Cradle to Graving-Dock?: The Promises and Limits of Modern Shipbreaking Reform

Rebecca Prentiss Pskowski[1]

Table of Contents

---

[1] This article, prepared for the 2020 Admiralty Law Institute, is an updated and expanded version of an article forthcoming at 34 OCEAN YEARBOOK 489, and is provided with the consent of that publication. The author is a civilian attorney-advisor to the United States Coast Guard, but the views herein are her own, and should not be construed as reflecting the views of the Coast Guard or of the U.S. Department of Homeland Security. The author would like to thank Professor Robert Force for his invaluable advice and support in the formulation and drafting of this project.

> *Cradle,* [ ] the timber frame which is constructed round the hull of a ship while she is on the launching ways in the course of being built. When launched, the cradle slides down the ways with the ship.[2]
>
> *Graving Dock,* . . . The term originates from the old practice of graving a ship's bottom, *i.e.*, burning off the accumulated weed and paying it over with tar. . . . Today, a graving dock is synonymous with a dry-dock.[3]
>
> From the perspective of international regulation, the aim should be the setting of, implementation of and controlled compliance with high international standards for the entire life cycle of ships, in other words, from "cradle to grave" or from "makers to breakers."[4]

I. INTRODUCTION: THE STRANGE CASE OF THE *RONGDHONU,* EX *RAINBOW WARRIOR II*

Greenpeace, the international environmental organization, has been from its inception a seagoing outfit.[5] Its vessels' exploits include protests of nuclear tests, arctic drilling, and whaling.[6] In the late 1990s, Greenpeace activists began documenting the occupational and environmental conditions of shipbreaking yards in Asia.[7] In Alang, India, at open-air beaches where massive cargo vessels were disassembled with hand-held acetylene torches, Greenpeace representatives saw workers removing asbestos with their bare hands and toxic materials dumped into the sea or on nearby agricultural lands.[8] Greenpeace began targeting European shipowners who sent their decommissioned vessels to Indian beaches, where the ships were scrapped under environmental and labor conditions that would never be tolerated in a European country.[9] In 2003, the three-masted schooner *Rainbow Warrior II*, Greenpeace's flagship, anchored off Alang beach, in protest.[10]

---

[2] OXFORD COMPANION TO SHIPS & THE SEA 211 (Peter Kemp, ed. 1976).
[3] *Id.* at 351
[4] Nele Matz-Lück, *Safe and Sound Scrapping of "Rusty Buckets"?: The 2009 Hong Kong Ship Recycling Convention*, 19 REV. EUR. COMMUNITY & INT'L ENVTL. L. 95, 96 (2010).
[5] The organization's name was coined to christen a boat, which precursor organization Don't Make a Wave intended to sail in protest of nuclear tests in Alaska. *See* FRANK ZELKO, MAKE IT A GREEN PEACE!: THE RISE OF COUNTERCULTURAL ENVIRONMENTALISM 69-70 (2013).
[6] *Id.*
[7] Patrizia Heidegger, *The Role of the NGO Shipbreaking Platform for Making Ship Recycling Clean and Safe*, INT'L CONFERENCE ON SHIP RECYCLING, WORLD MAR. U., Apr. 8, 2013, https://issuu.com/worldmaritimeuniversity/docs/heidegger_-_the_role_of_the_ngo_shi. *See also* WILLIAM LANGEWIESCHE, THE OUTLAW SEA 212-16 (2004) (describing origins of Greenpeace shipbreaking campaign); Peter Rousmaniere & Nikhil Raj, *Shipbreaking in the Developing World: Problems and Prospects*, 13 INT'L J. OCCUPATIONAL & ENVTL. HEALTH 359 (2007).
[8] Heidegger, *supra* note 7.
[9] *Id.*; LANGEWIESCHE, *supra* note 7, at 215-16 (describing targeting of shipowner P&O Nedlloyd by Greenpeace).
[10] Matthew McClearn, *Dark Voyage*, CANADIAN BUS., Oct. 10, 2005, at 64. *See also* GREENPEACE, PLAYING HIDE AND SEEK: HOW THE SHIPPING INDUSTRY, PROTECTED BY FLAGS OF CONVENIENCE, DUMPS TOXIC WASTE ON SHIPBREAKING BEACHES 22 (Dec. 2003) ("The SV [] *Rainbow Warrior* of Greenpeace has been in Indian Waters and surroundings from 7 November 2003 until the beginning of December. Shipbreaking was one of the core issues.

The fledgling movement to clean up shipbreaking was galvanized by the case of the *Clemenceau*, a French aircraft carrier decommissioned in 1997. France's efforts to scrap the vessel, containing some 130 tons of asbestos, resulted in an international legal and public relations battle. After Turkey and Greece refused import, an attempted export to India was aborted at the last minute, the vessel called back to France, and ultimately sent to the United Kingdom for responsible disposal.[11] The activists who had fought to keep the *Clemenceau* from the beaching yards of the Subcontinent, Greenpeace chief among them, formally joined forces in 2005, incorporating as the NGO Shipbreaking Platform, united to fight for responsible ship recycling practices, inimically opposed to the practice of beaching.[12]

It was therefore somewhat of a surprise when, on a high tide in November, 2018, a certain three-masted vessel was driven onto the beach of Chattogram, Bangladesh, to be cut apart on the intertidal zone.[13]

The *Rongdhonu, ex Rainbow Warrior II*, had since 2013 sailed as a charity hospital ship, providing health care in remote coastal areas of the Bay of Bengal.[14] Before her reincarnation as a floating hospital, the *Rainbow Warrior II* sailed as the Greenpeace flagship for 22 years.[15] When Greenpeace retired her in 2011 and donated her to Friendship NGO for re-commissioning as a hospital ship, the transfer agreement provided Greenpeace a veto over any demolition plan, requiring the *Rhongdhou*'s former owner to approve the method of her eventual disposal.

And yet, there the anti-beaching campaign ship was, in November, 2018, on the beach in Chattogram, for every satellite that passed overhead to see. In a press release, republished on the Maritime Executive news website, cash buyer GMS, a major player in the shipbreaking markets of the Subcontinent, publicly congratulated Greenpeace for reconsidering its long-held opposition to beaching: "GMS is pleased to see [Greenpeace] has finally accepted the fact that responsible recycling in the Subcontinent is the most prudent option for shipowners worldwide... GMS congratulates both Greenpeace and Friendship for actively participating in the green transformation of the ship recycling industry in Bangladesh."[16]

The next day, November 15, Greenpeace published a *mea culpa* on its website:

> When we transferred the ship to Friendship in 2011 we retained the right of veto over any final disposal plan ... We should have consulted our partners in the NGO Shipbreaking Platform ... we did not. No excuse ... Upon realising our mistake, we began work to try and find an alternative way for the ship to be decommissioned, but this was not possible. The ship was beached and readied to be cut up ... Greenpeace does not believe that breaking ships apart on tidal beaches is green. Going

---

Although it has been difficult to work, a lot of information was gathered on the actual practise of the arrival and arrived end-of-life ships in India as well as in Bangladesh."), available at http://storage.googleapis.com/planet4-netherlands-stateless/2018/06/playing-hide-and-seek.pdf.

[11] Heidegger, *supra* note 7. *See also* MICHAEL GALLEY, SHIPBREAKING: HAZARDS AND LIABILITIES 128-136 (2014) (case study of the *Clemenceau*); TONY GEORGE PUTHUCHERRIL, FROM SHIPBREAKING TO SUSTAINABLE SHIP RECYCLING 81-86 (2010) (same).

[12] Heidegger, *supra* note 7.

[13] On April 2, 2018, the government of Bangladesh officially changed the English spelling of this port city from the more familiar "Chittagong" to "Chattogram." Mahadi Al Hasnat, *Is Chittagong University Chattogram University Now?*, DHAKA TRIB., Apr. 5, 2018, https://www.dhakatribune.com/bangladesh/education/2018/04/05/chittagong-university-chattagram-university-now/. This article will use the contemporary spelling, but will not alter quotes which used the prior spelling.

[14] Rongdhonu Hospital Ship, FRIENDSHIP NGO, https://friendship.ngo/rongdhonu-friendship-hospital-ship/.

[15] S.Z. Al-Mahmood, *Greenpeace's* Rainbow Warrior *Begins Refit as Bangladesh Hospital Ship*, GUARDIAN, Aug. 29, 2011, https://www.theguardian.com/environment/2011/aug/29/greenpeace-rainbow-warrior-bangladesh-hospital; Rainbow Warrior II *Retires, Finds Second Life as Floating Hospital*, GREENPEACE, Aug. 16, 2011, http://www.greenpeace.org/eastasia/news/stories/about/2011/Greenpeace-Rainbow-Warrior-II-retires/.

[16] *Ex*-Rainbow Warrior II *Beached in Chittagong for Recycling*, MAR. EXECUTIVE, Nov. 14, 2018, https://www.maritime-executive.com/corporate/ex-rainbow-warrior-ii-beached-in-chittagong-for-recycling.

> forward Greenpeace commits to urgently adopt an end-of-life ship policy, drafted with the help of the Shipbreaking Platform, to help ensure such errors do not occur in future.[17]

As it emerged, the mistake came down to a failure of corporate compliance culture.[18] According to Greenpeace Norway, the specialized Greenpeace vessel operations desk approved the Chattogram scrapping plan "without consulting either its own expertise or allies within the NGO Shipbreaking Platform or Basel Action Network."[19] Mike Townsley, the communications director at Greenpeace International, said the oversight occurred "[b]ecause we did not have a clear shipbreaking policy ... We apparently counted on the collective memory of the shipbreaking campaigns of ten years ago, and we seem to have thought that would suffice to always opt for clean and responsible ship recycling."[20] Greenpeace pledged to develop such a policy.[21]

After the gaffe was revealed, Greenpeace's efforts to retrieve the *Rongdhonu* from the Chattogram beach were unsuccessful.[22] Efforts continue to contain and remediate any negative environmental effects of this unusual breaking project.[23] As of this writing, Greenpeace, probably the most visible and recognizable member of the anti-beaching movement,[24] is no longer listed as a member or partner organization of the NGO Shipbreaking Platform.[25]

The strange fate of the *Rongdhou* highlights some of the inherent difficulties of enforcing sustainability practices in so-called "reverse supply chains."[26] In the two decades since global public attention was first drawn to the curious and tragic industry that is modern shipbreaking, legal, economic, and policy scholarship on the subject has blossomed.[27] The bulk of this work's analysis will be reserved for

---

[17] *Decommissioning the* Rongdhonu *(ex* Rainbow Warrior (II)*)*, GREENPEACE, Nov. 15, 2018, https://www.greenpeace.org/international/press-release/19341/statement-on-the-decommissioning-of-the-rongdhonu/.

[18] Gie Goris, *Rainbow Warrior on Shipbreaking Beach in Bangladesh,* MONDIAAL NIEUWS, Dec. 11, 2018, https://www.mo.be/en/news/rainbow-warrior-shipbreaking-beach-bangladesh.

[19] Quoted by *id.*

[20] Quoted by *id.*

[21] *Id.*

[22] *Id.*; *Decommissioning the* Rongdhonu, *supra* note 17. Greenpeace spokesman Townsley told *Der Spiegel* that the Bangladeshi breakers quoted a $10 million buyback price, which was forty times the hulk's value, and any recovery plan would have also incurred the cost of transportation and responsible recycling elsewhere. Nicolai Kwasniewski, *Verschrottung der* Rainbow Warrior II*: Wo die Umweltliebe von Greenpeace Endet* [*Scrapping the* Rainbow Warrior II: *Where Greenpeace's Environmental Love Ends*], DER SPIEGEL, Mar. 12, 2019, https://www.spiegel.de/wirtschaft/rainbow-warrior-ii-wo-die-umweltliebe-von-greenpeace-endet-a-1256754.html.

[23] Goris, *supra* note 18.

[24] Michael Galley, *Shipbreaking—A Convenient Washing of Hands?*, 12 MOUNTBATTEN J. LEGAL STUD. 96, 107 (2008) (in each of five shipbreaking law case studies, "the environmental pressure group Greenpeace has played a major role in raising awareness"); Rousmaniere & Raj, *supra* note 7, at 367; McClearn, *supra* note 10.

[25] *See Members & Partners*, NGO SHIPBREAKING PLATFORM, retrieved Feb. 4, 2020, https://www.shipbreakingplatform.org/about/members-partners/. *Der Spiegel* reports that NGO Shipbreaking Platform suspended Greenpeace's membership as a result of the *Rongdhou* debacle. Kwasniewski, *supra* note 22.

[26] "[S]hip-breaking operates as a form of 'reverse-flow' value chain of dismantling and re-production. Here, the flow is from developed to less-developed world and from [multinational] shipping company 'supplier' to local [less developed country] 'producer' and 'consumer.'" George Cairns, *A Critical Scenario Analysis of End-of-Life Ship Disposal: The "Bottom of the Pyramid" as Opportunity and Graveyard*, 10 CRITICAL PERSP. INT'L BUS. 172, 174 (2014). *See also* Joshin John et al., *Sustainable Operations in Reverse Supply Chain of Shipbuilding Business: Benefits of Green Practices*, 4 J. INDP'T J. MGMT. & PRODUCTION 563 (2013).

[27] *See, e.g.*, George M. Cairns, *Return to Chittagong: Ten Years Since the "Postcard"* 13 CRITICAL PERSP. INT'L BUS. 340, 341-42 (2017) (chronicling the dramatic expansion of business scholarship on the shipbreaking industry over the ten years since 2007). *See also* George M. Cairns, *Postcard from Chittagong: Wish You Were Here?,* 3 CRITICAL PERSP. INT'L BUS. 266, 267 (2007) ("The business and management literature, most notably that on international business, lacks any reference to 'ship breaking' or related terms with reference to Chittagong or Bangladesh–or to India or Pakistan").

three distinct contemporary efforts to subvert the flagging problem and modernize the shipbreaking industry, to the hopeful mutual benefit of yard workers, the environment, and all of us: the consumers who rely on an efficient and inexpensive global freight market to bring us blue jeans, gasoline, food, and construction materials.

II. DEVELOPMENT OF A TWENTY-FIRST CENTURY SCRAP MARKET

The shipbreaking[28] industry was born with the metal hull, in the mid-nineteenth century.[29] Initially, the same yards which constructed metal ships handled their deconstruction, in dry docks or at quayside.[30] Later, more specialized salvage docks came into use, still in the same developed countries of Europe and North America where the vessels had been built.[31] In the 1960s and 1970s labor costs and environmental regulations caused a shift to East Asia, where first Japan, then South Korea and Taiwan operated industrial shipyards on a similar industrial scale.[32]

The 1980s saw a curious technological regression (or disruption) in the shipbreaking industry. During that decade, new breakers opened shop on the Indian Subcontinent, in India, Pakistan, and Bangladesh.[33] These countries had cheap labor and lax environmental standards, but unlike in the prior geographical shift, from Europe to East Asia, South Asian entrepreneurs did not have the existing industrial infrastructure or upfront capital to disassemble ships in the industrial fashion. Instead, the Subcontinent

---

[28] The term "shipbreaking" is slowly falling out of favor. Formerly, it was used interchangeably with "ship scrapping," "ship decommissioning," or "ship demolition," but today "ship recycling" is increasingly preferred. In an interview first published in 2000, International Chamber of Shipping advisor Brian Parkinson introduced the term to journalist William Langewiesche: "'We want to know how we can present the ship to the recyclers in the best possible way.' I complimented him on the word 'recyclers,' and he said yes, right, it was rather good, wasn't it?" LANGEWIESCHE, *supra* note 7, at 217, previously published at *The Shipbreakers*, ATLANTIC, Aug. 2000, at 31. This text will primarily use the term "shipbreaking," both for simplicity's sake and to emphasize that the re-branding of the practice as "ship recycling," can contribute to a "greenwashing" effect, lionizing an industry that, as we shall see, still has far to come to live up to the goal of "sustainable ship recycling." *See* Juan Ignacio Alcaidea, Emilio Rodríguez-Díaz & Francisco Piniella, *European Policies on Ship Recycling: A Stakeholder Survey*, 81 MARINE POL'Y 262, 266 (2017) ("The current concept of ship recycling does not appear to include the management of toxic waste . . . . The scrapping activity is based on recovery of the ship's metal, and there is no interest in the materials that have no commercial value, which affirms this as a metal recovery industry, not one of recycling."); Galley, *supra* note 24, at 97 ("Shipbreaking–also known as ship scrapping/wrecking/disposal/dismantling, and increasingly the more benign and anodyne 'ship recycling'"); Holly H. Hillyer, *The Hard Reality of Breaking Up: The Global Transboundary Movement of Ocean Vessel Demolition and Waste*, 13 VT. J. ENVTL. L. 755, 756-57 (2012) ("in most developing countries, the process is better labeled shipbreaking, since it is strictly the act by which a ship is rendered into its reusable components"). If "ship recycling" was introduced, in part, to euphemistically rebrand "shipbreaking," there are signs that the rusty taint of industry practices is starting to adhere to the new term, with one recent commentary observing, "Ship recycling is a term which needs rescuing." Tom Holmer & Stephanie Draper, *A Call for Clarity*, MAR. RISK INT'L, May 14, 2018, https://www.maritime-risk-intl.com/environment/a-call-for-clarity-129943.htm.

[29] OXFORD COMPANION TO SHIPS & THE SEA , *supra* note 2, at 790-91 (commercial iron construction began circa 1843; steel circa 1860); L. Milton Glisson & Harry L. Sink, *Maritime Shipbreaking: Law and Policy, Part III*, 73 J. TRANSP. L. LOGISTICS & POL'Y, 463, 464 (2006).

[30] Glisson and Sink, *supra* note 29, at 464.

[31] *Id.*

[32] *Id.*; PUTHUCHERRIL, *supra* note 11, at 11. For a discussion of the historical role of East Asian shipbreakers, and the light that history sheds on current controversies, see Emmanuel Yujuico, *Demandeur Pays: The EU and Funding Improvements in South Asian Ship Recycling Practices*, 67 TRANSP. RES. PART A 340 (2014). For a journalist's description of the operation of a quayside shipbreaking yard in Kaohsiung, Tawain, circa 1979, see Jim Shaw, *Getting Rid of Old Ships: The World of Shipbreaking*, PACIFIC MAR., Mar. 1, 2018, https://www.pacmar.com/story/2018/03/01/features/getting-rid-of-old-ships-the-world-of-shipbreaking/593.html.

[33] Yujuico, *supra* note 32, at 342.

boasted long, wide tidal flats and robust markets for reclaimed steel and other scrapping byproducts.[34] Absent domestic labor and environmental protections, a new method of shipbreaking came to be: an end-of-life vessel was emptied of all cargo and non-essential equipment, and, floating high on a high tide, bobbing far above her load lines, was driven, throttle down, onto the subcontinent's unusually long and shallow tidal mudflats.[35] Cutting began immediately, by use of handheld blowtorches, and, as pieces of the behemoth fell away, cables were attached to winch the hulk up the beach, by hand or mechanical power. Almost every aspect of the operation was manual, capital investment to start up was minimal, and, although the work was arduous and treacherous, the labor supply was plentiful.

This new model has been remarkably successful, at least economically speaking. By the mid-1990s India and Bangladesh dominated the world scrapping market, and today more than eighty percent of vessel tonnage is decommissioned by the "beaching" method.[36] Turkey and China are the only other two nations with significant scrapping capacity (though, as of the start of 2019, China has banned importation of foreign-flagged vessels for recycling).[37]

The average ocean-going commercial vessel will have an operational life of twenty-eight years.[38] Every year, some 700 vessels are sold on the scrap market.[39] In most circumstances, an owner seeking to sell an older vessel will choose to decommission the vessel when the scrap price is higher than the price on the second-hand market.[40] There are exceptions, where the scrap market may be the only market, such as in the case of the forced retirement of single-hull tanker vessels in the early 2000s, mandated by the International Maritime Organization (IMO) as an oil-spill prevention measure.[41] More recently, the opening of the new, broader Panama Canal caused the second-hand value of Panamax vessels to crater, consigning many otherwise-sound ships to the scrappers after fifteen years' or less sea service.[42] IMO 2020, the

---

[34] The differential demand for scrap steel is an often-overlooked contributing factor to the high per-ton prices paid by South Asian yards, and the consequent industry preference for South Asian breakers. India, Pakistan, and Bangladesh are rapidly urbanizing nations, with high demand for construction steel inputs, including bars, rods, and corners. *Id.* at 342-43. Structural shipbuilding steel is certified by classification societies, and "[g]enerally, marine quality steel is considered superior compared to those employed in land-based engineering." Kodungallur Sivaprasad & C.G. Nandakumar, *Design for Ship Recycling*, 8 SHIPS & OFFSHORE STRUCTURES 214, 220 (2013). *See also* NIKOS MIKELIS, THE RECYCLING OF SHIPS 9 (2d ed, Oct. 2019). Rerolling mills heat and reshape steel hull plates, but do not heat the steel to its melting point. MIKELIS, *supra.* "Consequently, South Asia's recyclers have the advantage of commanding better prices for flat rerollable steel compared to scrap steel destined for melting. However, in recent years, India's Ministry of Steel has imposed limits on the use of rerolled steel for making bars whose diameter is greater than 8mm and consequently." *Id.* This regulatory development has placed Indian breakers at a competitive disadvantage, compared to yards in Pakistan and Bangladesh. *Id.* Descriptions of rerolling mills in Bangladesh and India can be found in ROLAND BUERK, BREAKING SHIPS 136-40 (2006) and LANGEWIESCHE, *supra* note 7, at 221-22.

[35] Alang "boasts tides of about 30 feet, enabling breakers to bring ships in close to shore." McClearn, *supra* note 10. BUERK, *supra* note 34, provides an account of the origins and early development of the Bangladeshi beaching yards, including the role of hulks left crippled by the 1971 Liberation War, at 89-100.

[36] "674 ocean-going commercial ships and offshore units were sold to the scrap yards in 2019. Of these vessels, 469 large tankers, bulkers, floating platforms, cargo- and passenger ships were broken down on only three beaches in Bangladesh, India and Pakistan, amounting to near 90% of the gross tonnage dismantled globally" Press Release, Platform Publishes List of Ships Dismantled Worldwide in 2019, NGO Shipbreaking Platform, Feb. 4, 2020, https://www.shipbreakingplatform.org/platform-publishes-list-2019/.

[37] Nikos Mikelis, *Two Roads for Hong Kong Convention to Enter into Force*, MAR. EXECUTIVE, Mar. 31, 2019, https://www.maritime-executive.com/editorials/two-roads-for-hong-kong-convent ion-to-enter-into-force.

[38] L. Milton Glisson & Harry L. Sink, *The Environmental Impact of Maritime Shipbreaking*, 73 J. TRANSP. L., LOGISTICS & POL'Y 73, 76 (2006).

[39] *Id.*

[40] Siri Pettersen Strandenes, *Economics of the Markets for Ships*, *in* THE HANDBOOK OF MARITIME ECONOMICS AND BUSINESS (Costas Th. Grammenos, ed., 2d ed. 2010) at 217, 227.

[41] Glisson & Sink, *supra* note 37, at 79. *See also* BUERK, *supra* note 34, at 99-100 (describing impact of single-hull phase out on Chattogram breaking industry).

[42] Cairns, *Return to Chittagong, supra* note 27, at 343-44 (references omitted).

international regulation which drastically cut permissible sulfur emissions as of January 1, 2020, may cause a similar recycling uptick, as shipowners opt for newer tonnage equipped with scrubbers or powered by LNG.[43] A vessel's price on the second-hand market will vary with the conditions of the freight market; if there is excess tonnage, second-hand prices will be low, while if the market is strong and demanding more tonnage, second-hand prices will rise commensurately.[44] Prices on the scrap market, on the other hand, are affected by world scrap steel prices and shipbreaking yards' capacity.[45]

Shipowners employ brokers to sell a retiring vessel on a dollar per lightship displacement ton basis.[46] While it is possible to sell directly to a breaking yard, most often the transaction is made through a specialist "cash buyer," who plays an important mercantile role as the intermediary between shipowner and breaking yard.[47] While cash buyers' market expertise and capitalization may be invaluable to the shipowner, their intermediary purchases also serve to insulate shipowners from possible legal liability or reputational harm for labor and environmental harms caused by a vessel's demolition.[48] The nominal purchaser of a condemned vessel is often an offshore shell company standing in the shoes of the controlling cash buyer, further insulating the selling shipowner.[49] The cash buyer may purchase the vessel either on an "As-Is-Where-Is" basis, or on a delivered basis.[50] The vessel will transit to the breaking facility, most often on the Indian Subcontinent. Vessels may carry cargo for some portion of their final voyage, or may travel light.[51]

---

[43] *Older Tonnage Could Be Headed for Scrapping, Ahead of the IMO 2020 Rule*, HELLENIC SHIPPING NEWS, Nov. 22, 2019, https://www.hellenicshippingnews.com/older-tonnage-could-be-headed-for-scrapping-ahead-of-the-imo-2020-rule/. "[Even i]n the absence [of] scrubber-fitted ships, charterers are looking for the most fuel-efficient designs on offer, with the probability that ageing fuel-guzzling vessels will become early candidates for recycling." Mike Wackett, *Investment in Scrubbers Starting to Pay Off as Owners are Offered "Double" Rates*, LOADSTAR, Jan. 29, 2020, https://theloadstar.com/investment-in-scrubbers-starting-to-pay-off-as-carriers-are-offered-double-rates/.

[44] "[E]arnings, and thus freight levels, have a negative effect on the decision to send a ship to the demolition yards. The higher the freight rates the higher the earnings from ship operation. Thus high freight rates allow even inefficient, aged and technologically obsolete vessels to operate profitably." Thanasis Karlis & Dionysios Polemis, *Ship Demolition Activity: A Monetary Flow Process Approach*, 30 SCI. J. MAR. RES. 128, 129 (2016).

