *et al.*, INTERNATIONAL ENVIRONMENTAL LAW: CASES, MATERIALS AND PROBLEMS 126 (2007). See also Dodd, *supra* note 16, at 234; Eric Allen Engle, *General Principles of European Environmental Law*, 17 PENN ST. ENVTL. L. REV. 215, 221 (2009).

containing hazardous substances.<sup>196</sup> The Convention, on the other hand, assumes that as long as a recycling facility has required authorization, it should be allowed to conduct the entire dismantling process including removal of the hazardous wastes.<sup>197</sup>

Further, despite suggestions to the contrary during some of the initial meetings,<sup>198</sup> the Hong Kong Convention lacks any provision establishing a Ship Recycling Fund based on contribution from ship-owners and shipping States. It had been argued that the ship-owners should, under the notion of extended polluter responsibility, be financially responsible for end-of-life management of their ships as well. However, the Hong Kong Convention has missed a crucial opportunity by failing to contain any commitment on this fund.<sup>199</sup> Thus, there is no mechanism to force the ship-owners to internalize the costs associated with his use of hazardous materials in ships.

### C. *Source Principle*

The source principle implies that any form of pollution should be treated as closely as possible to the source.<sup>200</sup> Absence of any clean-up or decontamination obligations on ship-owners or the Flag State blatantly undermines this principle as it clears the way for treatment and disposal of the hazardous materials embedded in ships in distant Recycling States. Admittedly, complete decontamination of a ship may not be possible (as discussed earlier) due to the techniques used for beaching ships in the major recycling yards in South Asia. However, the failure to impose any decontamination obligation whatsoever on the ship owners or the Flag State represents a gross neglect of the source principle by the Hong Kong Convention.

### D. *Prior Informed Consent*

As discussed earlier, the absence of intra-State notification and express requirement of consent from Recycling or Transit States significantly dilutes the prior informed consent norms in the Convention. This neglect of one of the seminal norms of international environment law can, as discussed earlier, severely cripple the ability to monitor the implementation of the Convention and take prompt remedial actions.

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<sup>196</sup> See Global NGO Platform on Shipbreaking, *supra* note 9.

<sup>197</sup> See Mikelis, *supra* note 128.

<sup>198</sup> *Id.*

<sup>199</sup> See Global NGO Platform on Shipbreaking, *supra* note 9.

<sup>200</sup> Ernst-Ulrich Petersmann, INTERNATIONAL AND EUROPEAN TRADE AND ENVIRONMENTAL LAW 15 (1995); See also *The Queen v. Secretary of State for the Environment*, Case C-293/97, 1999 E.C.R. I-2603, paras. 51, 52.

### E. *Environmental Justice*

The Basel Convention and the subsequent development of hazardous waste control norms like the Bamako Convention<sup>201</sup> were, in parts, an affirmation of the principle of environmental justice. They recognized the presence of gross economic disparities in the world and the consequent disparate impact of environmentally harmful activities on different countries in the world.<sup>202</sup> They were born out of the deep outrage at the abhorrent but widespread practice of dumping highly hazardous and toxic substance by the developed countries of the world in the developing countries. Recognizing that developing countries would not be able to deal with the consequences of trade in hazardous substances due to the absence of adequate political, legal, medical and economic infrastructure, it called for minimization of transboundary movement, particularly to developing countries, of hazardous substances and greater responsibility for the developed countries.<sup>203</sup>

The Hong Kong Convention however is premised on formal equality between developed and developing States. As discussed earlier, it does not allocate any special obligation on the developed States in terms of prior decontamination. Similarly, the creation of a Ship Recycling Fund – which would have been a categorical acknowledgement of the responsibility of the developed countries – has also not been dealt with by this Convention.

## X. CONCLUSION

To sum up, it is averred that end-of-life ships containing hazardous materials would indeed fall under the definition of “hazardous wastes” as provided in the Basel Convention when they are being exported for recycling. However due to the practical difficulties in using the Basel norms in the field of ship-breaking, a strong need has been felt for a separate legally binding international instrument on ship recycling. This led to the adoption of the Hong Kong International Convention for Safe and Environmentally Sound Recycling of Ships

It is, however, submitted that the Hong Kong Convention is not the solution to this pressing need. Admittedly, the Convention contains several fundamental advances (most notably the cradle-to-grave control) over the Basel regime. It must be acknowledged that the adoption of a cradle-to-grave control and an inclusion of uniform minimum technical standards for the recycling process can potentially

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<sup>201</sup> Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes Within Africa, Jan. 29, 1991, 30 I.L.M. 773.

<sup>202</sup> See Global NGO Platform on Shipbreaking, *supra* note 9.

<sup>203</sup> See Gudofsky, *supra* note 63.



have far-reaching implications for transforming the nature of ship-breaking industry.

Yet, there are several fatal flaws in the existing text of the Convention that may completely undermine the aforesaid improvement. Its failure to adequately take into account some of the key protective mechanisms of Basel Regime and the basic principles of International Environmental Law raise questions about its ability to attain its central objective of controlling the environmental damage caused by ship-recycling. Critically, there is a danger that the ability of parties to trade with non-parties may impede many States from acceding to the Convention. As non-accession would not bar import and export of end-of-life ships, Recycling States would have very little incentive to sign and ratify the Convention.

The disincentive to join the Convention may be further strengthened by the failure of the Convention Parties to agree on a Ship-Recycling Fund as a result of which the entire costs of upgradation of the recycling facilities will have to be borne by the concerned Recycling State alone. As a result, the costs of improvement may outweigh the economic benefits arising from them.