[45] *Id.* at 129-30; Amir H. Alizadeh & Nikos K. Nomikos, *An Overview of the Dry Bulk Shipping Industry*, *in* THE HANDBOOK OF MARITIME ECONOMICS AND BUSINESS, *supra* note 40, at 319, 347-48.

[46] Karlis & Polemis, *supra* note 44, at 129; MIKELIS, *supra* note 34, at 17. *See also* Alizadeh & Nomikos, *supra* note 45, at 346. A vessel's origin may affect the offered price: "[A]s there is no market for Russian equipment … [Russian] ships are not preferred … [S]hips constructed in the United States give the highest return in terms of the quality and value of the steel recovered … Japanese ships are considered to be the cheapest and quickest to break." PUTHUCHERRIL, *supra* note 11, at 32 n. 164.

[47] Karlis & Polemis, *supra* note 44, at 130. "Unlike a broker, the [c]ash [b]uyer takes legal ownership of the vessel (albeit for a limited time). Cash buyers are involved in some eighty percent of shipbreaking contracts. Juan Ignacio Alcaidea, Francisco Piniella & Emilio Rodríguez-Díaza, *The "Mirror Flags": Ship Registration in Globalised Ship Breaking Industry*, 48 TRANSP. RES. PART D 378, 379 (2016). "Direct sales require a detailed knowledge of the recycling market, and specific information about the recycling country, which the majority of shipowners are unlikely to possess. . . . Selling directly to a recycling facility is therefore likely to be an option only for larger shipping companies, with sufficient in-house capacity to deal with the process. The route therefore taken in the vast majority of sales of end of life ships will be through a cash buyer who will purchase the vessel, either during its final voyage or at the point of handover to the recycling facility." INT'L CHAMBER OF SHIPPING, SHIPPING INDUSTRY GUIDELINES ON TRANSITIONAL MEASURES FOR SHIPOWNERS SELLING SHIPS FOR RECYCLING 12 (2d ed. 2016).

[48] "Cash [b]uyers . . . provide indispensable services to the shipowner, namely: expertise in a specialized and difficult market; *reduction to the shipowner's risk*; payment in cash . . . (as opposed to payment by Letter of Credit." MIKELIS, *supra* note 34, at 17 (emphasis added).

[49] *See, e.g.,* Margot Gibbs, *"A Moral Crime": Leaked Contract Reveals how Shipowners Wash Their Hands of Toxic Vessels via Offshore World*, FINANCE UNCOVERED, Jul. 23, 2019 (detailing leaked contract for sale for tanker *Coastal Energy Resolution*, made by Spanish shipowner Cepsa and offshore shell Conquistador Shipping, and communications revealing Conquistador to be an alter ego of cash buyer GMS).

[50] Karlis & Polemis, *supra* note 44, at 130-31. In the former circumstance, the cash buyer will become, for a short time, the vessel owner. *Id. See also* PUTHUCHERRIL, *supra* note 11, at 32.

[51] *See* PUTHUCHERRIL, *supra* note 11, at 33.

Upon arriving at her final destination—Alang, in India, Chattogram, in Bangladesh, or Gadani, in Pakistan—the breaking yard takes delivery from the cash buyer and the condemned vessel, floating high above her waterline, waits for the full or new moon, which, twice a month, will bring an unusually high tide.[52]

> When ... the tide [is] highest, a beaching specialist essentially aims for a flag or fire burning on the shore and heads for it at full throttle. Once the tide has ebbed, workers cut holes in the hull so that the next tide will wash away pollutants from the interior. More holes are cut for ventilation, light and escape routes should fire break out ... [T]he ship is swarmed by torch-cutters who disassemble it from bow to stern. They cut the hull into large segments, which can be pulled farther up the beach by powerful winches. Bit by bit, these segments are chopped into 400-pound plates, the approximate maximum weight that can be lifted onto a truck by hand.[53]

This is exceedingly dangerous work. Explosions result when torches ignite latent bunker fumes or other gases, workers can be crushed by falling steel plates and equipment, and workers themselves may fall to their deaths, as they habitually scale the anchor chains of beached vessels, and work at height without safety harnesses.[54] The inherently dangerous nature of the work is exacerbated by the density of workers toiling in close proximity and the general lack of personal safety equipment, such as respirators and safety glasses.[55] Bangladesh alone saw thirty-nine shipbreaking fatalities in the two-year period of 2017 and 2018.[56]

Despite the risks, jobs at the shipbreaking yards are highly desirable. Most of the men who work on the beaches come from rural and impoverished inland communities.[57] The daily wage for a shipbreaker far exceeds what they can earn as a day laborer anywhere else in the economy.[58] These same economic forces draw underage workers; the Bangladeshi industry, in particular, has been sharply criticized for the persistent use of child labor.[59]

Even men who leave their shipbreaking careers with life and limb intact are not unscathed by their years on the beach. Working without basic protective equipment, breakers are exposed to asbestos, PCBs,

---

[52] *Id.* n. 167.

[53] McClearn, *supra* note 10. For more detailed accounts of the beaching process, see BUERK, *supra* note 34, and LANGEWIESCHE, *supra* note 7.

[54] *See, e.g.*, Rousmaniere & Raj, *supra* note 7, at 365; Anwar Hussain, *Poor Workplace Safety Plagues Ship Breaking Industry*, DHAKA TRIBUNE, Apr. 8, 2019, https://www.dhakatribune.com/bangladesh/nation/2019/04/08/poor-workplace-safety-plagues-ship-breaking-industry; McClearn, *supra* note 10; Mostafa Yousuf, *Two Killed in Shipyard Blast*, DAILY STAR, Feb. 19, 2019, https://www.thedailystar.net/country/news/worker-killed-sitakunda-shipbreaking-yard-1703779.

[55] McClearn, *supra* note 10. Dr. Tapan Kumar Nath, who has run a mobile clinic in Chattogram, says "I meet workers with lung capacity as low as 20 percent. Many of these workers have been working on the shipyards for 25 years with dangerous gasses and asbestos. The accidents that kill many workers a year are one thing, but asbestos is the big silent killer. It leads to serious respiratory illness and kills the workers slowly." Norma J. Martinez, *Maersk and the Hazardous Waste in Bangladesh*, DANWATCH, Oct. 15, 2016, https://old.danwatch.dk/en/undersogelse/maersk-og-det-farlige-affald-i-bangladesh/.

[56] Hussain, *supra* note 54.

[57] Rousmaniere & Raj, *supra* note 7, at 362-63.

[58] *Id.* Shipbreakers in Alang, circa 2007, were earning approximately 200 rupees daily (US$5), compared to the 35 or 50 rupees these men could have expected from agricultural work. *Id.*

[59] Shashank Bengali, *Adult and Underage Workers Risk Their Lives in Bangladesh's Rising Ship-Breaking Industry*, L.A. TIMES, Mar. 9, 2016, https://www.latimes.com/world/asia/la-fg-bangladesh-ships-20160309-story.html.

and heavy metals, among other occupational health hazards.[60] An Indian government study projected that as many as sixteen percent of the Alang shipbreaking workforce suffers from asbestosis.[61]

III. THE FLAGGING PROBLEM

A. Flags of Convenience

All vessels must have a nationality, a flag State.[62] The flag State exercises general jurisdiction over registered vessels.[63] The United Nation Convention on the Law of the Sea (UNCLOS) requires that there be a "genuine link" between the vessel and the flag State, but, lacking a definition, the genuine link requirement has, in practice, been satisfied by the registry relationship alone. Because of the ease of satisfying the genuine link requirement, and because "[e]very State shall fix the conditions for the grant of its nationality to ships,"[64] over the past century an international market in flagging services has developed, where nations compete to offer convenient, low-cost, and low-regulatory burden registration to merchant shipowners.[65] These nations are referred to as "open registries," because, unlike other registries, they make few if any stipulations as to the nationality of vessels' owners, operators, and crew.[66] Open registries, also known as "flags of convenience," now predominate in the world merchant fleet.[67]

Because some open registry States have been unwilling (or unable) to provide meaningful enforcement of international maritime conventions and norms, port State control has developed as a parallel enforcement regime, exercising jurisdiction over foreign-flagged vessels in their ports, under the territorial presence principle.[68] By voluntarily sailing into a foreign port, a vessel is deemed to have consented to the limited jurisdiction of the port State.[69] A port State authority, upon finding a violation of a relevant labor, safety, or environmental standard, may detain the foreign vessel, and/or refer the vessel to its flag State for further investigation and sanction. Port States have joined together in enforcement alliances, based on memorandums of understanding (MoUs), to pool information and standardize inspection regimes.[70] If an enforcement MoU network finds that a given flag State's vessels are prone to serious violations, the flag

---

[60] "Ships constructed prior to 1980, it is believed, almost invariably contain asbestos used as thermal insulator for pipes and bulkheads." Saurabh Bhattacharjee, *From Basel to Hong Kong: International Environmental Regulation of Ship-Recycling Takes One Step Forward and Two Steps Back*, 1 TRADE L. & DEV. 193, 199 n. 22 (2009). *See also* Galley, *supra* note 24, at 101; McClearn, *supra* note 10.

[61] Galley, *supra* note 24, at 98; Rousmaniere & Raj, *supra* note 7, at 367.

[62] *See, generally*, Eric Powell, *Taming the Beast: How the International Legal Regime Creates and Contains Flags of Convenience*, 19 ANN. SURV. INT'L & COMP. L. 263, 269 (2013) ("the law of the flag is the internationally accepted starting point of high seas jurisdiction."); H. Edwin Anderson III, *The Nationality of Ships and Flags of Convenience: Economics, Politics, and Alternatives*, 21 TUL. MAR. L.J. 139 (1996).

[63] Anderson, *supra* note 62, at 140.

[64] UNCLOS, Art. 91.

[65] Anderson, *supra* note 62, at 156. *See generally,* ELIZABETH R. DESOMBRE, FLAGGING STANDARDS: GLOBALIZATION AND ENVIRONMENTAL, SAFETY, AND LABOR REGULATIONS AT SEA (2006).

[66] Anderson, *supra* note 62, at 140.

[67] *Id.* at 157. There is no official definition of the term, but the most commonly cited definition identifies the following elements: 1) the country of registry allows for vessel ownership by non-citizens; 2) ships may be registered easily, usually at a consulate abroad (or now, over the internet); 3) taxes and fees are very low; 4) the flag State has registered tonnage disproportionate to the size of its economy or national security needs, but registry fees may play a substantial role its national income; 5) ships may be manned by non-nationals; and 6) the flag State "has neither the power nor the administrative machinery to effectively impose any governmental or international regulations; nor has the country even the wish or the power to control the companies themselves." *Id.* at 157-58.

[68] Powell, *supra* note 62, at 291.

[69] *Id.* at 293.

[70] *Id.* The two predominant MoUs are the Paris MOU (North Atlantic nations) and the Tokyo MOU (Pacific nations). Most of the world's port States are party to at least one enforcement MoU. *Id.*

may be placed on a "grey" or "black" list, subjecting that nation's registered vessels to enhanced enforcement regimes—more frequent inspections and stiffer detention policies. Vessel owners will be reluctant to register with a black list flag, and open registries with good compliance records may advertise their "white list" status on the flag of convenience marketplace to shipowners eager to avoid costly port detentions.[71] The port State control regime thus works to improve compliance on a national or registry basis, not just a vessel-by-vessel basis.[72]

B. End-of-Life Flags

While port State control has proved generally, though not optimally, effective in enforcing international maritime safety, environmental, and labor standards,[73] the port State enforcement regime is particularly ill-suited to tackling the shipbreaking challenge.[74] As discussed immediately above, the port State control enforcement mechanism relies on the reputational and commercial harm suffered by flags of convenience when they appear on black or gray lists. Ships in commerce must move freely from one port and one nation to the next, and frequent inspections, or worse, lengthy detentions, are a powerful deterrent to the owner of a commercial trading vessel, be that trade cargo, passenger, or fishing.

The shipowner whose vessel is a floating hunk of scrap metal, valued by the lightweight displacement ton, is not so concerned with the ease of port entry and clearance. The only concern is whether she will be accepted at her final destination—which is, most often, a beach in India, Pakistan, or Bangladesh.[75]

This gap has led to the development of a sub-class of flags of convenience—the end-of-life flag.[76] The end-of-life flag is the most convenient of the convenient, with registration packages available for purchase entirely online, without even the need to set up a mailbox or "ghost" company to establish nationality.[77] A "last voyage package" typically "includes fast-track registration procedures, valid only for a very limited period of time, at a special lower price."[78]

---

[71] *Id.*; Anderson, *supra* note 62, at 293.

[72] DESOMBRE, *supra* note 65, at 97–98.

[73] "[P]ort State control is a highly relevant factor in maintaining shipping standards," but "not a panacea." Anderson, *supra* note 62, at 291, 293.

[74] "The various Memorandums of Understanding (MoU) are primarily focused on the operational life of the ship." Alcaidea et al., *supra* note 47, at 382. "Whilst port state control may be successful in reducing some substandard practices of the shipping industry and dissuade some ship owners from using the worst [flags of convenience], when a vessel reaches its end-of-life and commences its last voyage towards the shipbreaking yard, there is no scope and incentive for a port state to intervene." NGO SHIPBREAKING PLATFORM, *What a Difference a Flag Makes: Why Ship Owners' Responsibility to Ensure Sustainable Ship Recycling Needs to Go Beyond Flag State Jurisdiction,* Briefing Paper, Apr. 2015, at 13.

[75] Bhattacharjee, *supra* note 60, at 204. While scrapping yards lack traditional port state control, the host nations do retain the right to refuse entry to individual vessels bound for the beaches. This right has been exercised by Turkey, in connection with the Basel Convention, discussed further *infra*. *See, e.g.,* Michael N. Tsimplis, *The Hong Kong Convention on the Recycling of Ships*, LLOYD'S MAR. & COM. L.Q., May 26, 2010, at 305, 312. However, there are many counter-examples, where shipbreaking nations accepted clearly questionable vessels—perhaps the most curious being the case of the *Riky*, a retired Danish ferry. Some sources say the *Riky* was sailed onto Alang beach under the flag of North Korea, others maintain that she was flying the flag of the fictional nation "Roxa." *See* PUTHUCHERRIL, *supra* note 11, at 79 n. 184; Gopal Krishna, *The Scrapping of* Riky, INDIA TOGETHER, July 16, 2008, http://www.indiatogether.org/riky-environment.

[76] Alcaidea et al., *supra* note 47; NGO SHIPBREAKING PLATFORM, *supra* note 74. For general discussion of the market specialization of various open registries into "regulatory niches," see DESOMBRE, *supra* note 65, at 46-53.

[77] NGO SHIPBREAKING PLATFORM, *supra* note 74, at 16.

[78] *Id.* The registry of St. Kitts & Nevis, operating out of a London suburb, reportedly offers short-term registration for approximately £5,250. Margot Gibbs, *Revealed: How a UK Company Is Using a Caribbean Tax Haven to Cash in on Scrapping Toxic Ships in One of the World's Poorest Countries*, INDEPENDENT, Feb. 20, 2019,

A simple comparison of the proportionate registration of scrapped vessels, as compared to the distribution of registrations in the world fleet, reveals disproportionate representation of certain flags. In 2008: Tuvalu, St. Kitts & Nevis, St. Vincent & the Grenadines, Mongolia, the Comoros, Cambodia, and Dominica accounted for nearly twenty percent of recycled vessel tonnage and less than two percent of the fleet in service.[79] The disproportionate representation of these end-of-life flags on the beaches of South Asia is a "function of the low fees, low crewing standards, high anonymity and short-term registration that these States offer as [flags of convenience]."[80]

A vessel which has spent its entire working life sailing under a white-flag open registry may change its registry for a final voyage, and simultaneously change its name and remove corporate logos.[81] An empirical review of registry and scrapping data found that forty percent of beached vessels had changed flag shortly prior to decommissioning: "When arriving at shipbreaking yards in countries on the Indian subcontinent, ships previously registered under a white flag were now flying flags listed as grey or black."[82] Flags which have been implicated in this market include the Comoros, Sierra Leone, St. Kitts & Nevis, Tanzania, and Tuvalu.[83]

IV. LEGAL REGIMES

A. The Basel Convention

The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal addresses the export of hazardous wastes from wealthy, developed nations to poorer, developing nations.[84] The Basel Convention has three main objectives: to minimize the manufacture of hazardous wastes; to encourage disposal of waste as close as possible to its point of origin; and to ensure that disposal is as environmentally responsible.[85] Signatories may only export waste to other signatories, and only with the receiving nation's prior informed consent.[86] Receiving nations may prohibit import of hazardous waste, either unilaterally or on a case-by-case basis.[87]

The Basel Convention makes no special provisions for ship-recycling. Shipowners and shipbreakers have argued that ships bound for scrapyards are not covered by the import/export restrictions

---

https://www.independent.co.uk/news/uk/home-news/ship-scrapping-skanreg-st-kitts-nevis-maritime-investigation-a8780796.html.

[79] MARIA SARRAF ET AL., WORLD BANK, REPORT NO. 58275-SAS, THE SHIP BREAKING AND RECYCLING INDUSTRY IN BANGLADESH AND PAKISTAN 52 (2010).

[80] Michael Galley, *Flagging Interest: Ship Registration, Owner Anonymity, and Sub-Standard Shipping*, 14 MOUNTBATTEN J. LEGAL STUD. 87, 101 (2013).

[81] *See, e.g.*, Gibbs, *supra* note 49 (contract of sale requires cash buyer to reflag and rename vessel, and alter any funnel markings, "immediately upon delivery"); Ove Heimsvik, Tide Carrier *er Alt Under Controll?* [Tide Carrier*, is Everything Under Control?*], AFTENBLADET, Aug. 26, 2017, https://www.aftenbladet.no/magasin/i/bpkw5/tide-carrier-er-alt-under-kontroll (describing concurrent sale, reflagging, name change, and alteration to funnel logo in the case of the *Eide Carrier*/*Tide Carrier*/*Harrier*).

[82] Alcaidea et al., *supra* note 47, at 386. Sale to a cash buyer "is often accompanied by a change of flag and certificates. For insurance reasons it may be financially attractive to have a certificate issued specifically for the final voyage to demolition." Thomas Ormond, *Enforcing EU Environmental Law Outside Europe? The Case of Ship Dismantling,* ENVTL. L. NETWORK INT'L REV., Mar. 2009, at 17–18 (footnote omitted).

[83] Alcaidea et al., *supra* note 47, at 386. *See also* NGO SHIPBREAKING PLATFORM, *supra* note 74, at 16–20.

[84] Bhattacharjee, *supra* note 60, at 205.

[85] *Id.* at 205–06.

[86] Tsimplis, *supra* note 75, at 305, 309.

[87] *Id.*

of the Basel Convention, on the theory that operational vessels do not fall under the Convention's definition of "waste."[88]

The Basel Convention defines "waste" 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."[89] Commercial vessels at the end of their working lives will invariably contain materials considered hazardous under the Convention—including, but not limited to, waste oils, polychlorinated biphenyls (PCBs), zinc compounds, lead compounds, and asbestos.[90] A ship would therefore seem to be "waste" when it arrives at its final destination—when it is "disposed"—though, as noted, shipowners have argued that ships can never be considered "waste" under the Convention, so long as they remain under their own power. Pre-cleaning of vessels, to remove all hazardous materials before export, is not a practical option, as removing all hazardous material, including asbestos insulation on pipes and in engine rooms, and oil sludge accumulated in the bottom of fuel tanks, will render the vessel unsafe and unseaworthy for her final voyage.

Assuming that a vessel may be properly categorized as waste, the remaining question is *when* the vessel becomes waste—either when it is disposed, or, more subjectively, when its owner develops the *intent* to dispose of it. A shipowner might, for example, not declare its intent to scrap a vessel until it had reached international waters, or the territorial waters of the recycling state.[91] "By all means, it is hard to prove the subjective intention of the seller to dispose of the vessel as hazardous waste while it could—technically—still continue to trade."[92]

An additional challenge in applying the Basel Convention to shipbreaking operations is the difficulty in identifying the "exporting state." Some commentators, including State parties, have argued that the flag State should always be considered the exporting State.[93] *Quaere* what result if a vessel is re-flagged during her final voyage—which State would be considered to be exporting the vessel? Additional challenges arise from the nature of the modern open registries or flags of convenience, which means a large proportion of the global fleet (and a disproportionate number of vessels bound for demolition) are flagged by States without the ability or desire to exercise meaningful jurisdictional control.[94] The logical alternative, to consider the last port of call before dismantling the exporting State, has its own challenges, especially where the intent to recycle the vessel is not announced until after departure.[95]

A fundamental obstacle to the application of the Basel Convention to shipbreaking contracts is the resistance of the importing Asian states.[96] While embracing and enforcing the Convention in regards to other forms of hazardous waste, these nations largely lack the political will to prevent the import of vessels bound for the beaches, presumably because of the negative economic implications of such enforcement.[97] There are exceptions—in November 2019, the High Court of Bangladesh held that the import of former Maersk floating production storage and offloading (FPSO) vessel *North Sea Producer* had been illegal, because the importers did not disclose the full array of hazardous materials onboard, including

---

[88] Cairns, *Return to Chittagong*, *supra* note 27, at 342. *See also* Gabriela Argüello Moncayo, *International Law on Ship Recycling and Its Interface with EU Law*, 109 MARINE POLLUTION BULL. 301, 309 (2016); Bhattacharjee, *supra* note 60, at 209; Ormond, *supra* note 82, at 17.
[89] Art. 2(1). *See e.g.*, Argüello Moncayo, *supra* note 88, at 307; Ormond, *supra* note 82, at 17.
[90] Tsimplis, *supra* note 75, at 311.
[91] Paridhi Poddar & Sarthak Sood, *Revisiting the Shipbreaking Industry in India: Axing Out Environmental Damage, Labour Rights' Violation and Economic Myopia*, 8 NAT'L U. JURID. SCI. L. REV. 245, 250 (2015).
[92] Henning Jessen, *Maritime Transport Law and the European Union in the 21st Century*, *in* MARITIME LAW—CURRENT DEVELOPMENTS AND PERSPECTIVES: PUBLICATION ON THE OCCASION OF THE 35TH ANNIVERSARY OF THE INSTITUTE FOR THE LAW OF THE SEA AND MARITIME LAW (HAMBURG) 51, 58 (Peter Ehlers & Marian Paschke, eds., 2018).
[93] Argüello Moncayo, *supra* note 88, at 303.
[94] *Id.*
[95] Bhattacharjee, *supra* note 58, at 215.
[96] Ormond, *supra* note 82, at 18.
[97] *Id.*

impermissible levels of radiation.[98] The illegal import cannot be returned—the vessel sat, half-butchered, on Chattogram beach. Demolition had been halted since a 2017 court injunction, and now government agencies will assume the responsibility for completing the job.[99] The court's latest ruling directed local authorities to exercise stricter scrutiny over cash buyers and vessels entering under black or grey flags.[100]

B. The Basel Ban Amendment

After the Basel Convention's entry into force, critics argued that it failed to prevent the flow of hazardous materials from Western, developed nations, into less-developed countries. They pointed out that the Convention's intent could be circumvented by declaring transboundary shipments as materials designated for recycling or recovery,[101] and that "prior informed consent" was an inadequate standard for hazardous material export given the unequal power dynamic between the exporting, developed nation and the importing, less-developed nation.[102]

These criticisms led to the adoption of the resolution known as the Ban Amendment, or the Basel Ban, in 1995.[103] The Ban prohibits all exports of hazardous waste from Organization for Economic Cooperation and Development (OECD) members to non-OECD nations.[104] Entry into force required the ratification of three-quarters of the nations party to the Convention as of the introduction of the Ban Amendment, in 1995.[105] In September 6, 2019, Croatia deposited its instrument of ratification, and the Amendment finally passed the necessary threshold for entry into force.[106] As of December 5, 2019, the Ban Amendment is binding on all Basel Convention signatories who adopted the Amendment, and any nation that accedes to the Convention after that date.[107] As will be discussed further, the greatest impact of the Ban Amendment has been in Europe, where the language of the Ban Amendment was incorporated into EU law in 2006.

---

[98] *NGOs Win FPSO* North Sea Producer *Shipbreaking Case*, MAR. EXECUTIVE, Nov. 20, 2019, https://www.maritime-executive.com/article/ngos-win-fpso-north-sea-producer-shipbreaking-case. The vessel departed the U.K. in 2016 on her final voyage, reportedly under the false pretense that she would continue operations. Maersk has expressed regret that its vessel was beached in Bangladesh, following sale to a cash buyer. *Id.* NGO Shipbreaking Platform is still pressing for possible U.K. prosecution of Maersk, its Brazilian partner-owner, and the cash buyer. *North Sea Producer Judgement*, NGO Shipbreaking Platform, Nov. 19, 2019, https://www.shipbreakingplatform.org/north-sea-producer-judgement/. *See also* Gibbs, *supra* note 78 (investigating roles of GMS as cash buyer and St. Kitts and Nevis as offshore tax haven and flag of convenience in the *North Sea Producer* case). The vessel became radioactive over years of offshore oil production and storage: "naturally occurring radioactive elements like radium can end up in a well's produced water in significant quantities. This material can concentrate in a production platform's water handling system, settling out as a sediment or forming a mineral scale. Concentrations of these radioactive materials vary markedly, but older fields that rely on well-stimulation—like the MacCulloch field, the *Producer*'s former site—generate more produced water and may bring more dangerous material to the surface." *FPSO* North Sea Producer *Poses Radiation Hazard*, MAR. EXECUTIVE, June 14, 2017.

[99] *NGOs Win FPSO* North Sea Producer *Shipbreaking Case*, *supra* note 98.

[100] *Id.*

[101] Richard Gutierrez, *International Environmental Justice on Hold: Revisiting the Basel Ban from a Philippine Perspective*, 24 DUKE ENVTL. L. & POL'Y F. 399, 400-10 (2014); Yujuico, *supra* note 32, at 344.

[102] Gutierrez, *supra* note 101, at 407.

[103] For an account of the procedural details of the adoption of the Ban, see *id.* at 410-12.

[104] *Id.* Lichtenstein, a non-OECD nation, is also included in the first category. *Id.*

[105] *Id.* at 414-15.

[106] *See* Depository Notification, Amendment to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, U.N. Doc. C.N.420.2019.TREATIES-XXVII.3.a (Sept. 6, 2019); BASEL ACTION NETWORK & IPEN, THE ENTRY INTO FORCE OF THE BASEL BAN AMENDMENT: A GUIDE TO IMPLICATIONS AND NEXT STEPS 4 (Nov. 2019).

[107] Depository Notification, *supra* note 106.

C. The ILO Guidelines on Shipbreaking

As mentioned, the Basel Convention was never designed to address the particular labor and environmental challenges of the shipbreaking industry. The first international instrument directed squarely at the industry came in 2003, when the International Labor Organization (ILO) formulated a set of "Guidelines on Safety and Health in Shipbreaking" addressed to ship recyclers and national governments.[108] As suggested by their title, these provisions were not legally binding, but were rather intended to provide a set of best practices for the benefit of responsible ship recyclers, and to lay out minimum standards for health and safety to be implemented by domestic legislation and regulation.[109]

D. The Hong Kong Convention

Following the publication of the ILO guidelines, the IMO, ILO, and Basel Convention convened a tripartite Joint Working Group on Ship Scrapping, to coordinate their various efforts on labor and environmental problems of the shipbreaking industry.[110] The practical and conceptual difficulties of applying the Basel Convention's standards to the shipbreaking industry, and the non-binding nature of the ILO Guidelines, led to broad agreement that a purpose-built treaty for ship recycling was needed.[111] Spurred by the Joint Working Group, and developed primarily under the auspices of the IMO, the Hong Kong Convention for the Safe and Environmentally Sound Recycling of Ships (Hong Kong Convention or HKC) was adopted in 2009.[112]

The Hong Kong Convention adopts a "cradle-to-grave" regulatory perspective.[113] At the cradle, it bans the use of asbestos and some other hazardous substances and requires that shipbuilders declare the location and quantity of any permissible hazardous materials in an inventory of hazardous materials (IHM).[114] An IHM, also known as a "green passport," is issued by the flag State, carried onboard, and kept up-to-date for the vessel's working life.[115] Existing vessels will be surveyed to establish a baseline IHM.

In addition to issuing IHMs for their own vessels, States party to the Convention will exercise their port State jurisdiction to require all visiting vessels to produce an IHM. When a shipowner decides to scrap a vessel, a second document must be obtained, an International Ready for Recycling Certificate (IRRC), to be issued by the flag State.

Shipbreaking facilities located in States party to the Convention may not accept any vessel for demolition, absent a compliant IHM and IRRC.[116] Port States are responsible for assuring that their shipbreaking facilities meet the standards of the Convention, which include workplace safety and environmental provisions. Facilities must use the IHM to identify, label, package, and remove hazardous

---

[108] *Safety and Health in Shipbreaking: Guidelines for Asian Countries and Turkey*, INT'L LAB. ORG. (2003), https://www.ilo.org/public/english/standards/relm/gb/ docs/gb289/pdf/meshs-1.pdf.

[109] *Id. See also* Md Saiful Karim, *Violation of Labour Rights in the Ship-Breaking Yards of Bangladesh: Legal Norms and Reality*, 25 INT'L J. COMP. LAB. L. & INDUS. REL. 379, 381-82 (2009); Matz-Lück, *supra* note 4, at 98.

[110] Galley, *supra* note 24, at 116-17; FINAL REPORT, JOINT ILO/IMO/BC WORKING GROUP ON SHIP SCRAPPING, THIRD SESSION, Oct. 31, 2008, https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---sector/documents/meetingdocument/wcms_161509.pdf.

[111] Argüello Moncayo, *supra* note 89, at 304; Bhattacharjee, *supra* note 60, at 215-16; Tsimplis, *supra* note 75, at 307-08.

[112] Bhattacharjee, *supra* note 60, at 195; Galley, *supra* note 24, at 116-17. As discussed below, the Convention has yet to come into force.

[113] See Argüello Moncayo, *supra* note 89, at 304; Bhattacharjee, *supra* note 60, at 216, 221.

[114] Hillyer, *supra* note 28, at 783-84. Permissible hazardous components include radioactive materials, flame retardants, and heavy metals. *Id.*

[115] *Id.* For an excellent practical discussion of the IHM requirement, see INT'L CHAMBER OF SHIPPING, *supra* note 47, at 8-11.

[116] Facilities may accept vessels flagged by non-party States, provided they can provide equivalent satisfactory documentation.

materials.[117] Hazardous materials must be stored, transported, and disposed of in a safe and environmentally responsible manner.

The Hong Kong Convention has heavily criticized by the same environmental and human rights NGOs whose campaigns led to development.[118] The Convention does not require informed prior consent of the receiving State.[119] Enforcement provisions are slight, and the entire structure of the treaty is heavily reliant on paper documentation (certificates, licenses, inventories) generally verified only by the issuing State. Given the levels of government corruption in many of the major shipbreaking and open registry States, many critics doubt the efficacy of such requirements.[120] No provision was made to direct funds to shipbreaking nations for facility improvements.

Perhaps worst of all to the activists, the new Convention failed to ban beaching, the practice which they still campaign against. Nor was there any mechanism to prevent out-flagging (the re-flagging of an end-of-life vessel to a non-party State, in order to scrap the vessel at a non-party yard for a higher return). An earlier draft had required parties to provide information on vessels removed from their registries (de-registered) for the purpose of recycling.[121] The Bahamian delegation argued this was impractical and unnecessary, and the clause was deleted.[122]

The HKC has an unusual, tripartite ratification prerequisite. The Convention will come into force two years after it is ratified by: 1) at least fifteen states, representing 2) at least forty percent of world merchant tonnage (by flag); with 3) combined maximum annual ship recycling volume during the preceding ten years equaling no less than three percent of the gross tonnage of the contracting states. These requirements are designed to ensure that the HKC will not come into force until (and unless) nations with significant shipbreaking capacity are willing to comply, presumably assuring the other ratifying shipowning nations that there will be compliant yards to consign their ships to.

However logical this reasoning, the requirement that the contracting States have shipbreaking capacity in proportion to their combined tonnage introduces perverse incentives; should, for example, too many open registry nations ratify, and the combined contracting tonnage climb far above forty percent, reaching the shipbreaking capacity requirement will become more and more difficult.[123] This approach may "pose […] the risk of making entry into force hostage to the decision of just one or two states."[124] Guy Platten, Secretary-General of the International Council on Shipping, recently told stakeholders "perversely, the requirements require larger flag states ... not to ratify the convention... The big flag states could kill the convention with kindness."[125] Further, by calculating the requisite recycling capacity *retrospectively*, the

---

[117] ESRR, Reg. 20.2.

[118] Ormond, *supra* note 82, at 19.

[119] Tsimplis, *supra* note 75, at 329.

[120] "[A] system which relies upon certificates, authorizations, the control of inventories and licenses is prone to corruption." Matz-Lück, *supra* note 4, at 103.

[121] Tsimplis, *supra* note 75, at 317.

[122] *Id.* The Bahamians argued "that the registration legislation in some countries does not provide for declaration of intention for the use of the ship, and that there is no internationally agreed practice in this respect." *Id.*

> Arguably, this concession is a major one. Imposing a duty to request information about the use of the ship is within the Basel Convention's framework of obligations imposed on all parties to ensure the environmentally sound disposal of the ship. It is not easy to understand how a State, such as the Bahamas, that has acceded to the Basel Convention considers that it acts in compliance with the obligations regarding hazardous wastes imposed by that Convention without requesting information about the owner's intentions to recycle the ship. The amendment … opens a loophole by which changes in the registration of the ship for the purpose of avoiding the [HKC] are not going to be easily traceable.

Id. at 318.

[123] *See* Mikelis, *supra* note 37.

[124] URS DANIEL ENGELS, EUROPEAN SHIP RECYCLING REGULATION: ENTRY-INTO-FORCE IMPLICATIONS OF THE HONG KONG CONVENTION 230 (2013) (quoting PHILIPPE SANDS, PRINCIPLES OF INTERNATIONAL ENVIRONMENTAL LAW 133 (2d ed. 2003).

[125] Remarks made May 10, 2019, at IMO seminar, "Towards the early entry into force of the Hong Kong Convention," and quoted by Paul Gunton, *Hopes Rise for Recycling Convention, but a Future Scrap May Result*, SHIPINSIGHT, May

Convention's entry-into-force provisions "neglect[] both the fact that previously existent capacity might not be available in the future, and the problem that the existing capacity does not necessarily equal to 'green' capacity."[126]

As of this writing, the Convention has been ratified by fifteen states: Belgium, Congo, Denmark, Estonia, France, Germany, Ghana, India, Japan, Malta, Netherlands, Norway, Panama, Serbia and Turkey.[127] Between them, they represent approximately 30 percent of world merchant fleet gross tonnage.[128] Over the past ten years, these nations have recycled vessels equaling 12.2 million gross tons, more than 3% of their combined floating gross tonnage.[129]

Bangladesh has a statutory five-year timetable in place, for ratification by 2023.[130] China is moving ahead with plans for ratification, despite the existing ban on foreign vessel demolition.[131] At the end of 2019, Nikos Mikelis, non-executive director of cash buyer GMS, expressed his confidence in Bangladeshi ratification, and hope that it would happen before 2023.[132] Liberia and the Marshall Islands are said to be waiting in the wings, to bring the tonnage total up to forty percent.[133]

E. The European Waste Shipping Regulation

As referenced earlier, the Basel Ban Amendment has been incorporated into European Union law, as of 2006, by the European Waste Shipment Regulation.[134] Therefore, sending a ship containing hazardous substances from an EU nation to a developing nation for recycling is prohibited and subject to criminal sanction.[135] This ban has been enforced against shipowners on a few occasions, barring the export of vessels from EU member States, bound for South Asian scrapping facilities.[136] These actions are the rare exception.[137]

13, 2019, https://shipinsight.com/articles/hopes-rise-for-recycling-convention-but-a-future-scrap-may-result?mc_cid=d43b24ce01&mc_eid=434d2 cf1c4.

[126] ENGELS, *supra* note 124, at 230.

[127] *India Accedes to the Hong Kong Convention*, MAR. EXECUTIVE, Nov. 28, 2019.

[128] *Id.*

[129] Paul Gunton, *Recycling News: India Ratifies but HKC Still has Far to Go*, SHIPINSIGHT, Dec. 9, 2019, https://shipinsight.com/articles/recycling-news-india-ratifies-but-hkc-still-has-far-to-go.

[130] *Id.*

[131] *Id.* Because the ratification qualifications consider parties' demolition tonnage over the past ten years, China's accession would still have a considerable impact on the recycling tonnage entry-into-force factor. *Id.*

[132] Nikos Mikelis, *Developments in Ship Recycling in 2019*, MAR. EXECUTIVE, Dec. 15, 2019, https://www.maritime-executive.com/editorials/developments-in-ship-recycling-in-2019.

[133] *Id.* "However . . . one needs to remember that the gross tonnage of the world fleet is presently increasing, with an annual rate of around 3.5 percent. Consequently, in subsequent years the market share of countries may vary from the figures quoted here, which relate to fleets at the end of 2018." *Id. See also* Mikelis, *supra* note 37. David Pascoe, an executive at the Liberian registry's management company, has said that that Liberia is in favor of the Hong Kong Convention's entry into force, but has delayed ratification because the size of its fleet "could complicate the criteria for entry into force." Gunton, *supra* note 129.

[134] Council Reg. 259/93/EEC on the Supervision and Control of Shipments of Waste within, into and out of the European Community [1993] OJ L30/1, replaced by (EC) No 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste.

[135] *Id. See also* Michael Tsimplis, *Recycling of EU Ships: From Prohibition to Regulation?*, LLOYD'S MAR. & COM. L.Q., Aug. 2014, 416, 420.

[136] *Stichting Greenpeace Nederland* v. *Staatssecretaris van Volkshuisvesting, Ruimtelijke Ordening & Milieubeheer* (*The Otapan*), NJB 2007, 553 (ABRvS (Neth.) 21 februari 2007), *Upperton Ltd.* v. *Minister van Volkshuisvesting, Ruimtelijke Ordening & Milieubeheer* (*The Sandrien*), AB 2002, 388 m.nt. F.C.M.A. Michiels (ABRvS (Neth.) 19 juni 2002). See also GALLEY, *supra* note 11, at 128-36. In 2018, a shipowner was, for the first time, prosecuted under the EWSR for export of a vessel *after* demolition had taken place, a prosecution discussed in detail herein.

[137] "[O]ccurrences where owners were prevented from sending their ships to South Asian yards are extremely rare." Ormond, *supra* note 82, at 18.

F. The European Ship Recycling Regulation

In a process analogous to the international community's drafting of the HKC in the shadow of the Basel Convention, the European community reached a consensus that the EWSR was ill-suited to the practice of shipbreaking. A specialized regulation, the European Ship Recycling Regulation (ESRR), resulted and entered into force on 31 December 2018.[138]

The ESRR, like the HKC, requires vessels to carry an IHM onboard—here called an "inventory certificate."[139] Vessels flagged by EU member States may only be scrapped at a yard on the "EU List" of environmentally responsible scrapping facilities, which have passed inspection by a competent authority.[140] The EU List is composed of two sub-lists. Facilities located in member states are certified compliant by relevant domestic authorities and listed at Part A. Facilities located in third-party states must apply to the European Commission for inclusion, and will then by subject to inspection and audit, for possible inclusion at Part B of the list.[141] Unlike the HKC, the ESRR creates a de facto ban on beaching by requiring that "ship recycling facilities" be operated "from built structures."[142] Non-EU vessels calling on EU ports will be required to present inventory certificates which comply with the ESRR.[143] Of note, four United Kingdom facilities are currently listed at Part A off the list. In light of Brexit, the European Commission has notified stakeholders that, "Subject to any transitional arrangement that may be contained in a possible [UK] withdrawal agreement, as of the withdrawal date, the entries in the European List of ship recycling facilities for facilities located in the United Kingdom will become void. As a consequence, ships flying the flag of a Member State of the Union may no longer be recycled at these ship recycling facilities."[144]

Thus far, two main criticisms of the ESRR have emerged. First, industry players are concerned about the capacity of the EU List of approved facilities. While non-EU facilities may apply for inclusion, it is unlikely that any South Asian beaching facility can meet the EU requirements without major capital investment. A recent EU inspection of an Alang facility noted many improvements, but found the facility lacking. The inspectors found that the facility was not "operating from a built structure" and that primary cutting was taking place on the permeable tidal flats—a significant violation of the ESRR's environmental

---

[138] *See* Nikos Mikelis, *No Sleepless Nights for the E.U.*, MAR. EXECUTIVE, Dec. 25, 2018, https://www.maritime-executive.com/editorials/ship-recycling-no-sleepless-nights-for-the-e-u.

[139] European Ship Recycling Regulation (ESRR), Art. 4.

[140] ESRR, Arts. 13–15. *See also* Tsimplis, *supra* note 135, at 433-35.

[141] The currently effective fifth edition of the EU List is available at Commission Implementing Decision 2019/995, 2019 O.J. (L 160).

[142] ESRR, Art. 13(1)(c). The European Community Shipowners' Association (ECSA) does not believe this language should be interpreted as a beaching ban: "[t]he EU SRR does not ban any recycling method … A ban on beaching [ ] risks to exclude the current world largest ship recycling market (+ 91.6% of tonnage in 2018) to the EU list." ECSA REPORT, ECSA VISIT TO INDIAN SHIP RECYCLING FACILITIES, ALANG-SOSIAYA 19(Apr. 2019) at 19.

[143] ESRR, Art. 32(2)(b).

[144] Notice to Stakeholders, European Commission Directorate-General Environment (March 28, 2018). UK facilities may re-apply for inclusion on the third-party state list at Part B. *Id. See also* Richard Coles & Andrew Serdy, *Ship Registration and Brexit*, 43 TUL. MAR. L.J. 289, 300-01 (discussion of Brexit's implications for HKC and ESRR). Optimistically, "Brexit will permit a rational appraisal of how the [EU shipbreaking] system can be optimised . . . . [F]or example, by removing both the EU implementation of the Ban Protocol and the EU ship regulation for recycling, and applying the core of the Basel Convention to follow environmentally sustainable practices." Sofia Syreloglou & Mikis T. Tsimplis, et al., *Brexit: Adjusting the Sails*, LLOYD'S SHIPPING & TRADE L., June 6, 2017. In November 2019, UK attorneys at HFW wrote, "Even if a no-deal Brexit is pushed through, a draft Statutory Instrument is currently being considered in order to adopt the SRR to the fullest extent possible into English law." William Gidman, Rory Butler & Stephen Drury, *Do I Need a Ship Recycling Policy*, HFW BRIEFING (Nov. 2019), available at https://www.hfw.com/Do-I-Need-a-Ship-Recycling-Policy. As of this writing, the UK has withdrawn from the EU, but remains in a transitional status, with EU rules still in place, until January 1, 2021. *See generally*, Tom Edgington, *Brexit: What is the Transition Period?*, BBC NEWS (Jan. 31, 2020), https://www.bbc.com/news/uk-politics-50838994.

requirements.[145] The occupational health and safety inadequacies should prove to be more easily remedied: the main failings were as to ambulance and hospital access and injury reporting.[146] Some have also argued that the EU List is protectionist.[147]

The second major criticism comes from the NGOs. They point out that the ESRR, like the Basel and Hong Kong Conventions, fails to prevent out-flagging at the end of life:

> [O]wners of EU-flagged ships can circumvent the [European] SRR in two ways:
> 1. Re-flagging of the ship by the same owner: the ship changes the flag in favour of a flag state that does not have the environment regulations stipulated by the SRR and the like, but the owner remains the same;
> 2. Re-flagging of the ship by a new owner: the owner sells the ship to a new owner, who subsequently re-flags the ship to a flag state that does not have environmental regulations such as the SRR.
> Although re-flagging is not illegal, doing so with the direct intention of circumventing the SRR is against the spirit of the regulation.[148]

In 2016, anticipating possible impacts of the forthcoming ESRR, Maersk executive Annette Stube said, "if [] a flag from Denmark or another EU country [] hinders our ability to use the yards in Alang, which we believe deliver a responsible shipbreaking service, then we will consider changing the flag."[149]

While such out-flagging is already a problem under the existing regime, "the risk of an increased reflagging of EU ships—beyond what is already common practice now—is real. That risk might, however, be reduced if the 'European List' were linked with financial incentives for good ship recycling."[150] The European Community Shipowners' Association (ECSA) predicts that, if Indian yards continue to be excluded from the European List, "a two-tier market will be created as EU flagged ships, which consist around 22% of the world fleet during their operational live[s], will not be allowed to go to HKC-certified facilities unless they are also on the EU list ... Unless they reflag out of an EU flag, they will suffer severe (financial) disadvantages compared to their non-EU competitors."[151] In 2019, the first year of the ESRR,

---

[145] DNV-GL, REPORT NO. 2019-0072: INSPECTION OF A SHIP RECYCLING FACILITY IN INDIA: SITE INSPECTION REPORT APPLICATION 003, EUROPEAN COMMISSION DIRECTORATE-GENERAL FOR THE ENVIRONMENT 8–10, 28–34 (2019). Nikos Mikelis, the architect of the HKC and non-executive director of cash buyer GMS, contends that the ESSR language barring recycling on permeable surfaces is stricter than the EU intended: "in the summer of 2013, after the final version of the Regulation had been agreed between the Council and the Parliament, there was a highly irregular intervention by an advisor to the Green Party in the European Parliament who managed, unnoticed, to make some small changes to the agreed text in some of the EU languages, including English. The changed text in Article 13(1)(g)(i) in essence requires that: 'the handling of hazardous materials, and of waste' must be doing on impermeable floors; as opposed to the agreed text, which referred to 'the handling of hazardous materials and waste' (i.e. the word hazardous applying to both, materials and wastes). As in European regulatory language an 'end-of-life ship' is considered 'waste,' but not necessarily 'hazardous waste,' it follows that the changed text can be interpreted as requiring that nothing from the ship may touch the beach, not any clean steel blocks, not even a table and chairs! . . . When it was . . . realised how the changed text could be interpreted, the European Council proposed to the Parliament and the Commission a Corrigendum [ ] to reinstate the agreed text. . . . [T]he issue remains unresolved." MIKELIS, *supra* note 33, at 46.

[146] *Id.* at 40–42, 51–53.

[147] *See* Geoff Garfield, *EU Recycling List Smacks of Protectionism, Says Bimco*, TRADEWINDS, Apr. 8, 2019, https://www.tradewindsnews.com/casualties/1749880/eu-recycling-list-smacks-of-protetionism-says-bimco.

[148] ECORYS, DNV-GL & ERASMUS SCHOOL OF LAW, FINANCIAL INSTRUMENT TO FACILITATE SAFE AND SOUND SHIP RECYCLING 44 (2016).

[149] Tomas Kristiansen, *Maersk Considers Flagging Out Ships in Response to EU Rules*, SHIPPINGWATCH, May 30, 2016, https://shippingwatch.com/secure/carriers/Container/article8711697.ece.

[150] Thomas Ormond, *Hong Kong Convention and EU Ship Recycling Regulation: Can They Change Bad Industrial Practices Soon?*, ENVTL. L. NETWORK INT'L REV. 54, 58 (2012).

[151] ECSA REPORT, *supra* note 142, at 21.

Danish shipping giant Maersk out-flagged at least seven end-of-life vessels, from the Danish registry to that of Singapore.[152]

During the development of the ESRR, NGOs advocated for the inclusion of a specialized financial instrument to remove the financial incentive to out-flag at the end of life. A variety of forms have been proposed, such as a ship recycling guarantee, ship recycling account, ship recycling insurance, a port levy/ship recycling fund,[153] but the basic premise is to require EU shipowners to amortize the additional cost of safe and responsible recycling over the working life of the vessel so that, when the time comes to scrap, EU List yards will be able to match the high dollar-per-ton bids of non-compliant beaching yards (with the proceeds of the financial instrument compensating the EU List yard for its higher operating expenses).[154]

In 2013, a draft EU ship recycling regulation establishing a "scrapping fund" made it out of committee, only to be narrowly voted down by the European Parliament.[155] Shipowners were (and are) vociferously opposed to any financial instrument, arguing that any additional levy or charge will only hurt the competitive position of EU registries and EU ports in the global shipping market and could delay entry-into-force of the Hong Kong Convention.[156] The terms of the ESRR that eventually passed the European Parliament in 2015 provide only that such an instrument should be evaluated and considered.[157] Though an EU-commissioned study supported the creation of a financial instrument,[158] the European Commission decided, in 2017, to again defer the question for further study and consideration.[159] As of this writing, there are no concrete plans to create a ship recycling financial instrument.

V. FIVE APPROACHES TO THE SHIPBREAKING PUZZLE

The remainder of this article will examine five recent developments in the campaign to improve workplace and environmental protections in the shipbreaking industry.

---

[152] Niklas Krigslund, *Maersk Out-Flagged Four Ships from Denmark and Sent Them to Alang*, SHIPPINGWATCH, Nov. 20, 2019, https://shippingwatch.com/secure/carriers/Container/article11768700.ece.

[153] *See* EUR. COMM'N, REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL ON THE FEASIBILITY OF A FINANCIAL INSTRUMENT THAT WOULD FACILITATE SAFE AND SOUND SHIP RECYCLING (2017). The current favored proposal is for a "ship recycling license." *Id.*

[154] *Id.*

[155] MIKELIS, *supra* note 34, at 50 (vote against scrapping fund was 299 to 292); Katrine Grønvald Raun, *Scrapping Proposal Takes Flak from Shipowners and Ports*, SHIPPINGWATCH, Mar. 27, 2013, https://shippingwatch.com/articles/article5282944.ece; Louise Vogdrup-Schmidt, *Schlyter: Parliament Fooled by Lobbyists*, SHIPPINGWATCH, Apr. 19, 2013, https://shippingwatch.com/secure/carriers/article5352346.ece.

[156] *See Asian Shipowners Reject EU Proposal to Pay for Ship Recycling Licenses*, POST ONLINE MEDIA, July 18, 2016, https://www.poandpo.com/news_business/asian-shipowners-reject-eu-pro posal-to-pay-for-ship-recycling-licenses-1872016733/; Daniel Logan Berg-Munch, *Shipowners Flat Out Reject Scrapping Fund*, SHIPPINGWATCH, July 8, 2016, https://shippingwatch.com/secure/carriers/article8834080.ece; *Shipping Industry Slams Unworkable European Proposals*, MAR. RISK INT'L, May 1, 2013.

[157] "Even though the original proposal was rejected, it remained alive in a somewhat different form when the EU Commission, following the newly adopted scrapping regulations, had to examine potential financial initiatives that could possibly be added to the regulation in late 2016." Katrine Grønvald Raun, *NGO: Sustainable Scrapping will Collapse without Fund*, SHIPPINGWATCH, Jan. 6, 2016, https://shippingwatch.com/secure/carriers/article8348225.ece.

[158] ECORYS, ET AL., *supra* note 148. *See also* Niklas Krigslund, *EU Report Backs Proposed Recycling License*, SHIPPINGWATCH, July 7, 2016, https://shippingwatch.com/secure/carriers/article8830258.ece. Nikos Mikelis, non-executive director of cash buyer GMS and architect of the HKC, predicts: "This report may come back to haunt the shipping industry if, or more likely when, it becomes evident that the implementation of the [ESRR] has failed." MIKELIS, *supra* note 34, at 51.

[159] EUR. COMM'N, *supra* note 153; *E.U. Ship Recycling: No Financial Instrument, for Now*, MAR. EXECUTIVE, Aug. 15, 2017, https://www.maritime-executive.com/editorials/eu-ship-recycling-no-financial-instrument-for-now.

A. Port State Control: The *Harrier*

The 262-meter *Eide Carrier* was built in 1989 for Soviet shipping on the Black Sea. By 2015 she was essentially derelict, having sat on the pier in Høylandsbygd, Norway, since 2006, awaiting a promised rebuild to serve offshore oil platforms.

In the summer of 2015, an unsigned letter, postmarked in Germany, arrived in Brussels, addressed NGO Shipbreaking Platform.[160] Its anonymous author warned that Norwegian shipowner Eide Marine Services had recently sold an aging barge carrier, the *Eide Carrier*, and the vessel was destined for the breaking yards of the Subcontinent.[161] When the Shipbreaking Platform's Norwegian partner organization, Bellona, placed a call to Eide, to remind the shipowner of its legal obligation to dispose of unwanted vessels responsibly, they were reassured that the company had no intention of scrapping the vessel.[162]

Eighteen months passed. On February 22, 2017, the Norwegian Coast Guard responded to a vessel in distress off the rocky coast of Jaeren. She had lost engine power, and was being blown onto the lee shore, where a grounding could result in a massive oil spill. The letter "E"s in both the first letter of her name and the Eide Marine logo on her smokestack, and been replaced with "T"s.[163]

Tugs were dispatched to aid the *Tide Carrier*. The crew were evacuated by helicopter, and, after eleven hours of risky salvage, the vessel was pulled safely offshore. The engine failure was attributed to contaminated lubricating oil.[164] The real investigation began.

Supposedly, the *Tide Carrier* was now owned by Julia Shipping, a postbox company in St. Kitts and Nevis, and flagged to the Comoros. Norwegian authorities had given her permission to sail, based on a voyage plan which showed she was bound for repairs in Oman, though port state control officials had found eight deficiencies prior to departure, including five related to safety and emergency preparedness.

The crew and documents onboard gave conflicting information. Some crew said she was bound for Oman, some said Dubai. Some said Pakistan. The insurance policy found onboard, issued by Skuld, indicated that the vessel was insured for only $6500, for a voyage to Gadani, Pakistan. The name listed as point-of-contact for Julia Shipping was Keyur J. Dave, CFO of Singapore cash buyer Wirana. Perhaps the most interesting discovery came when Norwegian investigators called the Comoros registry. The office disclaimed nationality; the *Tide Carrier* had never been entered in its registry.

Norwegian authorities put the vessel under arrest as explanations for her conflicting documentation multiplied. After dry dock in Oman, the vessel was engaged to serve as a floating warehouse off the coast of Nigeria. Or perhaps Alaska?[165] The cost of insurance for a voyage to Gadani was less than insuring the vessel for its intended voyage (to Oman/Dubai/Nigeria/Alaska). Norwegian officials did not credit this claim of insurance fraud. Falsified class certificates were also presented.[166]

Tied up again, whoever owned the vessel painted over the "Tide C" with a plain "H," and flagged the *Harrier* to Palau. Julia Shipping eventually deposited security of 12 million kroner, and the *Harrier*

---

[160] Heimsvik, *supra* note 81; Press Release, NGO Shipbreaking Platform, *Controversial Tide Carrier Under Arrest in Norway* (April 6, 2017), https://www.shipbreakingplatform.org/press-release-controversial-tide-carrier-under-arrest-in-norway/.
[161] Heimsvik, *supra* note 81.
[162] *Id.*
[163] *Id.*
[164] *Tide Carrier Nearly Grounded Due to Contaminated Oil*, MAR. EXECUTIVE, Mar. 1, 2017, https://www.maritime-executive.com/article/tide-carrier-nearly-grounded-due-to-contaminated-oil.
[165] Daniel Logan Berg-Munch, *Cash Buyer Pays Big Fine for Norwegian Scrap Vessel*, SHIPPINGWATCH, Oct. 14, 2019, https://shippingwatch.com/secure/carriers/article11685185.ece.
[166] Marit Nilsen, *NOK 7 Million Fine Issued in the Harrier Case*, Norwegian Maritime Authority, Mar. 10, 2019, https://www.sdir.no/en/news/news-from-the-nma/nok-7-million-fine-issued-in-the-harrier-case/.

left Norway again in the summer of 2018, this time bound for breaking in Aliaga, Turkey.[167] At least two crew members had been confined onboard for the duration of the vessel's detention.[168]

Økokrim, the Norwegian Authority for Investigation and Prosecution of Economic and Environmental Crime, brought charges against Wirana, as the operating manager of the attempted Gadani voyage of then-*Tide Carrier*. In October 2019, Økokrim assessed a fine of 7 million kroner ($767,000) issued against Wirana, for two counts of false statement and one of risk of acute pollution.[169] The fine was taken from the security deposited by Wirana in order to secure the vessel's release.

An investigation into insurer Skuld was opened in November 2018,

As of this writing, shipowner Georg Eide faces Økokrim prosecution for environmental crimes related to the *Harrier* case.[170] According to the indictment, hazardous materials onboard the vessel included asbestos, e-waste, and various types of oil or sludge. Eide faces up to two years imprisonment, and Økokrim is also seeking a fine of 3 million kroner from the company he controls. This sum represents the difference in purchase price for the *Harrier* in Pakistan, as compared to the price in Turkey, and Økokrim believes, had the original scrapping plan been successful, Eide Maritime would have realized a 3 million kroner profit for evasion of the EWSR.[171]

While the outcome of the *Harrier* case may be satisfying, it does not represent a realistic, scalable model for addressing the ship recycling conundrum. As a prosecutor involved with the case note, the discovery of the illegal voyage was serendipitous.[172] The *Tide Carrier* had cleared customs and lawfully departed a Norwegian port. Were it not for the engine failure while still in Norwegian waters, the subterfuge would never have been discovered, or, at least, not have been discovered while Norwegian authorities retained territorial jurisdiction. News coverage suggests that the government's investigation into the vessel's ownership structure was initially motivated by a desire to recoup emergency response costs following the vessel's foundering, not any special curiosity about the legality of the intended voyage.[173]

This article asserts that port state control is a poor enforcement mechanism in the ship recycling context, and argues that the *Harrier* case illustrates that weakness—the exception that proves the rule. Nonetheless, there are some valuable lessons to be drawn from the fortuitous detection of the illegal voyage.

First, NGO Shipbreaking Platform did have advance notice of the potential for illegal export of the *Harrier*, thanks to a still-unknown whistleblower. Norwegian partner organization Bellona contacted shipowner Eide Maritime, but it is unclear whether Norwegian shipping inspectors or law enforcement were made aware of the specific export risk as to the *Harrier*. Better communication and cooperation

---

[167] Heimsvik, *supra* note 81.

[168] Niklas Krigslund, *Financial Police Enters Case of Detained Ship Headed for Beaching*, SHIPPINGWATCH, Dec. 12, 2017, https://shippingwatch.com/secure/Offshore/article10137884.ece; *The Controversial Case of the Harrier*, NGO Shipbreaking Platform, https://www.shipbreakingplatform.org/spotlight-harrier-case/, last visited Feb. 2, 2020.

[169] Nilsen, *supra* note 166.

[170] Gerhard Flaaten & Bendik Støren, *Økokrim har Tatt ut Tiltale mot Georg Eide,* [*Økokrim has Brought Charges Against Georg Eide*], SYSLA, Jan. 8, 2020, https://sysla.no/maritim/a/kJLgqQ/kokrim-har-tatt-ut-tiltale-mot-georg-eide.

[171] *Id.* Norway is not a member of the EU, but has incorporated the terms of the EWSR and ESRR into domestic legislation. Norwegian Mar. Auth., *Rules Regarding Ship Recycling*, Circular Series R, No. RSR 10-2018, Journal No. 2018/16152, Dec. 19, 2018, at 3, available at https://www.sdir.no/en/shipping/legislation/directives/new-rules-regarding-recycling-of-ships-and-mobile-offshore-units/.

[172] Lise Marit Kalstad & Hilde Torgersen, *Sju Millioner i Bot for a Forsoke a Smugle Skandaleskip ut av* Norge [*Seven Million in Fine for Trying to Smuggle Scandal Ships Out of Norway*], NRK, Oct. 14, 2019, https://www.nrk.no/rogaland/sju-millioner-i-bot-for-a-forsoke-a-smugle-skandaleskip-ut-av-norge-1.14741210 (quoting State Attorney Tarjei Istad).

[173] *Ship Arrested in Norway Following Disastrous Flight to Asian Recycling Yard*, WASTE MGMT. WORLD, Apr. 6, 2017, https://waste-management-world.com/a/ship-arrested-in-norway-following-disastrous-flight-to-asian-recycling-yard.

between port state control authorities might improve the chances of catching a vessel before she departs on an illegal last voyage.

Second, the Norwegian authorities who boarded the *Tide Carrier* after her engine failure found multiple documentation deficiencies, at least some of which might have been detected by port state control officers prior to her departure. The vessel carried fraudulent Comoros registration and class certification, and her insurance policy manifested an illegal intent for the voyage. Prior to departure, port state control inspectors found eight unspecified deficiencies aboard the *Tide Carrier*, including five related to emergency preparedness and safety.[174] Closer inspection and stricter enforcement of port state control authorities, especially in combination with the advance warning provided by a whistleblower in this case, might have uncovered the shipowner's subterfuge and prevented the departure of the vessel.

Meanwhile, the saga of the *Harrier*, improbably, continues. She finally left Norway on August 1, 2018, bound for the EWSR-compliant recycling facilities in Aliaga, Turkey. She arrived on August 28, and reportedly was brought ashore for recycling on August 31. Before she could be cut up, she was again placed under arrest, this time by Turkish authorities, for suspected discharge of oil near the coastal city of Izmir.[175] Satellite imagery and fuel testing confirmed that the 2.5 km oil slick originated with the unlucky *Harrier*, and her owner, postbox company Julia Shipping, was fined approximately $300,000, and charged an additional $4.5 million for cleanup costs.[176] As of November 2019, cash buyer Wirana and the Turkish shipyard had not yet agreed as to who should pay the fines, and the *Harrier* remained in limbo on the Turkish coast, somewhere between death and life.[177]

B. Prosecution by the Importing State: The *North Sea Producer*

The *Maersk Dagmar* launched from the ways in Odense, Denmark, in 1984, as an oil tanker.[178] Thirteen years later, on the Tees river in Northeast England, she was refitted as a floating production storage and offloading (FPSO) vessel and renamed the *North Sea Producer*.[179] Ownership was transferred to North Sea Production Company, a fifty-fifty partnership between Maersk and Brazilian firm Odebracht, and the reborn vessel was projected to have a working life of ten more years.[180]

In 2015, the *North Sea Producer* was retired from the North Sea oilfield. In August of that year, she returned to the same English dock where her conversion had taken place, almost twenty years earlier.[181] The vessel quickly became a popular local landmark, parked, as she was, just behind the local soccer

---

[174] *E.U. Ship Recycling: No Financial Instrument, for Now*, *supra* note 159.

[175] Press Release, NGO Shipbreaking Platform, *Investigations on the Harrier Tighten as It Reaches Turkey for Recycling*, Aug. 29, 2018, https://www.shipbreakingplatform.org/press-release-investigations-on-the-harrier-tighten-as-it-reaches-turkey-for-recycling/; *Harrier Caused Oil Pollution*, SEANEWS TURKEY, Sept. 10, 2018, https://www.seanews.com.tr/harrier-caused-oil-pollution/179527/.

[176] *Harrier Caused Oil Pollution*, *supra* note 175; *Fine for Julia Shipping Over Oil Leakage*, INS. MARINE NEWS, Sept. 12, 2018, https://insurancemarinenews.com/insurance-marine-news/fine-for-julia-shipping-over-oil-leakage/.

[177] Ingrid Kristensen, *Bellona Krever Gransking av* Harrier *Saken* [*Bellona Requires Investigation of the* Harrier *Case*], BELLONA, Nov. 29, 2019, https://bellona.no/nyheter/skipsfart/2019-11-bellona-krever-gransking-av-harrier-saken; *Marine Accident Round-Up*, INS. MARINE NEWS, Nov. 1, 2019, https://insurancemarinenews.com/insurance-marine-news/marine-accident-round-up-1st-november-2019/.

[178] NORMA J. MARTINEZ, DANWATCH, MAERSK AND THE HAZARDOUS WASTE II 6 (Oct. 2016).

[179] Dave Robson, North Sea Producer *Has Gone from the Riverside to Rusting on a Beach*, TEESSIDE LIVE, Oct. 17, 2016, https://www.gazettelive.co.uk/news/teesside-news/north-sea-producer-gone-riverside-12033913.

[180] Jeremy Beckman, *Technology, Construction Techniques Driving Fast-Track UK Developments*, OFFSHORE MAG., Aug. 1, 1996, https://www.offshore-mag.com/home/article/16759481/technology-construction-techniques-driving-fast-track-uk-developments.

[181] Dave Robson, *From the Riverside to a Bangladeshi Beach: How the* North Sea Producer *Sailed into Stormy Waters*, TEESSIDE LIVE, Dec. 27, 2016, https://www.gazettelive.co.uk/news/teesside-news/riverside-bangladeshi-beach-how-north-12355327.

stadium.[182] While alongside, the vessel was sold to an offshore post-box company, Conquistador Shipping, re-flagged, from the Isle of Man to St. Kitts and Nevis, and renamed *Producer*.[183] In the spring of 2016, after several aborted departures, she left the UK under tow, supposedly bound for a new working life in Nigeria.[184] According to internal documents, the nominal owner, Conquistador, had already entered into a $6.6 million dollar contract with a Chattogram yard.[185] Conquistador was represented by cash buyer GMS.[186]

The *North Sea Producer's* exact route to Chattogram is unknown—the vessel's AIS was apparently turned off before her departure from the UK—but unconfirmed sightings were reported in the Netherlands and Kenya.[187] In August 2016, she was driven up onto the Bangladeshi beach.[188] Danish reporter Norma J. Martinez was on the scene shortly after the vessel arrived:

> "That is a difficult ship to cut," says an older worker . . . . On the deck . . . is both a helicopter landing pad and a large crane. Aside from these, [ ] the ship looks similar to the other giant ships stranded at the Janata Steel shipyard in Chittagong, Bangladesh.
>
> "No, no, it's very different from the other ships." The worker attempts to explain, but the expla[]nation gets lost in translation. Finally, the worker accepts defeat in the face of his and the translator's limited technical vocabulary and says simply, "There are many, many pipes. Oil ship."[189]

This Chattogram veteran is right: for any scrapper, an FPSO like the *North Sea Producer* is a *very* different ship. Back in Denmark, a shipyard manager told Martinez that decommissioning an FPSO "involves totally different and much greater requirements with respect to safety, cleanup, and the environment. It's a much bigger job to cut up a ship like that than a container ship. There are more technical systems, pipes and inventory."[190] But it's not just the additional complexity of the former oil platform's systems that make it such a challenge: "we can't manage it in Denmark, because we have nowhere to dispose of the radioactive material that can be present on a ship like that."[191] After seventeen years on station, the storage, production, and transportation systems of an oil extraction unit like the *Producer* may be coated in naturally occurring radioactive material (NORM).[192] NORM is present, to varying levels, in petrochemicals, and accumulates in the mineral scale coating extraction and storage systems. The oil fields of the North Sea are known for their relatively high levels of radioactive material.[193]

---

[182] *Id.*
[183] Gibbs, *supra* note 79.
[184] "The ship . . .will be towed nearly 5,000 nautical miles by the 75m sea tug *Terasea Eagle* to the Tincan Island port complex in Lagos, Nigeria." Mike Brown, *That Big Ship Next to the Riverside? It's on the Move—But it's not Exactly Clear Why*, TEESSIDE LIVE, May 17, 2016, https://www.gazettelive.co.uk/news/teesside-news/big-ship-next-riverside-its-11344358.
[185] Gibbs, *supra* note 79.
[186] *Id.* This was reportedly a record price for a Chattogram breaking contract. *HC Wants Assessment Reports on Radioactive Material of Chittagong Scrap Vessel*, DAILY STAR, June 8, 2017, https://www.thedailystar.net/city/hc-wants-assessment-reports-radioactive-material-scrap-vessel-1417489.
[187] Niels Lykke Møller, *Bogstaverne er Skrabet af Men den er God Nok: Her er det Danske Skib* [*The Letters are Scrapped Off, but it is Plain Enough: Here is the Danish Ship*], TV2, Oct. 16, 2016, https://nyheder.tv2.dk/udland/2016-10-16-bogstaverne-er-skrabet-af-men-den-er-god-nok-her-er-det-danske-skib.
[188] MARTINEZ, *supra* note 178, at 7-8.
[189] *Id.* at 16.
[190] *Id.* at 19.
[191] *Id.* at 18.
[192] NGO SHIPBREAKING PLATFORM, RECYCLING OUTLOOK: DECOMMISSIONING OF NORTH SEA FLOATING OIL & GAS UNITS 30 (2019).
[193] *Id.*

Nevertheless, barefoot men with scarves wrapped around their faces began cutting the *Producer* on the Chattogram beach. Repon Chowdhury, Executive Director of NGO Bangladesh Occupational Safety, Health and Environment Foundation, reported that Chattogram yard owner Janata "intentionally cut down the front and back parts of this ship as part of [measures to] eliminate name and IMO number (usual tactic)."[194]

Following the Danish expose, domestic and international pressure was brought to bear.[195] By November 5, 2016, the Bangladeshi Department of Environment had issued an injunction to halt the breaking pending inspection by a specially formed expert body, including representatives from the national Nuclear Energy Commission.[196]

Bangladesh Enyironmental Lawyers Association (BELA) filed a writ for petition with the High Court Division of Bangladesh's Supreme court, and, in June 8, 2017, a new injunction was issued by that court, preventing further breaking activity, requesting additional investigation of the radioactive vessel, additionally asking environmental regulators to file briefs explaining why the 2016 import of the vessel should not be ruled illegal.[197] The high court's final ruling came down on November 14, 2019: the *Producer*'s import violated the terms of domestic and international law.[198] The breaking of the ship would be completed under government supervision, without the involvement of the importing yard, Janata Steel. Janata would bear financially responsibility for the illegal import. Additionally, the High Court directed Bangladeshi regulators to exercise stricter scrutiny over the import of vessels by cash buyers and under "last voyage" gray or black-listed flags, and to ensure that no vessel is imported without proper verifiable pre-cleaning certificates and an IHM.[199] As of the November 2019 High Court verdict, British investigations into the legality of the *Producer*'s export were ongoing.[200]

This legal outcome may be encouraging, but the radioactive *Producer* still sits on the Chattogram beach, and it remains to be seen how her safe demolition will be accomplished and funded. The extraordinary legal response was occasioned by an extraordinary beaching. First, the *Producer*'s radioactivity is attention-grabbing in a way that asbestos and other more pedestrian carcinogens are not. Second, the vessel was closely tied to a high-profile company (Maersk), headquartered in Northern Europe, the hotbed of anti-beaching activism. And, third, international journalists got to the beach shortly after the ship did. Hopefully, the High Court ruling will have some effect on the environmental and industrial regulators as low-profile vessels continue to arrive in Chattogram.

For its part, Maersk has expressed regret over the ignominious fate of the ex-*Dagmar Maersk*, while insisting that ultimate responsibility lies with the vessel's owner at the time of her scrapping—post-box

---

[194] Quoted by Laurie Kazan-Allen, *The Asbestos Hazard in Shipbreaking*, INTERNATIONAL BAN ASBESTOS SECRETARIAT, May 2017, http://ibasecretariat.org/lka-the-asbestos-hazard-in-shipbreaking.php.

[195] Syeda Rizawana Hasan, chief advocate of Bangladesh Enyironmental Lawyers Association (BELA), cited the Danish news coverage as the precipitating factor in public scrutiny of the *Producer* case. *HC Wants Assessment Reports on Radioactive Material of Chittagong Scrap Vessel*, *supra* note 185.

[196] *Body Formed to Probe Scrap Vessel*, DAILY STAR, Nov. 6. 2016, https://www.thedailystar.net/backpage/body-formed-probe-scrap-vessel-1310149.

[197] *HC Wants Assessment Reports on Radioactive Material of Chittagong Scrap Vessel*, *supra* note 185; *Workers in Flip-Flops Dismantling Radioactive FPSO*, OFFSHORE ENERGY TODAY, June 14, 2017, https://www.offshoreenergytoday.com/workers-in-flip-flops-dismantling-radioactive-fpso/.

[198] *No Ship can be Imported Violating Conditions of Environmental Certificate: HC*, DAILY STAR, Nov. 14, 2019, https://www.thedailystar.net/country/no-ship-can-be-imported-violating-conditions-environmental-certificate-1827079.

[199] *Id.*; *NGOs Win FPSO North Sea Producer Shipbreaking Case*, MAR. EXECUTIVE, Nov. 20, 2019, https://www.maritime-executive.com/article/ngos-win-fpso-north-sea-producer-shipbreaking-case. No published version of the High Court judgment is currently available on the Court's website, but the case is listed as Writ Petition 8466/2017; Dave Robson, *Messy End for Ship Whose Sheer Size and Proximity to Riverside Made it a Matchday Fixture*, TEESIDE LIVE, Nov. 24, 2019, https://www.gazettelive.co.uk/news/teesside-news/messy-end-ship-whose-sheer-17307796.

[200] *See* Robson, *supra* note 199 ("the UK's Department for Environment, Food and Rural Affairs is still investigating how [the *Producer*] ended up on a Bangladeshi beach").

company Conquistador.[201] Considering that the nominal vessel "owner" at the time of the *Producer*'s transfer to Janata Steel was an offshore shell company, represented by cash buyer GMS, and the market conditions at the time of the sale, journalists and anti-beaching activists have expressed skepticism as to Maersk's claims that it did not know the vessel was bound for the beaches of South Asia when it left Teesside.[202]

C. Piercing the Flag State Veil: The Seatrade Case

As discussed above, "flagging-out" is the perennial loophole of shipbreaking regulation. The law of the flag State determines shipowner liability for vessel disposal. Many flag States are unlikely to ratify the Hong Kong Convention or the Basel Ban Amendment, and even those that do subscribe may lack the will and/or means to take enforcement actions against shipowners. The use of cash buyers, who purchase condemned vessels from their final commercial owner and then handle the transfer to a breaking yard, provides an additional layer of legal protection to shipowners skittish of legal or reputational liability for substandard breaking, or, so, at least, everyone thought.

On March 8, 2012, Dutch-Belgian shipowner and operator Seatrade decided to decommission a class of four refrigerated cargo vessels, the *Spring Bear*, the *Spring Bob*, the *Spring Deli*, and *the Spring Panda*, all constructed in 1984.[203] The next day a Seatrade executive sent an internal group email, listing action points, including compilation of "a list of all things to be taken off board," and evaluation of "a possible change of flag for sale in connection with 'the position in ranking on North Sea Platform scrapping list.'"[204]

Preparations began: maintenance and inspection schedules were modified, so as to minimize costs, and plans were made to remove navigational equipment, spare propellers, and portraits of Queen Beatrix from the Spring vessels.[205] On April 9, 2012, a Seatrade employee sent an internal email, providing an update on projected proceeds from the Spring scrap sales. The email's author, identified in court papers as employee S., provided a comparison of the scrap prices available in Fujairah, United Arab Emirates, with the much higher per-ton bids available from beaching yards in India: "The latest deals based on delivery in its current state at Fujairah reportedly cost about US$15/[light displacement ton]. For a Spring type this would mean 15 x 8,000 = US$120K lower gross proceeds."[206] Employee S. adjusted this $120,000 per-vessel responsible-breaking surcharge down, to account for the additional operational and agency costs associated with sailing the vessels to India for demolition, and arrived at a price differential of $70,000 per

---

[201] *See Maersk Group says it was "cheated" over final destination for North Sea Producer FPSO*, ENERGY VOICE, Feb. 11, 2016, https://www.energyvoice.com/oilandgas/north-sea/123274/maersk-oil-says-cheated-final-destination-north-sea-producer-fpso/; *Maersk Regrets Shipbreaking Outcome*, REUTERS, Oct. 22, 2016, https://www.maritime-executive.com/article/maersk-regrets-shipbreaking-outcome; A.P. Moller-Maersk Response to Joint Communication from Special Procedures (AL OTH 6/2018), Mar. 20, 2018, available at https://www.maersk.com/~/media_sc9/maersk/news/news/files/2019/10/response-by-a-p-moller_oct-25_v1.pdf.

[202] *See Maersk's Toxic Trade: The* North Sea Producer *Case*, NGO SHIPBREAKING PLATFORM, https://www.shipbreakingplatform.org/spotlight-north-sea-producer-case/, last visited Feb. 20, 2020; MARTINEZ, *supra* note 178. Journalist Margot Gibbs, *supra* note 48, details another European shipbreaking case implicating shell company Conquistador.

[203] *Staat* v. *X* ("*The Seatrade Case*"), NJFS 2018, 180 (Rb. Rotterdam, Neth. 15 maart 2018). Citations and quotations to English translation, available online: <https://www.rechtspraak.nl/Organisatie-en-contact/Organisatie/Rechtbanken/Rechtbank-Rotterdam/Nieuws/Documents/English%20translation%20Seatrade.pdf>.

[204] *Id.* The North Sea Foundation is a Dutch environmental group, and member of the anti-beaching NGO Shipbreaking Platform. NGO SHIPBREAKING PLATFORM, *supra* note 25. Presumably the "North Sea Platform scrapping list" refers to publicity campaigns by North Sea Foundation/Shipbreaking Platform.

[205] *The Seatrade Case*, at 8-9.

[206] *Id.* at 9.

Spring class vessel. The question posed to the higher-ups: "Would it be worth 5 x 70K = 350K not to end up on the name and shame list?"[207] There might be a less expensive option:

> Alternatively, would it be possible to change ownership quickly, for example in the Persian Gulf, before the ship sails to Alang? *It would have to be a flag state that does not require inspections or anything else.*
>
> Is that possible, what would it cost? The Indian owner of the *Viking Star* is said to have switch from a flag state to the Comoros. We would, of course, need the name of the new owner because, as seller, he would have to enter into the contract with the scrappers. Please let me know your thoughts about this.[208]

Another employee, L., responded: "For changing flag and setting up [new] companies we have to assume at least €20,000 (US$25,000) per ship."[209] Employee S. updated the calculations for operational costs, and factoring in the re-flagging expenses, arrived at a new figure: "USD 37k per ship = 5 ships x 37 = *total USD 185k investment not to end up on the list*. Would you please substantiate/state whether that means that we are selling in ... Fujairah or not?"[210]

The *Spring Bear* sailed from Rotterdam on April 15.[211] The first scheduled stop would be in Egypt, but the crew was told the vessel's real destination was Alang beach.[212]

The following month, on May 12, the Dutch Living Environment and Transport Directorate Inspectorate placed a telephone call to Seatrade.[213] The investigating agent told Seatrade that the agency had heard that *Spring Bear* might be exported to India, for scrapping. The Seatrade executive on the call denied any such plan and assured the agent that Seatrade was familiar with the requirements of the EWSR.[214]

Meanwhile in Alexandria, *Spring Bear* loaded a cargo of fruit, for delivery to Iran.[215] By now all four Spring class vessels were on their way to the breakers, and their captains and engineers were operating on strict orders to minimize expenditures on bunkers and other necessaries. Shoreside management emailed the captain of the *Spring Deli*:

> [Do] not count on a reserve for the reserve. Really sail on the minimum, because every ton still in there on arrival at the beach is a waste of money...
>
> [R]emember that we want to transfer the ships with a minimum of bunkers and lubricating oil, so please order accordingly, and if you need to sail with economical consumption, do so, let the auxiliary fans run if that helps to cut costs. It doesn't matter if there is a chance that one will break or that the engine will emit pollution.[216]

Back in Europe, Seatrade employees prepared the financial and legal particulars to transfer ownership in advance of *Spring Bear*'s arrival in India. It was decided that the transfer would take place when the vessel stopped in the UAE, what would be her last port of call. Seatrade emailed the *Spring Bear*'s captain on May 30, to notify him of the anticipated change in ownership: "This is a paper act required for

---

[207] *Id.*
[208] *Id.* (emphasis added).
[209] *Id.*
[210] *Id.* at 9 (emphasis added).
[211] *Id.* at 7.
[212] *Id.* at 10.
[213] *Id.*
[214] *Id.*
[215] *Id.* at 7.
[216] *Id.* at 13.

the last voyage ... The reason for the transfer of management is just because of the paperwork; in practice nothing will change. We will remain your point of contact and the crew will stay on board until they reach their final destination."[217] The "paper" ownership transfer took place the same day, for a stated purchase price of $1 million.[218]

With the vessel under "new" ownership, negotiation for the real sale could be concluded. A price of $3,184,959.99 was agreed, delivery at Alang, India, where "the seller will assist in beaching the vessel at the scrapping yard indicated by the buyer."[219]

On June 12, 2012, the scrap buyer paid the balance of the purchase price, and Seatrade employee L. emailed the *Spring Bear* captain, informing him of the sale's conclusion. Employee L. instructed the master "to follow the buyer/agent's instructions to beach the ship," and to let L. know as soon as the vessel had been beached.[220] By June 13, the *Spring Bear* was on Alang beach.[221]

Spring Bob met the same fate in Chattogram, Bangladesh, after sailing in ballast from Rotterdam.[222] On their final voyages, *Spring Deli* and *Spring Panda* carried cars from Antwerp, Belgium, to Al Khums, Libya, before winding up on the beach in Aliaga, Turkey.[223] NGO Shipbreaking Platform included the four vessels on its "2012 Annual List of Ships Scrapped Worldwide."[224] On the NGO list, Seatrade Holding B.V. is listed as the beneficial owner of each vessel. The list reports that *Spring Bear*'s last registered owner was Spring Bear Shipping Co., S.A., and that she was Liberian-flagged.[225]

Compare this sequence of events to the semi-satirical instructions to shipowners laid out by *Lloyd's List* columnist Andrew Craig-Bennet, back in 1998:

> Now, here is some simple, free, advice ... In future, please do as others, more experienced in these matters, do;
> like this:—1. Ring your broker and tell him that you want to sell the ship for further trading, on "simple terms." If he is up to his job, he will understand you to mean that you want to sell the ship to a scrap speculator.
> Curiously, most of these gentlemen live in London anyway, although they seldom like to hog the limelight.
> 2. The buyer will then ring his lawyers and buy a Liberian shelf company on bearer shares.[226]
> 3. You sell the ship to the new company. One of the "simple terms" is that the ship's name and funnel marks are changed. You have now sold a viable, trading, ship, with certificates for at least another week, from your high profile company in the OECD to an obscure company in an African nation outside the OECD. You have not breached the Basel Convention.
> 4. The speculator then does what he is best at, which is to sell the ship for breaking.

---

[217] *Id.* at 11.
[218] *Id.* For another behind-the-curtain look at scrapping contracts, see Gibbs, *supra* note 49 (describing leaked sales contract between Spanish shipowner Cepsa and shell company Conquistador Shipping, an alter ego for cash buyer GMS).
[219] *The Seatrade Case*, at 11.
[220] *Id.*
[221] *Id.*
[222] *Id.* at 7.
[223] *Id.*
[224] *2012 Annual List of Ships Scrapped Worldwide* (spreadsheet), available at https://www.shipbreakingplatform.org/wp-content/uploads/2018/2012-List-of-all-ships-dismantled-all-over-the-world.xlsx. The *Spring Bob* seems to appear on the list under the name *Spring*, as that vessel matches the *Spring Bob* in all other particulars.
[225] *Id. Spring Bob* was Comoros-flagged when scrapped in Bangladesh. *Spring Deli* and *Spring Panda* were Curacao and Dutch-flagged, respectively, at the time of their demolition.
[226] "The principal way in which an [vessel]'s ownership may be hidden through the use of bearer shares which, unlike normal registered shares, do not carry the name of the owner and may be transferred from person to person without money changing hands or details of the transfer being registered." Galley, *supra* note 24, at 105.

> All these functions can be carried out, by experts of high professional standing, within half a mile of your office doors. That is why London is a shipping centre.
> The ship will still end up in India, she will still get broken up, and the breakers' workforce will not be out of employment. The Basel Convention, on the other hand, will have been observed precisely.[227]

Seatrade seemed to have followed Craig-Bennett's advice, albeit from Antwerp rather than London; the price had been paid, the paper companies registered, the vessels re-flagged, the name-and-shame list avoided, the letter, if not the spirit of the EWSR observed. Or had it been?

The Dutch public prosecutor brought a novel case against Seatrade and three of its executives, alleging that the final voyages of the Spring vessels had been an export of hazardous waste in violation of the EWSR, and seeking a fine of €2.35 million, confiscation of profits made on the *Spring* scrapping contracts, and six-month prison sentences for the three individual defendants.[228]

The main legal question before the Rotterdam District Court was whether the vessels, three of which carried cargo for some portion of their final voyage, could be considered "waste" under the EWSR. Seatrade argued the vessels were not waste, because, at the time they left Europe, the vessels were "seaworthy, certified[,] insured [and] operationally deployable."[229] The court rejected this argument—"[a]lthough these circumstances, taken separately and in combination, may constitute an indication that no waste is involved, they are not decisive in determining whether a waste is involved."[230] The determinative question is as to the intent to dispose, which must be evaluated in the totality of the circumstances. The court found that, in light of the EWSR's objective to protect public health and the environment, the definition of "disposal" should not be given a restrictive interpretation.[231]

On March 15, 2018, the court shocked many in the shipping industry by convicting Seatrade and two of the three individual defendants.[232] The court held that Seatrade intended to dispose of the ships at the time they left Europe, in violation of the EWSR.[233] The court described the "paper" sale as a transaction which, "in the context of the exchanged messages, only seems to have been aimed at preventing entry on the 'name and shame list' by reflagging the ship before it was handed over for scrapping."[234] Evaluating the blameworthiness of one of the two convicted executives, the court observed that he had "turned a blind eye" to the health and safety risks of beaching the vessels.[235] "In his considerations, he apparently only took account of the business interests of the companies for which he was responsible. The warning issued by the

---

[227] Andrew Craig-Bennett, *Shipbreaking: Oh Dear*, LLOYD'S LIST (1998), available at http://archive.ban.org/library/ship breaking_oh_dear.html. Craig-Bennett wrote in response to public outcry over the breaking of a P&O Nedlloyd vessel. *Id.*

[228] *Dutch Court to Hear Shipbreaking Case Against Seatrade*, MAR. EXECUTIVE, Feb. 13, 2018, https://www.maritime-executive.com/article/dutch-court-to-hear-shipbreaking-case-against-seatrade.

[229] *Staat* v. *X* ("*The Seatrade Case*"), NJFS 2018, 180 (Rb. Rotterdam, Neth. 15 maart 2018), at 15.

[230] *Id.*

[231] *Id.* at 17. This is consistent with other judicial interpretations of the EWSR. "In EU law, as interpreted by the European Court of Justice, the distinction between waste and non-waste is … guided by the principles of precaution, prevention and high level of environmental protection, which excludes a narrow delimitation of the notion of waste." Ormond, *supra* note 82, at 17.

[232] *See* Cedric Ryngaert & Lukas Waardenburg, *Tackling Extra-Territorial Ship-Breaking: From the EU Waste Shipment Regulation to the EU Ship Recycling Regulation—Reflections After the Rotterdam District Court's Judgement in* SeaTrade, 24 J. INT'L MAR. L. 226, 226 (2018).

[233] "[T]he true intention of the holder must be given decisive significance and, as can be seen from that set out above, the intention was to dispose of the ships. The circumstance that three of the ships were still in commercial service and carried a cargo during part of the voyage to their final destination does not alter this." *The Seatrade Case*, at 16.

[234] *Id.* at 21.

[235] *Id.* at 25.

Environmental and Transport Inspectorate on 08 May 2012 ... also did not prevent him or his co-defendants from committing the offences."[236]

The company and executives were fined €750,000. The court declined to impose any prison time, instead banning the two individuals from participating in the shipping industry for twelve months.[237]

After the verdict, Seatrade spokesman Cor Rading maintained, "when the ships were here, [] they were sea worthy, they had all the certificate[s] and could not be considered waste. There is a difference of opinion about whether the decisions to recycle the ships were made in the European Union or not. We think they weren't. They were in international waters."[238] The conviction is on appeal.[239] Even if the Seatrade opinion overturned, its effect has been considerable. Seatrade chief executive Yntze Buitenwerf was interviewed by *Lloyd's List* after the verdict, and he said he found it laughable that the prosecution had expended so much energy to determine whether the Spring scrappings were "intentional":

> "Now the whole world is shaken up, because everyone that has scrapped a ship in the last six years must have had an intention to scrap a ship. It is not like you pass the beaches of Alang and say: 'Hey, look at this nice beach. Let's beach her,'" said Mr. Buitenwerf. "The jails would be full of shipowners right now if you apply the same ruling where we have been the only ones singled out" ... Seatrade has learnt its lesson, though, and vigilance is top of the agenda. "We now make sure we are aware of the enemy around the corner," said Mr. Buitenwerf.[240]

In the aftermath of the Seatrade verdict, shipping lawyer Johannes Grove warned European shipowners,

> They're keeping an eye on which ships end up on the beaches. A shipping company may have sold its ship to a cash buyer, which has changed its flag as well as name. But if a ship was owned by a European shipping company two or three months before arriving at a beach, the case will be scrutinized. . . . It's not unlikely that authorities will go in and demand to see emails, contracts and the like. And if there are emails dating back to before the departure from Europe, which mention having as little bunker oil as possible, because the ship is expected to be scrapped when it arrives, I don't think they'll be able to dodge it, no matter what the practice has been so far.[241]

In January 2019 another Dutch shipowner, Holland Maas, settled with the Dutch prosecutor for €2.2 million, in addition to a fine of €780,000, for the export and scrapping of the *HMS Laurence*.[242] She was sold to a cash buyer in 2013, and ended up on Alang Beach, and the settlement amount reflected the earnings realized by Holland Maas for the sale.[243] The master of the *Laurence* was subject to a Dutch merchant marine disciplinary action, for his role in the illegal scrapping.[244] The maritime disciplinary

---

[236] *Id.*
[237] *Id.* at 26. The court found imprisonment unwarranted where this prosecution was the first of its kind. *Id.*
[238] Quoted by Tomas Kristiansen, Daniel Logan Berg-Munch & Katrine Grønvald Raun, *Two Seatrade Execs Convicted for Scrapping Four Ships*, SHIPPINGWATCH, Mar. 15, 2018, https://shippingwatch.com/secure/carriers/article10419626.ece.
[239] Mikelis, *supra* note 138.
[240] Linton Nightingale, *Seatrade Made a Scapegoat in EU Scrapping Verdict*, LLOYD'S LIST, June 4, 2018, *reprinted in* SIMPLY SEATRADE, June 2018, at 25.
[241] Quoted by Niklas Krigslund, *Shipping Companies Risk Tough Penalties for Shipbreaking*, SHIPPINGWATCH, Mar. 21, 2019, https://shippingwatch.com/secure/carriers/article11267227.ece.
[242] *Another Dutch Shipowner Fined for Beaching a Vessel*, MAR. EXECUTIVE, Jan. 21, 2019, https://www.maritime-executive.com/article/another-dutch-shipowner-fined-for-beaching-a-vessel.
[243] *Id.*
[244] *Minister of Infrastructure & Environment in The Hague v. M.N.*, Ruling 5 of 2015, No. 2015.V6, Maritime Disciplinary Court of the Netherlands (Tuchtcollege voor de Scheepvart), (*HMS Laurence*) (official English

court of the Netherlands found that the *Laurence* master had breached his duty of care as master, in violation of Dutch law, by knowingly participating in the beaching of the vessel in Alang.[245] Because this case was the first disciplinary action brought against a Dutch mariner for participating in a beaching, the court issued a deferred six-month suspension, amounting to a probationary period.[246]

An extensive, if not exhaustive, survey of legal scholarship on the modern shipbreaking problem revealed only one article hypothesizing an EWSR prosecution for export of a vessel by means of out-flagging and sale to a cash buyer. Social science research from Fifteen years ago, Darren Wall and Michael Tsimplis theorized that a scrapping contract might be rendered unenforceable under English law by a showing of illegality.[247] Wall and Tsimplis cabin their analysis by observing that such a finding of contractual illegality, based on criminal violation of the EWSR, will only come to light if a party seeks to enforce (or void) the contract in an English court.

The Seatrade opinion, if it is sustained on appeal, may complicate shipowners' calculations going forward. To establish that Seatrade had formed an intention to scrap the Spring class prior to the vessels' departure from European waters, the Rotterdam court considered internal emails, removal of non-essential equipment, and instructions to minimize vessel maintenance, inspection, and restocking. Add to this Wall and Tsimplis' suggestions: age of the vessel, price relative to second-hand market, particulars of the bill of sale. To avoid creating this class of evidence, shipowners will need to delay any preparations for decommissioning until the vessel has left European waters. The current legal climate, combined with the limited capacity and low bids of the European List scrapping yards may incline European shipowners to avoid decommissioning their vessels at almost any cost, and rather find a non-European bona fide owner to continue operating the vessel, for some respectable period of time.

Considering the recent entry-into-force of the ESRR, which supersedes the EWSR, the direct precedential impact of the Seatrade decision will be limited. However, the willingness of the Dutch court to work backward through the final flag and final owner, to find liability in the European corporate owner who had tried to skirt the limits of regional environmental regulation is significant. Prior to the Seatrade Case, even sympathetic business and legal scholars believed the EWSR could be reliably avoided by delaying any official declaration of the intent to discard until after the vessel had left European waters, and that the ESRR would be almost as easily avoided.[248]

At time of writing, the Danish Environmental Protection Agency is investigating Maersk's out-flagging and subsequent Alang scrapping of four vessels.[249] The vessels in question were re-flagged to Hong Kong in 2018, and scrapped in the spring of 2019. Maersk maintains that the decision to scrap the vessels was taken after re-flagging and while the vessels were in international waters, and was therefore

---

translation). The master apparently posted a YouTube video of the *Laurence* beaching, which came to the Dutch government's attention and occasioned the disciplinary action against his license. *Id.* at 3-4.

[245] *Id.* at 6.

[246] *Id.* at 6-7. *See also* Thomas van Hövell, *Master Receives Deferred Suspension*, INT'L L. OFFICE, Dec. 23, 2015, https://www.internationallawoffice.com/Newsletters/Shipping-Transport/Netherlands/AKD/Master-receives-deferred-suspension-for-illegal-beaching-of-vessel# ("the beaching for subsequent demolition of ships moved from the European Union to Southeast India places the master of such ships at risk of suspension if the physical breach of national and European law has been performed under the authority of such master. Posting a recording of the beaching of such vessels on YouTube clearly increases the risk of detection and suspension.").

[247] *Selling Ships for Scrap*, LLOYD'S MAR. & COM. L.Q. (May 2004), at 254, 262.

[248] The ESRR, like the EWSR before it "could not be applied to non-EU-flagged vessels." Cairns, *Return to Chittagong*, *supra* note 27, at 342. "Leaving port before a decision to scrap the ship has been formally taken avoids the controls of the … Ban Protocol." Tsimplis, *supra* note 135, at 420. Frank Stuer-Lauridsen, CEO of consulting firm Litehauz, told *ShippingWatch* "it's impossible to prove that a company is re-flagging in order to circumvent the regulations, even though it might look conspicuous. This is the same issue that applies to the Basel convention, where one has to prove that a shipping company intends to scrap the ship before it leaves OECD waters. This is, in effect, not possible." Krigslund, *supra* note 152.

[249] Niklas Krigslund, *Maersk Responds to Authorities in Case About Re-Flagging of Vessels*, SHIPPINGWATCH, Jan. 28, 2020, https://shippingwatch.com/secure/regulation/article11903994.ece.

legal under both the EWSR and the Basel Convention.[250] In Norway, Økokrim is investigating Teekay Shipping's 2018 scrapping of the *Navion Britannia* in Alang for possible waste export law violations.[251] The *Navion Britannia* case is notable because Teekay, a member of the industry Ship Recycling Transparency Initiative, made extensive, public efforts to audit and monitor the Alang yard for responsible ship recycling practices.[252] Reports suggest authorities in the United Kingdom, Germany, and Belgium are also interested in pursuing scrapping-export prosecutions.[253]

D. Direct Tort Actions: The *Eurus London*

Mohamed Edris, aged thirty-eight, worked as a metal cutter on the beaches of Chattogram, Bangladesh.[254] He showed up to work early on the morning of April 11, 2015, as he had six days a week since coming to Chattogram at age fourteen. That morning, Edris was one of some hundred workers dismantling the 19,600-ton container ship *Eurus London*, and his supervisor directed him to cut the vessel's forty-ton propeller down from the hull, using a blowtorch, onto a makeshift metal platform. Edris did not want to do it; he was afraid the propeller would rebound off the platform and injure him, but when his protests were ignored, he lit up his torch and started cutting. The massive propeller hit the metal platform, and then careened into Edris, just as he had feared. Its metal edge amputated his left leg below the knee. His back was seriously injured, and he was blinded in one eye.[255] Edris was taken to a nearby hospital, but his employer, Fedrous Steel yard, refused to pay for needed surgery.[256] The NGO Shipbreaking Platform prevailed upon local industry contacts, and Edris was operated upon.[257] Edris, a skilled and experienced metal cutter, had earned the equivalent of £3.20 a day, and supported seven family members.[258] He eventually received the equivalent of £1.142 in compensation from his employer, and £4.32 a week for nine months, but, unable to work, he and his family were left destitute.[259]

Edris's injury was not, sadly, unusual, but the outcome of his story is. The Shipbreaking Platform obtained counsel for Edris, from the UK firm Leigh Day, and Edris filed a first-of-its-kind lawsuit against the British owner of the *Eurus London*, Zodiac Maritime.[260] The suit was filed on a negligence theory:

---

[250] *Id.*

[251] *Norwegian Authorities Investigate Teekay Subsidiary Over Shipbreaking*, MAR. EXECUTIVE, Jan. 31, 2020, https://www.maritime-executive.com/article/norwegian-authorities-investigate-teekay-subsidiary-over-shipbreaking.

[252] *Id. See also, Promoting Responsible Ship Recycling*, TEEKAY, Mar. 20, 2019, https://www.teekay.com/blog/2019/03/20/promoting-responsible-ship-recycling/ (featuring photograph of *Navion Britannia* on the beach).

[253] Ole Andersen, *Several European Scrapping Cases Could Break Out*, SHIPPINGWATCH, Feb. 14, 2018, https://shippingwatch.com/secure/carriers/article10309769.ece.

[254] John Vidal, *"This is the World's Cheapest Place to Scrap Ships"—But in Chittagong, It's People who Pay the Price*, GUARDIAN, Dec. 2, 2017, https://www.theguardian.com/global-development/2017/dec/02/chittagong-shipbreaking-yards-legal-fight. For an earlier interview with Edris, made prior to filing of his lawsuit, see Niels Lykke Møller & Mikkel Secher, *Mohammed Ophuggede Mærsks Skibe på Berygtet Strand: Vi Løb en Stor Risiko Eele Tiden* [*Mohammed Scrapped Maersk's Ships on the Notorious Beach: We Ran a Huge Risk All the Time*], TV2, Oct. 17, 2016, https://nyheder.tv2.dk/udland/2016-10-17-mohammed-ophuggede-maersks-skibe-paa-berygtet-strand-vi-loeb-en-stor-risiko-hele (video clip and article). Edris told these Danish journalists that he had worked on the breaking of two Maersk vessels in Chattogram, several months before his injury. *Id.*

[255] Vidal, *supra* note 254.

[256] *Severely Injured While Scrapping a British-Owned Vessel—Worker Edris Receives No Medical Support from the Yard Owner*, 6 NGO SHIPBREAKING PLATFORM S. ASIA Q. UPDATE, 3, 3-4 (2015).

[257] *Id.*

[258] Vidal, *supra* note 254.

[259] *Id.*

[260] *Id. See also, Legal Action Against London-Based Shipping Company Following Life-Changing Injuries*, LEIGH DAY, Dec. 4, 2017, https://www.leighday.co.uk/News/News-2017/December-2017/Legal-action-against-London-based-shipping-company.

> Zodiac knew, or ought to have known, that there was a foreseeable risk of physical harm to workers when they allowed their vessel to be sold to a Chittagong yard through a cash buyer ... They had a duty not to sell vessels to Bangladesh shipyards via their contractors or cash buyers.[261]

Zodiac initially denied all liability, in a statement to the press, saying the accident occurred four months after Zodiac sold the vessel: "The yard where Mr[.] Edris was employed was not Zodiac's contractor and Zodiac did not select the yard used to dismantle the vessel. Zodiac has no control over the working practices at shipbreaking yards."[262]

Within the month, a private settlement had been reached, "to the satisfaction of the worker."[263] A Shipbreaking Platform spokesperson said the group hoped to repeat this success and that a number of similar cases were under review for legal action.[264] Shipping lawyers at the London office of Holman Fenwick Willan warn, "the case suggests that even with the involvement of an intermediary cash buyer, a determined and financed claimant could at least create litigation risk for an owner."[265]

While the case was clearly a success for Edris and his family, and a public relations coup for the Shipbreaking Platform and Leigh Day, the suit's legal underpinnings are far from certain. The suit in negligence sought to apply British tort law to an accident occurring on a Bangladeshi beach. Defendant Zodiac objected, "The claim seeks to extend the law of negligence beyond any recognized boundaries. It is the law of Bangladesh which applies to this case."[266]

Professor Henning Jessen, of the World Maritime University, is sympathetic to the injured shipbreakers' plight, but skeptical that a theory of transboundary, extra-contractual negligence can, or ought, be brought to bear:

> It is hard to argue … that there is any legal relationship between a former shipowner in one part of the world and the workers at a ship recycling yard in another part of the world. Anyone who takes a different legal view must take the trouble to explain why—potentially—thousands of unknown legal relationships exist between a (penultimate) shipowner and the workers at a foreign scrapyard—even though the shipowner has not sold the vessel to the relevant scrapyard ... [And w]hat about the passage of time? ... [W]hat if the vessel is not sold once but several times before it ends up at the scrapyard?[267]

In addition to these legal obstacles to assigning liability, there are practical concerns when using lawsuits such as Edris' to enforce workers' rights: third-party financial sponsorship and/or pro bono counsel is necessary to finance the litigation, and such actions are, by their nature, piecemeal and *ex post facto*. As one contemporary press account said of the prospect for future suits on the *Eurus London* model: "A claimant's best hope might be for an early out-of-court settlement from an owner that is seeking to avoid

---

[261] Leigh Day director Martyn Day, quoted by Vidal, *supra* note 254. Edris' theory of liability rested on the allegation of a legal duty of the former ship manager *not* to sell any vessels via any contractors or cash buyers to shipyards in Bangladesh (or Pakistan) since in doing so it would have known that the vessels would be dismantled in unsafe conditions and the higher price paid by the cash buyer was an indication that the vessel would ultimately be beached. Henning Jessen, *Safe and Environmentally Sound Ship Recycling—Is There a Case for Liability Claims?*, *in* MARITIME LIABILITIES IN A GLOBAL AND REGIONAL CONTEXT 89, 100 (Bariş Soyer & Andrew Tettenborn, eds., 2019).
[262] Quoted by Vidal, *supra* note 254.
[263] *Monitoring the Problem of Shipbreaking in Bangladesh*, NGO SHIPBREAKING PLATFORM ANN. REP. 10, 11 (2017). *See also* Adam Corbett, *NGO Shipbreaking Readies Personal Injury Cases Against Owners*, TRADEWINDS, June 12, 2018, https://www.tradewindsnews.com/casualties/1509126/ngo-shipbreaking-readies-personal-injury-cases-against-owners.
[264] Corbett, *supra* note 263.
[265] Gidman, et al., *supra* note 144.
[266] Quoted by Vidal, *supra* note 254.
[267] Jessen, *supra* note 261, at 100-01.

negative publicity from bringing a case to court in the UK."[268] And, indeed, so long as these cases are infrequent, the price of settling with the occasional Bangladeshi family is probably a bearable cost of doing business for a corporate shipowner.

On January 31, 2020, Leigh Day announced a second UK suit, brought on behalf of the widow and son of Md Khalil Mollah against Maran (UK) Ltd., a subsidiary of Greek shipowner Angelicoussis Shipping Group, and filed in the High Court of London.[269] Mollah, 32, died on or around March 30, 2018, after falling from a height of eight stories, off the hulk of the former Maran vessel *Ekta*, where he worked as a fitter, on the beach in Chattogram.[270] The new lawsuit asserts that Maran had a responsibility to take reasonable steps to ensure that its sale and disposal of the vessel would not endanger human health or the environment. Maran sold the vessel to cash buyer Wirana for $16,243,106.80 in September 2017, at which time the scrap prices were $255 per ton in China, compared with $385 in India and $405 in Bangladesh.[271] At or around the time of sale, the vessel's name was changed from *Maran Centaurus* to *Ekta*, and she was reflagged from Greece to Palau.[272]

E. Corporate Responsibility: An Extralegal Solution?

For two decades, NGOs, including Greenpeace and the Shipbreaking Platform, have worked to raise public awareness of the environmental and human rights abuses in the South Asian shipbreaking industry.

There are signs that the pressure is starting to have a real effect on corporate decision-makers.[273] Roger Strevens, a vice president with Norwegian shipowner Wallenius Wilhelmsen says shippers now frequently ask, "'well, how do you deal with issues like vessel recycling.' Because . . . even though they are not responsible for how we recycle our vessels from a legal perspective, if they are found to be using a carrier that disposes of vessels in a way which has a very negative environmental or social impact, they can

---

[268] Corbett, *supra* note 263.

[269] Press Release, Leigh Day, UK-Based Shipping Co. Facing Legal Claim Following Death Caused by Shipbreaking (Jan. 31, 2020), https://www.leighday.co.uk/News/Press-releases-2020/January-2020/UK-based-shipping-company-facing-legal-claim-follo.

[270] *Id.*; John Vidal, *"Mollah's Life was Typical": The Deadly Ship Graveyards of Bangladesh*, GUARDIAN, Jan. 31. 2020, https://www.theguardian.com/global-development/2020/jan/31/khalid-mollah-life-was-typical-the-deadly-ship-graveyards-of-bangladesh. "The breaking of the tanker *Ekta* at Zuma Enterprise yard has been particularly hazardous: there, two fatalities have been recorded on two separate occasions. Fitter man Muhammad Khalil fell from great height while working on the *Ekta* on 31 March; and only three days ago, on 24 April, Shahidul Islam died when hit by a falling steel plate." *Platform Publishes South Asia Quarterly Update #15*, NGO SHIPBREAKING PLATFORM (Apr. 27, 2018), https://www.shipbreakingplatform.org/platform-publishes-south-asia-quarterly-update-15/.

[271] Vidal, *supra* note 254; *Platform Publishes South Asia Quarterly Update #15*, *supra* note 270. The *Ekta*, "according to shipping databases, was sold to the breaker by the Swiss shipping company Navimar. Navimar bought the vessel that was operated by Maran Tankers . . . in September 2017, only a month before it was brought to the beach at Chittagong, so it's clear that the Swiss company acted as a conduit to scrap the ship, making a purely financial transaction." Gie Goris & Nicola Mulinaris, *Where Ships Go to Die*, PUBLIC EYE (Jan. 2019), available at http://stories.publiceye.ch/ships/#the-hell-of-ship-graveyards-CY1ySCZpy2.

[272] Goris & Mulinaris, *supra* note 271; *2017 Annual List of Ships Scrapped Worldwide* (spreadsheet), available at https://www.shipbreakingplatform.org/wp-content/uploads/2018/08/2017-List-of-all-ships-dismantled-all-over-the-world.xlsx.

[273] *See* Alcaidea et al., *supra* note 27, at 270; Patrick M. Alderton & Merv Rowlinson, *The Economics of Shipping Freight Markets, in* THE HANDBOOK OF MARITIME ECONOMICS AND BUSINESS, *supra* note 40, at 181, 210-11. "[I]n today's environmentally aware marine industry a critical news report or an unfavourable 'tweet' can undo years of good work in seconds." John Chillingworth, *Don't Let Poor Recycling Decisions Damage Your Reputation*, LUCIONMARINE, Aug. 13, 2018, https://www.lucionmarine.com/blog/dont-let-poor-recycling-decisions-damage-your-corporate-brand-reputation (citing and linking to Vidal, *supra* note 254).

end up being held accountable or responsible."[274] In combatting bad practices in shipbreaking, "[a]n alternative to the legal approach suggests the development of corporate decision-making on the basis of the market forces together with legal and ethical decision-making."[275]

Norway's Government Pension Fund Global (GPFG) is the world's largest sovereign wealth fund.[276] In January, 2018, following advice from its internal Council on Ethics, the fund announced its disinvestment from four ocean carriers, including major player Evergreen, because the shipowners had scrapped their vessels under substandard conditions in Pakistan and Bangladesh.[277] The fund said the use of third-party cash buyers was not considered a mitigating factor as to the shipowners' culpability:

> When a company sells a ship to a cash buyer, it is at the outset clear that the ship is being sold for the sole purpose of scrapping. Furthermore, both parties are aware that the price agreed depends largely on two factors: the volume of steel in the ship and the cost of dismantling it. The cheapest method of dismantling a ship is by beaching, which is why this process gives the seller the highest price for the vessel concerned.
>
> The Council on Ethics presumes that companies that dispose of a ship for scrapping in this way are fully aware of what will happen to it next. It must also be considered as general knowledge in the shipping industry that environmental and working conditions associated with beaching are extremely poor. That a ship is nevertheless sent for scrapping at the Chittagong beach in Bangladesh is a consequence of an active choice on the part of the company that owned the vessel to maximise its profit. In the Council's opinion, that company must shoulder an independent responsibility for doing so. There are better ways of dismantling ships that are readily available to the shipowner, but these are more expensive.
>
> In the opinion of the Council on Ethics, therefore, there exists a tangible connection between the shipowner's actions and the violation of ethical norms, which is of such a nature as to constitute a contribution to the latter under the GPFG's ethical guidelines.[278]

The Fund's Council on Ethics has been keeping tabs on the shipbreaking industry and recently announced that assuring that companies it invests in practice responsible ship recycling will be a major focus for 2019.[279] Private Norwegian pension fund KLP has followed GPFG's lead, adopting the GPFG's Council on Ethics recommendation, and divesting from shipping companies found to have knowingly scrapped vessels on Pakistani and Bangladeshi beaches, including the January 2019 addition of Nordic Tanker Lines to the original list of four.[280] In September 2019, after a worker died in an explosion at Shree Ram breaking yard in Alang, KLP indicated concern over continued investment in blue-chip shipowner Maersk.[281] Maersk had scrapped four vessels with the yard, and promoted Shree Ram as an example of

---

[274] Quoted by Simon West, *Shift to a Sustainable Future: No Escaping Ecological Juggernaut*, BREAKBULK MAG., Issue 1 (2020), at 33, 34.

[275] Tsimplis, *supra* note 135, at 439 n. 181.

[276] Niklas Krigslund, *Why the Norwegian Oil Fund Blacklisted Carriers for Beaching*, SHIPPINGWATCH, Jan. 17, 2018, https://shippingwatch.com/carriers/article10210736.ece.

[277] *Id. See also, Observation & Exclusion of Companies,* NORGES BANK, https://www.nbim.no/en/the-fund/responsible-investment/exclusion-of-companies/, retrieved April 23, 2019.

[278] Government Pension Fund Global Council on Ethics, *Recommendation to Exclude Evergreen Marine Corp (Taiwan) Ltd. from the Government Pension Fund Global* (GPFG), June 29, 2017 (unofficial English translation), at 8.

[279] Gwladys Fouche, *Norway Wealth Fund's Watchdog Turns Spotlight on India Shipbreaking*, REUTERS, Mar. 11, 2019, https://www.reuters.com/article/us-norway-swf-ethics/norway-wealth-funds-watchdog-turns-spotlight-on-india-shipbreaking-idUSKBN1QU124.

[280] KLP, *Decision to Exclude Nordic American Tankers Ltd.*, Jan. 2019; KLP, *Decision to Exclude Evergreen Marine Corporation Ltd., Korea Line Corporation, Precious Shipping PCL and Thoresen Thai Agencies PCL*, Jan. 2018.

[281] Niklas Krigslund & Mathias Blædel Lorenzen, *Investor Wants to Enter Talks with Maersk After Beaching Yard Death,* SHIPPINGWATCH, Sept. 13, 2019, https://shippingwatch.com/secure/regulation/article11614792.ece.

Indian progress towards responsible scrapping processes: "In this case, a serious accident occurred at a yard that's viewed as one of India's better yards. It's worrying and something we would like to enter talks with Maersk about."[282]

D. Michael Kaye, chief counsel of the American Archer Daniels Midland Company (ADM), told the assembled attorneys at a maritime law conference that, when his employer needed to decommission a vessel (an uncommon occurrence for the firm, which is primarily focused on food processing) he went to Maersk and outside counsel for advice.[283] Outside counsel advised Kaye of the potential for reputational harm and spurred him to make further inquiries, after his Dubai scrapping broker initially told him there were ninety-odd yards available, mostly in South Asia. Kaye told his broker that ADM wanted a yard which could meet international hazardous waste transfer and shipbreaking convention standards and where ADM could be assured that no underage labor would be employed. These stipulations brought the number of available facilities down to four. Kaye said his concerns in this matter were not, *per se*, legal (the HKC, as discussed above, is not yet in force) but more business oriented, as to the reputational and sustainability interests of the corporation: "We don't want to end up on the front page of the paper."[284]

Similar motives are surely at play in the Ship Recycling Transparency Initiative (SRTI), a component of the Sustainable Shipping Initiative. The SRTI is a voluntary, membership-based information-sharing platform.[285] Presumably, this model can benefit image-conscious shipowners who want to publicize their responsible ship recycling practices, and enable shippers and institutional investors to direct their business or investment towards socially responsible companies. (It may also have benefited the Norwegian economic and environmental crimes prosecutor Økokrim, who in January 2020 raided the offices of Teekay Shipping, in relation to that company's demolition of the *Navion Britannia*, a transaction documented by the SRTI.)[286]

While some of these efforts are encouraging, voluntary corporate responsibility schemes will not solve the labor and environmental problems endemic to modern shipbreaking. In the global, transnational and highly competitive shipping industry, the efforts of a few marquee names, like Maersk or ADM, will have a limited impact on shipping lines competing to provide low-dollar freight rates: "Ships are moved from port to port, change their flags of registration and their names and can apparently be made to disappear from the face of the earth despite high-profile opposition and developed world government action to prevent disposal for beaching."[287] "[T]o the extent that social pressure by consumers is unlikely to play a role in rewarding the ethically behaving shipping company, simply because most other ships will belong to one-ship companies which will disappear with the ship, such an [extralegal, corporate social responsibility] approach is unlikely to succeed within the shipping sector."[288] Nikos Mikelis, non-executive director of cash buyer GMS and architect of the HKC, notes that the shipowners who have adopted "green recycling" programs or other corporate social responsibility principles are, largely, "either publicly listed . . . or companies whom, or whose clients, are directly exposed to the vagaries of public opinion."[289] Dr. Mikelis

---

[282] *Id.*, quoting KLP Head of Responsible Investments Jeanett Bergan. The ongoing Norwegian criminal investigation of Teekay Shipping's Alang scrapping of the Navion Britannia, discussed briefly *supra*, is an example of how ship recycling transparency may backfire and expose a shipowner to criminal, as well as reputational, liability. *See Norwegian Authorities Investigate Teekay Subsidiary Over Shipbreaking*, *supra* note 251.

[283] Panel Discussion, From Blue to Brown Water: Maritime In-House Counsel Roundtable, Am. Bar Ass'n Tort Trial & Ins. Practice Section Admiralty Disruption Conference (Mar. 23, 2019).

[284] *Id.*

[285] *See* Holmer & Draper, *supra* note 28; *Ship Recycling Transparency Initiative Launched*, MAR. EXECUTIVE, Dec. 10, 2018, https://www.maritime-executive.com/article/ship-recycling-transparency-initiative-launched; Andrew Stephens & Nicole Rencoret, *Creating a New Norm for Responsible Ship Recycling*, MAR. RISK INT'L, Feb. 11, 2019, https://www.maritime-risk-intl.com/environment/creating-a-new-norm-for-responsible-ship-recycling-133624.htm.

[286] *Norwegian Authorities Investigate Teekay Subsidiary Over Shipbreaking*, *supra* note 251.

[287] Cairns, *supra* note 26, at 177-78 (references omitted).

[288] Tsimplis, *supra* note 135, at 439 n. 181.

[289] MIKELIS, *supra* note 34, at 53.

attended a meeting designed to introduce the SRTI to industry stakeholders, and left "quite concerned that the SRTI was aiming to be (or was destined to become) an exclusive club of exclusive members."[290]

Some twenty years ago, International Chamber of Shipping advisor Brian Parkinson suggested a voluntary self-regulation scheme, much like the SRTI, to journalist William Langewiesche.[291] He envisioned a regime "under which the industry would inspect and certify the yards at the Asian beaches and then factor in good behavior when choosing which ones to use."[292] Langewiesche asked Parkinson, "what was to keep his scheme from becoming a two-tiered arrangement, whereby a few image-conscious companies would accept the expense of working with certified yards while all the other shipowners continued with business as usual, selling their vessels to the highest bidders. He said he worried about that too."[293]

VI. CONCLUSIONS

While progress has undoubtedly been made in the twenty years since the South Asian shipbreaking yards became a site of international concern, the basic difficulties remain. Campaigners have tried, with some success, to use the Western beneficial ownership of scrapped merchant vessels as a lever to reform labor and environmental law in India, Pakistan, and Bangladesh.[294] But it remains "difficult for a developing-world nation to increase significantly its [occupational, environmental, and health] standards for a particular, migrant-staffed industry, ship recycling, while the […] profile for the rest of its society remains troubled."[295] The implementation of an EU financial instrument that would remove the financial incentive for beaching seems, at this writing, unlikely. As things stand, it seems the main practical effects of the European Regulation will be to: 1) shift scrapping tonnage to Turkey, and 2) encourage European shipowners to transfer ownership and/or reflag their vessels before the vessels reach the end of their operational life. As journalist William Langewiesche wrote twenty years ago, "the more likely effect of the reforms, as long as money can be made in Third World scrap, would simply be a new and less direct route to Asia: ships would pass through more hands, would maybe live longer plying faraway waters under new names and flags, and would still end up dying on some filthy beach."[296]

With increased scrapping regulatory burdens, cash buyers may become even more important to the ship breaking process, assisting operational owners in selecting a compliant scrapping facility and/or assuming some of the operational owner's liability for non-compliance.[297] Should the Hong Kong

---

[290] Quoted by *Ship Recycling Transparency Initiative Launched*, *supra* note 285. *See also* MIKELIS, *supra* note 34, at 48 (discussing possible development (and deleterious effect) of a three-tiered shipbreaking market of "(i) no standards; (ii) HKC; and (iii) 'HKC Plus'").

[291] LANGEWIESCHE, *supra* note 7, at 217-18.

[292] *Id.*

[293] *Id.*

[294] In the relatively early days of the anti-beaching campaign, journalist William Langwiesche asked Dutch Greenpeace operative Claire Tielens, "'Why did you choose Alang? Why does it seem worse to you than the other industrial sites in India?' She answered, 'Because here there is a very direct link with Western companies.' 'But if it's Western companies at Alang, versus Indian companies somewhere else, what difference does it make to the world's environment?' 'Because those Western companies pretend to us here with glossy leaflets that they are so environmentally responsible. And it is a shame when they export their shit to the developing world.'" LANGWIESCHE, *supra* note 7, at 218.

[295] Rousmaniere & Raj, *supra* note 7, at 359. "For instance, the fragile workers' compensation systems of developing countries cannot be expected to work well for shipbreaking workers and not for others." *Id.*

[296] *Id.* at 236.

[297] "Under the Hong Kong Convention and the EU Regulation cash buyers will have the same responsibility for the ship as a shipowner, and on entry into force will therefore be subject to the same requirements and liabilities. The actual effect this will have remains to be seen, and it is probable that liabilities and responsibilities will be shared, *i.e.* the shipowner prepares the inventory for final survey whilst the cash buyer negotiates with a facility on the owner's behalf and takes ownership at the point of delivery. There is a strong possibility that the cash buyer will be increasingly important as a facilitator as the industry moves towards compliance with the IMO Convention, matching vessels to

Convention come into force, at least one of the subcontinent's three shipbreaking nations will have strong incentives to remain non-signatory, as non-signatory breaking yards, working in concert with non-signatory open registries, will be at a significant competitive advantage in bidding for decommissioned vessels.[298] (Present conditions suggest that Pakistan, whose breakers have been struggling in recent years and whose government has made no motions towards accession to the HKC, may fill this niche.)

These probable outcomes point to a missed opportunity for the developed world to contribute to the development of a more sustainable breaking industry on the Subcontinent. As described above, lax labor and environmental standards are not the only reasons that shipbreaking activity has become concentrated on the Subcontinent.[299] The development of a safe and sustainable shipbreaking industry in India, Pakistan, and Bangladesh would be more economically efficient, on a global scale, than a wholesale shift of the industry to industrialized nations like Turkey and China (should China's yards reopen). Norway has funded an IMO project to improve conditions at Bangladeshi yards.[300] The first phase of the project was inaugurated in 2015, with US $1.5 million in funding, including some financial support from the Secretariat of the Basel, Rotterdam, and Stockholm Conventions (all dealing with transboundary wastes).[301] Phase I included environmental and economic studies of the industry, planning disposal streams for hazardous wastes, and consultation on strengthening and streamlining government regulators, provided in part by Turkish government officials. Phase I was completed in 2017, and a second phase launched at the end of 2018.[302] There has been criticism of this project, and what is really needed is upfront capital investments, to build medical response facilities, extend impermeable cutting surfaces further down the beach, and provide safer cutting equipment.[303]

---

yards and assisting shipowners in identifying suitable recycling facilities for their ships." INT'L CHAMBER OF SHIPPING, *supra* note 47, at 13.

[298] If one of the four major shipbreaking countries (India, Bangladesh, Pakistan, and Turkey) is not party to the HKC as of entry into force, "their recycling yards at that time would be operating at a lower cost compared to compliant yards in Party countries, therefore being in a position to pay higher purchase prices." MIKELIS, *supra* note 34, at 56. That scenario will present major enforcement problems:

> Whereas a ship will be able to demonstrate to PSC inspections throughout its operating life that it fulfills the requirements of the [HKC], it will still be possible for the shipowner to take advantage of any better prices that may be offered by non-Convention yards at the time the ship is sent for recycling, either by selling the ship on an as-is-where-is basis, or by re-registering the ship to a non-Party flag. The cost of changing flag for an average-sized ship is about US $1 per [light displacement ton] LDT, which is quite insignificant if a non-Convention yard pays, say, US $30 to US $50 per LDT more than a Convention yard.

Id. at 56-57.

[299] "Recycling vessels [in Europe] makes limited economic sense from this perspective, and is the modern-day equivalent of 'bringing steel to Sheffield.'" Yujuico, *supra* note 32, at 348.

[300] *See* IMO, SAFE AND ENVIRONMENTALLY SOUND SHIP RECYCLING IN BANGLADESH–PHASE I, available at http://www.imo.org/en/OurWork/Environment/MajorProjects/Pages/Ship-recycling.aspx; *IMO and Bangladesh Review Shipbreaking Industry*, MAR. EXECUTIVE, Apr. 24, 2015, https://www.maritime-executive.com/article/imo-and-bangladesh-review-shipbreaking-industry. Nikos Mikelis credits the Norway-IMO project with helping Bangladesh move towards HKC ratification: "it is likely that Bangladesh will be the first of the two countries to ratify the Convention. This is because the country's administration is well aware of what is required to enable its industry to comply with the requirements of the Convention, thanks to a project funded by Norway and run by the IMO." Mikelis, *supra* note 132.

[301] IMO, *supra* note 300.

[302] Sefer A. Gunbeyaz, Rafet E. Kurt & Raphael Baumler, *A Study on Evaluating the Status of Current Occupational Training in the Ship Recycling Industry in Bangladesh*, 18 WORLD MAR. U.J. MAR. AFF. 41 (2019); *IMO Launches Phase II of Bangladesh Ship Recycling Program*, MAR. EXECUTIVE, Dec. 10, 2018, https://www.maritime-executive.com/article/imo-launches-phase-ii-of-bangladesh-ship-recycling-program. Reports on the outcomes of Phase I may be found at Safe and Environmentally Sound Ship Recycling in Bangladesh – Phase I, IMO, http://www.imo.org/en/OurWork/Environment/MajorProjects/Pages/Ship-recycling.aspx, retrieved Feb. 11, 2020.

[303] An anonymous shipbreaking expert described the Norway-IMO project to social science researchers, "They have made two reports on the economics of ship recycling in Bangladesh and on the environmental impact of the industry, both reports are extremely poor, none of them look at the cost of death, or disease, or workers without

Meanwhile, the ships continue their inevitable tracks across all the world's oceans towards the beaches, in their hundreds, each year.

No sign of the *Rhongdhou* remains on the Chattogram beach; her steel now reinforces concrete construction of someone's home or place of work.

The *North Sea Producer* is entering her fourth year on that same beach, and cutting can finally recommence, now that the court has placed the government in charge of disposing of her radioactive carcass.

Reportedly, the *Harrier* remains intact, the floating dead, rusting as the Turkish government tries to recoup for the oil she allegedly spilled on her way to the knacker's yard.

And, on the other side of the world, a Brazilian aircraft carrier named *São Paulo* is on the auction block.[304] The *São Paulo* once sailed under the French flag as the *Foch*. The *Foch* was sold to Brazil in 2000, shortly after her sister ship, the *Clemanceau*, went to the breakers in 1997 and ignited the modern anti-shipbreaking campaign. Now the *São Paulo* has reached the end of her useful life, and the government is accepting bids. The NGO Shipbreaking Platform and its Brazilian partner have written to the governments of Brazil and France (who retains a contractual interest in the disposition of the former *Foch*), urging them to keep the *São Paulo* from her sister's notoriety, and assure that the ship is decommissioned by a responsible breaker.[305] Bids are currently being considered.

---

contracts, etcetera, etcetera. And the report on the environmental impacts just simply states that in times there needs to be an environmental impact and questions whether the pollution is actually coming from all the other industries which are around." Jasmien Claeys & Lieselot Bisschop, *Een Schip op het Strand is een Baken in Zee: Over de Criminogene Rol van Bedrijven en Overheden bij* Shipbreaking [*A Ship on the Beach is a Beacon in the Sea: About the Criminogenic Role of Companies and Governments in Shipbreaking*] 60 TIJDSCHRIFT VOOR CRIMINOLOGIE 1, 13 (2018).

[304] Press Release, *Clemenceau*'s Sister Ship Heading For the Scrapyard, NGO Shipbreaking Platform, Jan. 30, 2020, https://www.shipbreakingplatform.org/sao-paulo-scrapping/.

[305] Letter from NGO Shipbreaking Platform and Associação Brasileira dos Expostos ao Amianto (ABREA) to Ministry of Defense, Brazil (Sept. 26, 2019), available at http://ibasecretariat.org/letter-to-brazil-mod-re-disposal-aircraft-carrier-sao-paulo-sep-26-2019.pdf; letter from ABREA to President Emmanuel Macron of France (Oct. 1, 2019), available at http://ibasecretariat.org/letter-to-president-macron-re-auction-carrier-sao-paulo-oct-1-2019-fre.pdf.

EVERYTHING AMERICAN MARITIME ATTORNEYS NEED TO KNOW ABOUT SHIP RECYCLING…BUT WERE AFRAID TO ASK

By Lawrence J. Kahn[1]

INTRODUCTION

For nearly as long as there have been ships, there has been a process by which the valuable parts of damaged and obsolete ships could be removed and put to new use. This process was historically known as "ship breaking" but has now largely been replaced by a newer term, "ship recycling". Both terms refer to the same general process, but because the term "breaking" connotes a rough and violent process while "recycling" suggests a more refined "green" process of waste reclamation, the term "ship breaking" is now used accusatorily to describe those who engage in this practice with little or no regard for health, safety or environmental protection and "ship recycling" is used instead to describe those companies that have protective measures in place. Largely, though, the question of who is a "breaker" and who is a "recycler" of ships depends upon the personal opinion of the individual using the term. This paper will use the terms interchangeably.

I THE BUSINESS OF SHIP RECYCLING

The business of ship recycling is broken down into the following component parts: (a) ship acquisition; (b) ship transport; (c) ship import; (d) hazardous and non-hazardous waste remediation, storage transport and disposal; (e) component recovery; (f) metal reclamation; (g) sales; and (h) documentation. Each component involves overlapping, and often complex, legal issues.

A Ship Acquisition

[1] Lawrence J. Kahn is the General Counsel for, and a Director of, Marine Environmental Remediation Group LLC ("MER Group"), a ship recycling company. The views set forth in this paper are his own and do not necessarily represent the views of MER Group.

Quite obviously, no ship recycling can be accomplished without ships to be recycled. Recyclers come upon ships in multiple different ways:

- Ships can be obtained from shipowners directly if there is a direct connection between the shipowner and the recycler
- Ships can be obtained through brokers in much the same manner as ships are bought and sold between shipowners
- Ships can be obtained from "cash buyers"
- Ships can be bought at either governmental or private auctions, or in response to an RFP (or equivalent)
- Ships, wrecks, or parts of ships or wrecks can be bought from salvors or insurers following a casualty

(1) The Economics of Ship Acquisition

Ship recyclers must consider a wide variety of issues in making the decision to acquire a ship. To be sure, a full-time ship recycling yard needs ships to recycle on a continuous basis, or the business will not succeed. Recyclers, though, need to always take into account market fluctuations, currency fluctuations, the potential for high-value metals on the vessel, the possibility of valuable equipment that could be re-used, and the cost of processing hazardous materials that might be aboard. When the maritime industry is in a downturn and there is a glut of ships on the market, recyclers with sufficient operating space can sometimes take advantage of the global economic position to acquire excess tonnage which may then be kept in inventory until the recycler is ready to commence cutting.

The few major ship recyclers based in the United States have a small advantage in that there is no need to worry about currency fluctuations *per se*.[2] American ship recyclers buy their vessels in dollars, pay for equipment and labor in dollars, and then sell their product in dollars. Recyclers in other countries, on the other hand, must be concerned about how their own currency fluctuations against the dollar will impact their businesses: as is the case with their American counterparts, ships are generally bought in dollars, but equipment and labor are paid in local currency, and the scrap may be sold locally in the local currency or abroad in dollars. How the local currency is faring against the dollar is a serious issue for non-American ship recyclers, who make up the majority of the world market in this industry.

American recyclers, on the other hand, must pay substantially higher rates for labor than their foreign competitors. India is, by far, the country where most ship recycling takes place, and there, the cost of labor is as little as $8 per day per worker.[3] The minimum wage in the U.S. is approximately this much per hour, and few American yards can get away with paying minimum wage to most of the work force: generally, the labor rate paid, including benefits and insurance, is much higher and can be double or more this rate. A side-by-side comparison on this economic issue alone shows that for the same number of dollars, an Indian yard can afford sixteen to twenty workers for every one worker at an American yard. This has a dramatic impact on production and profitability of the work since, for the same dollars, Indian yards can outpace American yards (in terms of cutting) by a ratio of perhaps 20 to 1. Taking as an example a 10,000 LDT vessel, an American yard might process such a vessel in three or four months while an Indian yard might process the same vessel in around a month. When so much of the value of

[2] Currency fluctuations, of course, could affect the market as a whole and so there will of course be an impact on American ship recyclers' businesses.
[3] https://www.nationalgeographic.com/magazine/2014/05/The-Ship-Breakers/

a vessel is tied up in her steel, Indian yards have a clear advantage in that they can buy their inventory of steel (the ships) in the same month in which they sell their steel product, and so are buying and selling in more or less the same market. American yards, on the other hand, must gamble on the market value of scrap several months out. Even if all other factors were even (and they aren't),[4] American yards are unable to pay anywhere near as much as Indian yards because American yards must hedge against the possibility of a future drop in the value of scrap.

American yards are also subject to substantially stricter (and far costlier) environmental and health and safety regulations, and the cost of acquiring and maintaining a yard is likewise substantially higher in the United States. As a result, most ships bound for recycling – even those that originate in U.S territorial waters – generally get transported to Turkey or the SubContinent for recycling.[5] American yards are generally left only with those vessels that are either too small to be of interest to foreign yards, or those which are too heavily damaged to survive the journey to a foreign yard. A small number of vessels are required to be recycled in the United States, however: government-owned vessels and vessels contaminated with PCBs cannot be exported for recycling.[6]

The result of these economic factors is that most American ship recyclers feed themselves on a diet of relatively small ships (tugs, barges, fishing vessels and the like) and a few larger ships, while the major ship recycling yards of Turkey, India, Bangladesh and Pakistan process the majority of the larger vessels. European yards are subject to many of the same economic

[4] In the major ship recycling countries (India, Bangladesh, Pakistan and Turkey), the scrap produced is a strategically important source of steel and as a result (particularly in India, Bangladesh and Pakistan), the acquisition cost for vessels is heavily subsidized by the government. This is a substantial part of how recyclers in those countries can typically pay $400/MT for a vessel when the market price of steel scrap is only $250/MT.
[5] The author presented a paper on this phenomenon at the Tradewinds Ship Recycling Forum 2017 at Singapore.
[6] See discussion below on the Toxic Substances Control Act.

pressures as American yards and as a result likewise consume mostly smaller vessels, with large vessels generally going to Turkey or the SubContinent.[7]

(2) The Impact of Environmental Regulation on Ships Available for Recycling

In the United States, American ship recyclers have had to contend with environmental regulations impacting the number of available ships for decades. The Toxic Substances Control Act ("TSCA")[8] prohibits the export of ships if they contain more than 50 ppm of PCBs.[9] Curiously, and even though a substantial proportion of the world's PCBs were created in the United States or by American companies,[10] the same law prohibits the import of foreign ships for recycling if they contain *any* PCBs at all, even if those ships were built in the United States or even were formerly American ships.[11] Because TSCA prohibits the import of vessels with any PCBs, most ship recyclers in the U.S. cannot consider accepting foreign ships for recycling if those ships are of an age where they might have PCBs as part of their structure. Accordingly, all such foreign vessels must usually be recycled elsewhere, even if an American yard is nearby and/or would be better suited to do the work. And, for the same reason, American vessel owners who have ships contaminated with PCBs cannot take advantage of better pricing available in the SubContinent because their ships must be recycled at an American yard because their export would be illegal.

The United States is able to enforce this policy by taking the position that an American ship cannot leave the U.S. flag unless there has been confirmation that the ship does not have PCBs in

---

[7] In August 2016, the rig TRANSOCEAN WINNER was being transported from the North Sea near Inverness, Scotland to Aliaga, Turkey for recycling when it broke free of its tug and ran aground in Scotland. Despite the challenges and costs involved in refloating the rig and efforts by the Government of Scotland to have the rig recycled locally, it proved far more economical for the interested parties to proceed to have the rig recycled in Turkey. https://www.wsj.com/articles/oil-rig-washes-aground-on-scotland-shore-1470767383
[8] 15 U.S.C. §2601 *et seq.*
[9] 40 C.F.R. §761.97(a)(1).
[10] https://www.epa.gov/pcbs/learn-about-polychlorinated-biphenyls-pcbs
[11] 40 C.F.R. §761.93(a).

excess of the export limit.[12] American authorities take the position that any such transfer of flag is an "export".[13] Indeed, the Environmental Protection Agency ("EPA") has gone so far as to take the position that a ship in the United States that is known to have PCBs in excess of the regulatory limit must be recycled in the United States and cannot leave – even for purposes of further trading.[14] Wide powers have been granted to the EPA to determine if vessels suspected of having PCBs in excess of the regulatory limit actually have such levels of PCBs. For example, in *Potomac Navigation*, the Fourth Circuit concluded that even though TSCA only authorizes the EPA to utilize subpoena power to determine if the owner has evidence that the ship has such levels of PCBs, it would nonetheless grant the EPA warrant power (which is found nowhere in the statute) to hold a ship and conduct an investigation onboard.[15] The EPA declined to exercise this same warrant power in a similar case with another vessel at around the same time, presumably for economic and practical reasons, since the other vessel was under tow and crossing the Pacific ocean *en route* to breakers in the SubContinent at the time the EPA learned of it.

Recently, the European Union passed the Ship Recycling Regulations [2013], which impose a number of very strict regulations concerning ship recycling, and in essence requires E.U.-flagged ships to be recycled in a yard with E.U. approved processes and procedures.[16] The E.U., however, does not take the same position as the United States does with regard to what

---

[12] EPA and the United States Maritime Administration ("MARAD") jointly developed technical guidelines for American ship owners interested in reflagging vessels that are of an age where PCB contamination is likely. https://www.epa.gov/pcbs/polychlorinated-biphenyls-pcbs-ships

[13] *United States v. M/V SANCTUARY*, 540 F.3d 295 (2008).

[14] *Id.*

[15] *Id.* The defendant in that matter argued that warrant power must be granted by Congress to an agency and that it cannot simply be "implied" without violating the Constitutional 4th Amendment protection against searches and seizures, but the same did not successfully move the Court.

[16] Such yards do not need to be located within the E.U. MER Group, for example, qualified to perform ship recycling of E.U. ships at its yard in Puerto Rico.

constitutes an export, and as a result, it is a relatively simple matter for a European owner to change the flag of the vessel (assuming it is not in a European port at the time) to a non-European flag and then sell the vessel for recycling for the best price available (generally at a yard that does not require rigorous and costly environmental and health and safety protections), thereby avoiding the Ship Recycling Regulation [2013].

The effect of U.S. environmental regulations is to prevent a relatively small number of contaminated vessels from being recycled abroad while simultaneously prohibiting a large number of contaminated vessels from being recycled in the United States. Conversely, the manner in which E.U. environmental regulations are enforced allows large numbers of contaminated vessels to be recycled at non-E.U. approved yards and does not actively encourage vessels to be recycled in Europe or at E.U. approved yards, except in limited circumstances. The difference is that U.S. policy allows American authorities to reach American ships anywhere in the world but only acts on foreign vessels when they seek to enter the U.S. for recycling, while E.U. policy only reaches European ships when they are actually in Europe, and only acts on non-European ships when they too, are actually in Europe. American policy is conceptual whereas European policy is geographic. Regrettably, neither policy is providing substantial economic assistance to ship recyclers in either America or Europe where regulatory standards are generally higher and more protective of worker and public health and the environment.

(3) Ship Acquisition Contract

Whatever the method of ship acquisition, the recycler will need a contract to acquire the vessel. The contract can be nearly any writing,[17] and many shipowners and recyclers have their

[17] Assuming the value of the transaction is valued in excess of $500, the contract should be in writing to avoid a "statute of frauds" issue. In the author's experience, barter arrangements should also be reduced to a writing to avoid later conflicts.

own "house" forms for ship purchase and sale. One form contract that is commonly referenced in the industry is the "BIMCO RECYCLECON"[18] form. A review of the more significant clauses of this form is instructive to show the types of risks and issues that a contract for the sale of a vessel for recycling seeks to stabilize.

(a) Vessel LDT

The first distinguishing characteristic of the RECYCLECON form, at Part I Box 11, is the call for the "Light Displacement Tonnage" (with the requirement for clarification as to metric or long tons). Light Displacement Tonnage (or sometimes called lightweight displacement tonnage, or "LDT") is a vessel measurement that is rarely used outside of the recycling context. Whereas Gross Tons (or "GT") measures the vessel's total internal volume, Net Tons (or "NT") measures the vessel's cargo-earning internal volume, and Deadweight Tons (or "DWT") measures the weight of the cargo the vessel can carry, the LDT measures the actual weight of the ship itself.[19]

Vessels bought for recycling are almost always purchased on the basis of their LDT. The reason for this is that the recycler is uninterested in the vessel's former use as a ship: her carrying capacity or other capabilities have no meaning for the recycler. The recycler is primarily interested instead in the weight of the vessel because at the end of the day, the recycler must sell the cut up pieces of the vessel, and the scrap steel market is interested only in the

---

[18] BIMCO is the Baltic & International Maritime Council, an international association representing the interests of shipowners. BIMCO creates numerous form contracts, among them the "RECYCLECON" form, which is for use in sales of ships for recycling. *See* www.bimco.org. The sample form is freely available on the internet at the BIMCO website (*Id.*). A copy of the form for use between contracting parties must be purchased. The author is neither promoting the use of the RECYCLECON form nor discouraging its use: the intent is merely the utilization of this form to highlight many of the issues that arise during ship recycling contracting.

[19] This measurement is typically found in the vessel's stability booklet and if the vessel received any significant modifications during her lifetime, the value is supposed to have been recalculated. Comparing two similar vessels recycled by MER Group, it was clear that both vessels had received significant modifications during their lifetimes, but only one had the LDT value recalculated by the shipyard that had performed the modification. In the end, neither vessel's LDT measurement was accurate (or even close).

quality of the steel and the weight. The recycler must know how much steel is being bought because that is an indication of how much steel will be available to be sold after the ship is processed.

Recyclers know, however, that the LDT is not an exact measure of the ship's metal weight. Builders of ships are more concerned with the ship's stability than they are with her value as scrap decades later. Accordingly, materials that are in the vessel on a permanent basis (including many liquids) that impact stability are often counted in the ship's LDT but have little to no value for the recycler, and might actually represent a negative value to the recycler.

A recycler's offer to purchase a vessel will often include language that attempts to refine the LDT value. For example, MER Group's bid offer form makes offers to purchase for a certain number of US Dollars per LDT "net of permanent ballast, constants, or circulated liquids in system". While the language itself is clear as to what weights should be included and excluded from the LDT, as a practical matter shipowners generally lack the ability to provide an exact calculation in this regard.

Recyclers will also often seek to discount the vessel's LDT based on "wastage". This refers to the amount of steel that has eroded from the vessel over the years. Based on experience in the industry and the vessel's records of steel renewal (generally found with the vessel's class documentation), an understanding can be obtained as to how much of the original steel structure remains or has been replaced.

Box 11 of the form provides not only for the LDT, but also for "deductions" and the "contractual weight". The contractual weight is not, of course, the real weight of the vessel but instead is merely the weight agreed between the parties so that a final dollar value for the purchase can be resolved. In the author's experience, this box is often used when the vessel has

an unusually high content of non-ferrous metals or valuable equipment which would be anticipated to bring the recycler substantial additional revenue. As a result, this box often has little to do with weight and instead represents a way for the parties to calculate a purchase price.

(b) Payment

Part II Clause 5 of the RECYCLECON form concerns payment. It should be noted that the payment must be in full from the buyer (recycler). Recyclers are often in need of financing but generally traditional means of financing vessels (such as through ship mortgages) are unavailable, because the vessel is about to be withdrawn from navigation, and the moment the cutting torches are put to the vessel, her ability to be returned to service is greatly diminished, which of course greatly reduces her value as collateral to a bank or other traditional marine financier. Even traditional financiers who recognize that the vessel's value is as scrap are also concerned with securing against an asset that might not be successfully transported from her current location to the recycler's location, and whose value is subject to both (a) the ability of the recycler to get the job done and (b) the vicissitudes of the scrap market, a commodity that loosely follows the trends of the oil market.

It is for this reason that "cash buyers" have flourished. In general, a cash buyer is a company that purchases vessels from owners and sells them – often financed – to recyclers. The cash buyer provides a valuable service to both the shipowner who is looking to sell a damaged, obsolete or otherwise unwanted vessel and to the recycler who may be otherwise unable to gather the funds to make the required purchase by serving as the matchmaker between parties who would otherwise have a hard time finding one another. In this regard, it is important to note that most ship recyclers are located in India, Bangladesh and Pakistan where access to hard currency – particularly US dollars – is very limited, regardless of how successful the recycler

may be as a going business. As a result, the financing terms offered by a cash buyer, who has the ability to trade in U.S. dollars or other major currencies, can be an invaluable tool for ship recyclers, particularly in the SubContinent.

(c) Documentation

Proper documentation is essential to the sale of the vessel. The flag authorities, insurers, class, and other governmental interests all need to know that the sale was proper and that the parties have the rights they claim to have. These concerns are found in Part II Clause 6 of the RECYCLECON form. The documents negotiated generally include, *inter alia*, the following:

- Bill of Sale. This document's primary purpose is for the vessel owner to be able to record ownership with a flag authority. Some flags require the use of their own forms, while others freely allow the use of forms from other flag authorities. The U.S. Coast Guard form 1340, for example, is often acceptable.[20] Because this form can also be used for taxation purposes, quite often buyers and sellers will agree that the value paid (as set out in pre-printed language on this form) is "$1 and other good and valuable consideration", even when that "other consideration" is actually substantially more cash. Recyclers need to complete this form carefully, as they will generally need to pay import taxes or other similar fees and the value could be based on this Bill of Sale form.
- Commercial Invoice. This document serves as the receipt for purchase of the vessel and usually states the value actually given for the vessel. Ordinarily that value is stated in terms of cash, but there are times when other arrangements are made, such

[20] https://www.dco.uscg.mil/Portals/9/DCO%20Documents/NVDC/CG-1340_Bill_of_Sale.pdf?ver=2017-05-09-113141-317

as a barter. Again, the import duties, taxes or other fees paid by the recycler (assuming the recycler is the importer) can be based on this value.

- Transcript of Registry. This document is used to show the vessel is free and clear of all recorded liens and encumbrances. It is important to note that there may be other unrecorded liens and encumbrances. For example, maritime liens for necessaries or unpaid crew wages might not have ever been recorded, but it has long been held that such liens nonetheless follow the vessel and survive the sale from the party that incurred the lien and can be collectable against even a bona fide purchaser for value who had no knowledge of the existence of the lien.[21] Recyclers need to be cautious here to be sure that all liens (both recorded and unrecorded) are properly cleared. Lien holders can prevent recycling from proceeding in order to protect their lien rights. If this was to happen to a recycler, then the flow of operations would be impaired and this could damage the recycler's business operations overall.
- Undertaking from the seller to provide a Certificate of Deletion. The Deletion Certificate is recorded with the seller's flag after closing, which allows for the buyer to register ownership with the buyer's flag (generally ships cannot be registered simultaneously with more than one flag). Typically, though, the seller will not delete the vessel from the registry until after the sale is completed because, obviously, if the sale fails for whatever reason, the seller does not want to have a vessel that has been deleted from its flag and have to go through the steps (and costs) of vessel registration so as to be able to use the vessel until a new sale can be

[21] *The BOLD BUCCLEUGH*, 7 Mod. PCC 267 (1850).

arranged. No such document is needed if the buyer will be utilizing the same flag as the seller. Recyclers may not need to register the vessel with a flag, particularly if the vessel is sold to the recycler on a "delivered" basis. If the recycler is removing the vessel from navigation upon delivery (whether or not vessel recycling is commenced straight away), no new flag registration is usually needed. However, if the recycler is buying the vessel "as is where is", then vessel registration may be necessary – or at least beneficial – for purposes of navigation from the purchase location to the recycler's location and/or for obtaining insurance.

- Protocol of Delivery and Acceptance. This document is usually quite simple and states the exact time and place of the transfer of the vessel. It is usually used to let insurance companies know when the risk of loss passed from the seller to the buyer so that insurances can be ended (for the seller) and commenced (for the buyer) as of that moment.
- Corporate Resolution authorizing the sale (from the sellers) and purchase (from the buyers), possibly with Incumbency Certificate. This is, primarily, an anti-fraud device which serves as demonstration that the seller really is selling the vessel. To the extent possible, the buyer should check to make sure that the registered owner of the vessel is actually the party making the sale, that the owner's board of directors has authorized the sale and that the identities of the board members are correctly stated on the Incumbency Certificate.
- Power of Attorney if an agent will appear at the closing. It is important (as an anti-fraud device) for the parties on both sides to know that the person appearing at the closing has the required corporate authority to sell (or purchase) the vessel.

(d) **Delivery**

Part II Clause 9 of the BIMCO RECYCLECON form discusses delivery of the vessel. The standard preprinted clauses are built around the presumption that the seller is delivering the vessel to the buyer and that this is not an "as is where is" sale. The clause, interestingly, provides as follows:

- The main engine and all generators are in working condition. Note that nothing is said of any auxiliary engines (which under this contract can be delivered in non-working order), but that all generators must be in working condition – the seller will be in breach if they are not. Working engines and generators often have resale value while non-working engines and generators are often not worth the trouble to repair and instead are only worth their weight as scrap. This is especially so given new environmental regulations that proscribe older engines from being installed in vessels.[22]
- The vessel is to be delivered "safely afloat". The seller, therefore, must keep the vessel afloat until the time that ownership is transferred. If the vessel is being run aground as part of the scrapping process, then the title transfer must occur at sea because the vessel will not be "afloat" once it has been run aground.[23]
- The vessel must be "cargo free". This again is important to the recycler, who must assure customs authorities that the vessel is not carrying cargo (in which case duties and/or taxes must be paid by the importer of such cargo). It is for this reason that

[22] *See* 40 C.F.R. 1068.101 and 1068.240.

[23] In delivered-basis contracts where grounding will be required, it is not uncommon for the recycler to hire the seller's chief engineer as a temporary employee to drive the ship into shore. Masters and pilots will often refuse to perform this task because the intentional grounding of a vessel for a purpose other than saving the vessel can negatively impact the master's license.

ships being scrapped are not typically loaded with other scrap for processing by the same yard: the scrapyard would be the "importer" of any such carried scrap and customs entry would be more complicated and would involve the payment of fees (and could require inspections that could be dangerous to conduct).

(e) Removals

The seller will often wish to keep various items from the vessel instead of allowing these items to be transferred to the recycling facility. Sometimes, the items that are intended as removals are spares that could be useful on other ships owned by the same seller. The seller should be cautious, though, about where any such removals are made.

The seller needs to be sure that the items removed are not going to leave the vessel without minimum SOLAS-required equipment (such as lifeboats). If the vessel cannot legally sail from the place where the removals occur, then the seller could be in breach of the sale contract because the seller will not be able to perform the delivery.

The seller also needs to be careful not to violate the customs laws of the place where the removals occur. The seller needs to determine if the entry of a part of a vessel requires customs entry information filings (and duties or taxes to be paid), and also needs to determine if the installation of the removed items requires a special permit in that place. Often, local shipyards and the unions that govern labor at such places are very protective of what construction work can and cannot occur.

(f) Safe and Environmentally Sound Recycling

Part II Clause 18 provides some interesting requirements relating to "green recycling". For example, the seller can require the buyer to provide the Ship Recycling Facility Plan as well as the Ship Recycling Plan. Ship recyclers incur substantial expenses in developing these plans,

and giving them away "for free" to a ship owner who may later provide these plans to a competitor generally leaves ship recyclers feeling uncomfortable. Often, a recycler compelled by such a contractual term will seek to limit this by making such plans subject to a Nondisclosure Agreement ("NDA").

This clause also requires the seller to provide the Inventory of Hazardous Materials ("IHM"), but does not obligate the seller in any way as to the truthfulness of the information in the IHM. At MER, we viewed the IHM as a "nice to have" but not a "need to have". For an environmentally conscious ship recycler, the IHM is only useful to the extent it points out specifically where certain hazardous materials can be found and in what concentration. Otherwise, a green recycler will perform environmental testing throughout the vessel as part of the recycling process. At MER, one vessel which arrived for recycling had an IHM which indicated that the vessel had already been remediated of asbestos at a very reputable shipyard as part of a vessel overhaul several years prior. During the recycling process, though, asbestos was nonetheless discovered in several locations on that ship which had not been remediated as stated. Most vessels that arrived at the MER yard did not have IHMs and this was not viewed as particularly problematic because MER conducted its own intensive environmental investigation.

The clause also provides that the recycler must allow the seller's representatives to visit the recycler's facility to confirm that the recycling is being performed in accordance with the plan. This clause has its origins in the EU SRR, and appears at first glance to be rather innocuous. It is, however, probably the most problematic clause in the RECYCLECON form.

First, it is not entirely clear why the seller would want to attend and observe the recycling of its former vessel. It would seem that once the seller has sold the vessel for green recycling, the seller would want to be finished with the process and not pay for observers to travel to the

recycling location and watch the process. Not observing the process would seem to provide the seller with plausible deniability in the event that the recycler makes an error that results in injury, death, or environmental insult. So long as the seller was reasonable in its choice of recycler, that should insulate the seller from liability. If, however, the seller is observing the recycler and there is an injury, death or environmental contamination event, then what is the seller's liability? Could the seller have reasonably prevented the event from occurring? How – the RECYCLECON form does not provide the seller with stop work authority. Even if the seller had such authority, what knowledge does a shipowner have about recycling methods and technology (and why would the shipowner want to invest in obtaining this knowledge)?

Next, from the recycler's perspective, why would the recycler want these strangers at the facility? To a recycler, these observers are risky human targets over whom there is no control, contractual or otherwise. Nothing in the RECYCLECON form provides the recycler with the right to eject these persons from the facility in the event that they unreasonably interfere with the work being done or, worse, violate the recycler's health, safety, security or environmental policies. Moreover, if (as set out above), these observers have no stop work authority and only appear to be there to report to the seller if the recycling is not going according to plan, then these persons appear to be present for negative purposes only. Often, recycling does not go according to plan: ships have all manner of hidden compartments, wasted steel and other defects that call for changes to the plan. Do these observers have authority to grant plan deviations (and if not, who does)? The RECYCLECON form is silent in this respect. Work stoppages caused by these observers – if they are allowed by the recycler (or by a non-standard clause to the contract) expose the recycler to higher costs, a matter that the recycler will always complain was beyond the parameters of the bargain encompassed in the sale. Who will compensate the recycler?

Finally, what happens if the recycler does not proceed with the recycling according to plan? What power does the seller really have to do anything about it? The seller's only remedy is to proceed to arbitration (see Part II Clause 22). What damages could the seller possibly claim? Regardless of what the recycler does, the seller should not be exposed to any financial repercussions post-sale (even if there are injuries, deaths, or damage to the environment). On the other hand, if the seller is exposed to injury, death or environmental damage claims for which the seller seeks indemnity from the recycler, then the recycler is exposed to possibly unlimited damage far beyond the value of the work being performed. It is very hard for a recycler to accept such risks.

B Ship Transport

Generally, the ship must be brought to the recycler's facility.[24] The only question is who must bring the ship there. If the contract is made on a "delivered basis," the seller delivers the vessel to the recycler at or near the recycler's yard. If the contract is made on an "as is where is basis" then the recycler is responsible for getting the vessel to its own yard from an agreed closing location (either at port or at sea).

If the vessel can proceed to the recycling facility under its own power, this is often the most economical choice. Many flag authorities will liberalize their own rules in order to allow a "final voyage" to a recycling yard that might reduce safe manning requirements or will allow the vessel to travel even after failed or deferred inspections would dictate that the vessel would not otherwise be authorized to sail. Flag authorities do not often define the parameters of the "final voyage", however, and might defer to the vessel's owner as to the voyage itself, including any intermediary stops. Some owners (whether the seller or the recycler) are able to find low value

[24] In the case of certain casualties, occasionally the recycler will set up a temporary facility at or near the site of the casualty. Even still, however, the vessel (in whole or in parts) must be brought to the site.

or dangerous cargo to carry between intermediate ports during this "final voyage". Whether these intermediary stops are permitted or not are subject to the laws, rules and regulations of the relevant flag and it is possible that the flag has no law, rule or regulation on point. These intermediary stops are likely not covered by insurance, but often enough, insurance for a final voyage to a scrapyard is not available anyway. Many of these voyages are undertaken without insurance and flag authorities appear to be generally unconcerned.

This is also true for final voyages under tow. Many vessels ready for recycling cannot move to the recycling yard under their own power and so are towed. Such voyages from ports or places originating in the United States will usually require a Dead Ship Tow Permit from the Coast Guard. Similar permits are required for transit through certain sensitive areas, such as the Panama Canal.

The towing of a dead ship is a very risky endeavor for a towing company. Ships ready for recycling may have latent defects that are not discovered until after the voyage commences. These ships have been known to take on water for unknown reasons and may list, capsize or sink. Such events place enormous strain on the tow wire and the crew of the tug must be vigilant to protect the tug and her crew and use good judgment in making a decision to cut a tow wire, recognizing that setting the ship adrift could present a danger to navigation if she doesn't sink, but that if she does sink, she could easily take the tug down with her. Dead ships might not be delivered to the tug in a gas-free and/or fuel-free or cargo-free condition. In such cases, the dead ships present the danger of fire, explosion, and/or environmental damage from leaks from cargo and/or fuel tanks and bilges. For this reason, the towing company would be wise to require insurance from the party charged with delivery to the recycling facility. Insurance, though, may

not be available, in which case the towing company must choose between the economic benefit of a successful tow and the risk of an uninsured catastrophe.

Towing companies often have their own towage form contracts, but BIMCO publishes two industry standards, the TOWCON form (for lumpsum payments) and the TOWHIRE form (for daily payments).[25] These forms resolve many issues common to towage contract disputes that are beyond the scope of this paper. When a tow is lost at sea, a question often arises as to the payment due to the towing company. Neither the seller nor the recycler will want to have to pay for the towage because the vessel was not delivered, but the towing company will want payment, whether the tow is "lost or not lost".

Take, for example a hypothetical towage of a ship for recycling where the tow is commenced but lost at sea when the tug is mid-way to the destination. A look at the result dictated by the standard terms in the TOWCON form is instructive on how payment terms will work out if left "as is". Parties should consider this so as to plan accordingly and determine whether they wish to change any terms of the standard contract.

In this case, the towage company will have already earned (and presumably paid) the amounts set out in Part I Box 33(a)-(d), but generally (e), the largest part of the payment, is reserved for delivery, which is due "on arrival of tug and tow at place of destination". In our hypothetical, is the towing company still entitled to compensation for (e)? The destination was not reached with the tow, so the answer would seem to be no, but there is a provision at Part II Clause 3(c) that refers to the money being payable whether the tow is "lost or not lost" which would seem to conflict.

[25] As before, the author neither endorses not discourages use of either the BIMCO TOWCON or TOWHIRE form. These forms are discussed here for academic purposes only. The TOWCON and TOWHIRE forms are available in sample form on the BIMCO website, www.bimco.org.

Part II Clause 3(c) states that "each installment of the Lump Sum shall be fully and irrevocably earned at the moment it is due as set out in Box 33". Accordingly, if the tow was lost before the tug and tow arrived at the place of destination, then this payment will not have been earned and so would not be due to the tug company. The "lost or not lost" language does not mean that the tug company can disregard the "earned" language: it simply means that the "Hirer" (the company that contracted for the tow – whether it is the seller or the recycler) has to pay amounts that have been earned by the tug company at each stage, whether or not the tow was later lost. This reasoning makes sense under the general rule of freight payments, which provides that, absent contrary contract language, freight payments are not due until arrival at destination.[26] Most, if not all, maritime contracts require payment of freight charges regardless of whether actual delivery is made. Examples include prepaid freight clauses, freight earned clauses and the like, all of which provide that freight payments need not be refunded, vessel lost or not lost. BIMCO's explanatory documents agree. BIMCO's comment in the table that compares their older 1985 TOWCON with their 2008 TOWCON[27] Clause 3(c) states in part: "Sub-clause (c) establishes when the lump sum is deemed earned" and continues:

> [a]t the end of Sub-clause (c) a reference to Box 30 (Delay Payments) has been added. This has been done to clarify that if the Tow is lost between installments then the rate earned up until the loss of the tow will be pro rata the lump sum installment and the rate earned after the loss (for repositioning) will be at the delay payment rate.

(*Id.*). It isn't entirely clear what provision of TOWCON 2008 is being referenced by the repositioning language of this comment, but BIMCO's guidance on Clause 3(c) clearly demonstrates that the authors of the form take the position that the Tug company is entitled to

[26] *See, e.g.,* Cooke Young, *et al.*, Voyage Charters (4th ed.2014) at 345-346.
[27] Table available at www.bimco.org.

receive only those lump sum installments which have been earned and were due before the loss of the tow.

An English decision on point is A TURTLE Offshore v. Superior Trading, Inc. ("the A TURTLE"), [1988] 1 Lloyd's Rep. 177, decided by the High Court of Justice, Queens Bench Division (Admiralty). That decision involved a TOWCON agreement to tow a semisubmersible drilling rig, the "A TURTLE", from Brazil to Singapore via Cape Town. The towing vessel, a pusher tug named "MIGHTY DELIVERER", ran out of fuel in the southern Atlantic Ocean. The disabled tug released the tow connection and the A TURTLE drifted away.[28] The TOWCON agreement in A TURTLE provided that the lump sum price of $1,970,000 was payable as follows: 5% on signing the agreement and 95% on arrival at Singapore. The A TURTLE interests paid the 5% due upon signing the agreement but because the tow was lost, they refused to pay the 95% balance. The A TURTLE interests sued for the value of the lost rig and the tug company counterclaimed for the 95% balance on the towing contract.

The A TURTLE TOWCON contract had an additional clause added by the parties that provided "[f]reight…is deemed earned whether the tug or rig is lost or not lost". Having considered the interactions among all payment clauses in the towage contract, the A TURTLE court held the installment payment provisions to be clear and dispositive as to when the freight was due and payable. The provisions concerning "lost or not lost" did not impact the "payment earned and due" clause. According to the A TURTLE court, the proper net effect of the TOWCON payment clauses was that if part of the lump sum freight becomes due and payable, it

[28] Of interest, A TURTLE was later found washed ashore on a remote island. Salvage attempts failed and the wreck of A TURTLE was later removed and dumped at sea. A TURTLE demonstrates the result when the economic consequence outweighs a green result: economics generally wins out.

remains due and payable not withstanding whether the rig is later lost. Applying those provisions, the court found that the 95% balance payment never became due and owing because the tug and tow never arrived at Singapore but that the 5% remained payable notwithstanding the loss of the A TURTLE thereafter.

This result is consistent with Simon Rainy, Q.C., The Law of Tug and Tow and Offshore Contracts (3d ed. 2013). According to this treatise, Clause 3(c) of TOWCON 2008 provides that a lump sum towage price is fully and irrevocably earned at the moment it is said to be due in Box 33 of the contract. The "lost or not lost" provision "protects the tug's rights to remuneration notwithstanding a subsequent loss of tug or tow or both."[29] In other sections of this treatise, Mr. Rainy notes the rule that, in the absence of a contrary contractual provision (which is nearly always present), freight is not earned and payable until the tow arrives at the agreed destination. The "lost or not lost" words make it clear that the tugowner is entitled to any portion of the lump sum which has been earned, even if the tug and/or tow is later lost.

An American court decision is consistent. International Shipbreaking Ltd. LLC v. Smith Maritime, 44 Fed.Appx. 653 (5th Cir. 2002) involved the tandem towage of two U.S. Navy destroyers from Pearl Harbor, Hawaii to Brownsville, Texas (for recycling) under a TOWCON agreement. One of the destroyers sank en route, but the other was delivered successfully. International Shipbreaking sued Smith Maritime for negligent towage and alleged breach of the towing company's warranty of workmanlike performance. Smith Maritime counterclaimed for unpaid installments of the lump sum towage price. Applying Robins Dry Dock & Repair Co. v. Flint, 275 U.S. 303 (1927), the Fifth Circuit affirmed the dismissal of the plaintiff's claims

[29] Rainy, at §4.38, p. 110-111.

because the plaintiff had no proprietary interest in the lost destroyer. Under the *Robins Dry Dock* rule, a claimant in a maritime case cannot recover for economic loss in the absence of physical damage to property in which it has a proprietary interest. The Court also affirmed the dismissal of the plaintiff's warranty of workmanlike performance claim, finding that the terms of the TOWCON agreement did not include such a warranty. As to the towage payments, the Fifth Circuit affirmed the award of judgment to the defendant for the installment payments on two grounds: first, the court found that Smith Maritime did not breach the TOWCON agreement, and second, the court held by virtue of TOWCON clause 2 that the parties "contemplated the risk of loss of the tow and expressly provided that payment was due without any discount, deduction, setoff, lien, claim or counterclaim…fully and irrevocably earned at the moment it is due…Tug and/or Tow lost or not lost." In this case, the towing company was successful in its claim for freight because it ultimately completed the tow from the point of origin to the point of destination, even though it lost one of the two tows along the way. This result is consistent with BIMCO's interpretation of the meaning "or part of the Tow":

> [t]hese words have been added to cover multiple tows where a partial loss of one or more tows occurs but at least one part of the tow remains. To avoid disputes as to whether the entire lump sum is payable in the event of a loss of part of the tow the additional wording is clear that in such circumstances the full lump sum is payable.[30]

It is notable that the TOWCON requires that the tow be "tow-worthy" but does not require the tow to be "seaworthy". This language is likely linked to a consistent line of decisions finding that vessels that have been withdrawn from navigation cannot be held to provide a warranty of seaworthiness. Tug companies should not be made to be concerned with whether the

[30] www.bimco.org

vessel is seaworthy or not, because the question of seaworthiness – whether the vessel is reasonably fit for her intended voyage – is not really relevant to a tug owner pulling (or pushing) the tow. The tug owner is instead concerned with whether the vessel can be successfully towed from origin to destination so the tug can earn and be paid freight for the service provided.

C Ship Import and Export

The importation of a ship for recycling is an important issue for recyclers. In the U.S., as a general rule, American flag vessels already in the United States do not need to be "imported" in order to be transported to the recycler's yard in the United States. This is true even if (for example) the vessel is starting on the U.S. Pacific Coast and being brought to a recycler on the U.S. Gulf Coast via either the Panama Canal or Cape Horn.

(1) Import and Export Generally

Foreign flag vessels already in the United States may still need to be imported, even if they are legally authorized to be in the United States. This is a situation that American recyclers often face with offshore oil exploration rigs and other laid up vessels. Recyclers need to note that when a vessel owner lays up a vessel in the United States, the entry with Customs may (or may not) authorize the owner to enter the vessel into the trade of the United States. If the vessel is to be sold, it must be entered "for trade". The sale contract may (or may not) indicate which party is to make the Customs entry. The presumption made by Customs is that in the absence of an agreement to the contrary, the seller is the party responsible for making the proper Customs entry.

Failure to make a proper Customs entry can result in a hold action by Customs to restrain the recycler from taking any action with respect to that vessel (even if the fault for the improper entry is that of the seller). If Customs determines that the seller must make the proper entry,

Customs will not authorize the recycler to make the entry and pay the tariff or duty. This can result in an extreme hardship on the recycler if the vessel has already been delivered, because the recycler is forced to wait until Customs and the seller reach an agreement. If the seller does not have a regular trade with the U.S., the recycler can be forced to wait indefinitely for the Customs hold to clear. Additionally, the vessel subject to a Customs hold could well be in the way of the recycler's operations, and cannot even be legally be moved – let alone worked on – without authorization from Customs. Typically at this point, the recycler has paid the entire purchase price for the vessel and holding on to an asset that cannot be worked and which may be in the way of other productive work can have substantial negative repercussions on a recycling business, particularly if the market for scrap steel falls. Accordingly, even though it is an additional cost to the recycler, it would be wisest for the recycler to contractually assume the obligation to properly import the vessel, so as to have control over this risk. Additionally, it makes more sense for Customs to see that the vessel is being imported as unprocessed scrap instead of as a vessel (the tariff is lower), given the nature of the recycler's business as opposed to the nature of the seller's business.

On the ship export side, it may seem curious why recyclers in India, Bangladesh and Pakistan would pay so much for a ship to scrap but would not want those ships loaded to the gills with other scrap metal. The reason is again one of import duties. The import duty on partly or completely unprocessed scrap is significantly higher than the import duty on ships to be scrapped, and the time it would take for the customs authority in those countries to conduct their inspection would take so long that it is counter-productive to smooth operations at the recycler's yard.

(2) Environmental Concerns Relating to Import and Export

Another main concern for American recyclers relating to import and export of vessels for recycling is environmental and arises under the Toxic Substances Control Act ("TSCA").[31] Among the items regulated by TSCA is a chemical substance, Polychlorinated BiPhenyls, or "PCBs". Vessels built prior to the global PCB ban in 1979 are presumed by the U.S. Environmental Protection Agency ("EPA") to have liquid and/or solid PCBs throughout the ship in excess of 50 ppm.[32] The EPA states: "ocean-going ships built before 1979 contain PCBs in various materials….Ship owners must get permission from EPA before exporting older ships containing PCBs for disposal, or holding a ship containing PCBs for purposes of export for disposal."[33] TSCA prohibits the export of PCBs in concentrations greater than 50 ppm and prohibits the import of PCBs in any concentration.[34] Accordingly, foreign ships contaminated with PCBs cannot be brought to the United States for recycling under ordinary circumstances, and vessels with PCB concentrations greater than 50 ppm cannot be exported for recycling. Penalties for violation of TSCA are heavy[35] and recyclers and vessel owners must be careful not to violate TSCA.

Asbestos is also a concern. Asbestos Containing Materials ("ACM") and Suspected Asbestos Containing Materials ("SACM") are components of many ships. Asbestos use in ship construction has been banned since July 2002, but nonetheless asbestos is still found in 90% of ships currently afloat and in approximately 80% of newly built ships, even ships declared by the

---

[31] 15 U.S.C. §2601 *et seq.*
[32] 40 C.F.R. §761.97(a)(2).
[33] https://www.epa.gov/pcbs/polychlorinated-biphenyls-pcbs-ships
[34] The export limitation is found at 40 C.F.R. §761.97(a)(1). The import prohibition is found at 40 C.F.R. §761.93(a). Both regulations provide for the ability of an applicant to obtain an exemption, but seeking an exemption is a very time consuming and expensive process, and at the end of the day the issuance remains discretionary with EPA. Accordingly, while such exemptions may be theoretically available, for practical business purposes they are effectively unobtainable.
[35] Civil penalties are $25,000 per violation (15 U.S.C. §2615(a)(1)) and criminal penalties are currently set at $50,000 per violation per day and/or imprisonment for 1 year for knowingly or willingly violating TSCA (15 U.S.C. §2615(b)).

builders to be "asbestos free".[36] U.S. law provides that hazardous wastes, including asbestos, may only be imported for disposal from OECD[37] countries, plus Costa Rica, Malaysia and the Philippines, and may only be exported for disposal to OCED countries (it is illegal to export hazardous waste to non-OECD countries under U.S. law, including Costa Rica, Malaysia and the Philippines, which are U.S. "import-only" countries as concerns the disposal of hazardous wastes).[38] Accordingly, ship owners in the U.S. whose ships have asbestos cannot legally export these vessels to non-OECD countries[39] without violation of U.S. law, and cannot accept for disposal ships containing asbestos from non-OECD countries.

(3) The Impact of Foreign Law on U.S. Ship Recycling

While it might seem that foreign law would not have much impact on ship recycling in the United States, this is actually not the case. Basic American policy is to respect foreign law whenever there is no contrary U.S. law.[40] One of the most significant foreign laws of concern to American ship recyclers is the Basel Convention Controlling Transboundary Movements of Hazardous Wastes and Their Disposal ("Basel" or "Basel Convention").[41] The Basel Convention concerns a wide array of different types of hazardous wastes, including petroleum products, oils and lubricants which are found on nearly every vessel, and indeed, ships destined for scrap are considered to be "hazardous waste" subject to the Basel Convention.

The Basel Convention provides specifically that it is illegal to export hazardous waste (including ships destined for recycling) from a Basel Convention country to a non-Basel

---

[36] http://www.ibasecretariat.org/jc-why-most-ships-still-contain-asbestos.php
[37] The OECD is the Organization for Economic Co-Operation and Development. https://www.oecd.org
[38] See generally 40 C.F.R. Part 262, Subpart H.
[39] Of the major ship recycling countries (India, Pakistan, Bangladesh and Turkey), only Turkey is a member of the OECD. https://www.oecd.org/about/members-and-partners/
[40] *Hilton v. Guyot*, 159 U.S. 113, 163-164 (1895).
[41] 1673 U.N.T.S. 126 (1989). The United States is not a signatory to the Basel Convention. Since the United States has its own domestic legislation concerning the transboundary movement and disposal of hazardous wastes, it is unlikely that the U.S. will ever become a signatory to Basel.

Convention country. For ship owners as well as American recyclers, the concern is obvious: since the United States is not a Basel Convention country, it is illegal under Basel to export hazardous waste (including ships destined for recycling) to the United States. Basel provides an exception only with regard to bilateral agreements between Basel and non-Basel countries. Currently, the United States only has such bilateral agreements with Canada and Mexico (for hazardous waste intended for disposal in both directions) and Costa Rica, Malaysia and the Philippines (only in one direction: for hazardous waste intended for disposal in the United States).

Hypothetically, if a Marshal Islands flag vessel became a wreck in U.S. waters and needed to be recovered and recycled, recycling the vessel in the United States would be problematic. Under the Salvage Act,[42] the recovery of the vessel would need to be performed by one or more U.S. flag vessels because the vessel recovery operation would be in U.S. territorial waters. Transportation of the wrecked vessel (or pieces of the vessel) to any port or place within the U.S. would need to be performed by U.S. flag vessels under the Jones Act.[43] As concerns the hazardous wastes in the wrecked vessel (or pieces), however, it needs to be observed that there is no bilateral treaty between the Marshal Islands and the U.S. concerning the transboundary movement or disposal of hazardous waste, and the Marshal Islands is also not an OECD country. Accordingly, the import of the hazardous wastes contained in the wreck for disposal in the United States cannot be accomplished legally: such import would violate U.S. domestic law[44]

[42] 46 U.S.C. §80104. This act prohibits foreign vessels, under penalty of forfeiture, from performing salvage in operations in U.S. territorial waters.
[43] 46 U.S.C. §55101. This action prohibits foreign vessels, under penalty of forfeiture, from transporting people or cargo from one point or place in the U.S. to another point or place in the U.S.
[44] 40 C.F.R. Part 262, Subpart H.

and would also, separately, violate foreign law in the form of the Basel Convention because parties in the Marshal Islands cannot legally export hazardous waste to the United States.

Taking this hypothetical one step further, if the wreck in this hypothetical example was instead flying the flag of an E.U. member state such as Cyprus (which is also not an OECD country), then the situation would be even more complex because the recycling of such a wrecked vessel would also be subject to the E.U. Ship Recycling Regulation [2013] ("EU SRR").

While a recycler in the U.S. could be prosecuted in the United States for illegal import and disposal of hazardous waste in such an example, the situation is far more complex for the ship owner. That party could theoretically be prosecuted both in the United States for the illegal import of hazardous waste and in the Marshal Islands for the illegal export under Basel. In the Cyprus example, the ship owner could additionally be prosecuted for violation of the EU SRR if the yard that performs the recycling is not on the list of E.U. approved ship recycling facilities.[45]

D Waste Remediation, Storage, Transport and Disposal

Waste remediation, storage, transport and disposal is generally the second largest cost (after labor) to a recycler. Recyclers need to be efficient and knowledgeable about waste in order to be successful at their work because failures in this area can lead to penalties that could result in the company being shut down by regulatory authorities.

(1) Nonhazardous Wastes

Many ships arriving for recycling will contain a variety of nonhazardous wastes. Food waste is almost always expected, but in large quantities can result in a fine by Customs for

[45] In this regard it is important to note that the E.U. approves facilities, not companies, to perform the recycling. Accordingly, a company that owns an E.U. approved facility in the United States could not successfully open and operate a satellite facility (permanent or temporary) to recycle E.U. flag vessels without such satellite facility also being separately approved by the E.U., a process that could potentially take several months to accomplish.

improper waste importation. If a composting facility is available, food waste can generally be composted. Otherwise, food waste needs to be disposed in non-hazardous waste dumpsters together with other non-recyclable[46] non-hazardous waste. Many vessels will arrive with mattresses, bedding and other similar "household" items. In the United States, this material often represents a waste stream, which is another advantage that recyclers in the SubContinent hold over their American counterparts – there, these items typically represent a monetizable commodity (albeit small).[47] American recyclers might be well served to find ways to donate or otherwise reutilize as much of this waste as possible.

American recyclers need to be cautious not to recycle hazardous wastes in non-hazardous waste dumpsters. Typically, when hazardous wastes such as oil material, electronics, paint cans, chemicals, and the like are found in non-hazardous waste dumpsters that are destined for landfills (or incinerators), the dumpsters will be rejected and the recycler will be fined. Typically (assuming the recycler is utilizing a dumpster leasing service), if such wastes are found in non-hazardous waste dumpsters, the recycler will be required to either purchase or pay for the cleaning of the dumpster by the waste hauler.[48]

Depending on the construction and/or function of the vessel prior to recycling, there may also be large volumes of concrete or wood (used in deck protection) that are generated. Even if this material is not contaminated with hazardous material, it can be difficult or expensive to dispose due to size and weight. C&D debris, as this material is often labeled, is generally not permitted in non-hazardous waste dumpsters not dedicated to this type of material. Fortunately,

---

[46] If the recycler is operating in a jurisdiction with mandatory recycling requirements, then the recycler may need to separate out recyclable plastics, paper products, and glass. It is possible that these recyclables could result in a revenue stream, if plentiful enough.

[47] https://www.maritime-executive.com/article/Indian-Ship-Recycling-Extremely-Regulated-2014-08-07

[48] https://www.hometowndumpsterrental.com/blog/dumpster-rental-terms-and-conditions-a-closer-look-at-the-fine-print

though, non-contaminated waste concrete can be sold as clinker and there are even creative uses for old non-contaminated wood (even in heavily used condition).

Recyclers will also often be faced with large volumes of wastewater. Some ships will arrive with fresh water and/or salt water in their tanks. So long as there is no contamination from hazardous materials (including oil), then fresh and salt water can usually be released. However, if the water is contaminated with oil or other hazardous contaminants, then the entire volume of the liquid in the subject tank(s) must be treated as hazardous. Vessel grey water can ordinarily be disposed at sea (again, so long as it is nonhazardous) prior to arrival at the recycling facility, but if it is not, then it must be processed ashore. It is important to confirm that the grey water does not contain any contaminants, particularly PFOS (see below) because this contaminant can destroy typical shore-based wastewater processing systems. Sewage/black water is ordinarily processed at sea as well, but some amount can usually be expected ashore. Again, so long as the black water is not contaminated with hazardous materials, then shore-based wastewater processing systems are typically utilized for disposal at relatively inexpensive rates.

(2) Hazardous Wastes

The recycling of ships, sadly, has a long and savage history of human suffering. This is true on a worldwide basis and not merely at the shipbreaking yards of the Indian Subcontinent that are the frequent target of recent investigative reports. Fortunately, it appears that a spate of new legislative efforts, including the EU SRR, aimed at improvement of ship recycling conditions on a global basis, are starting to take root. In the United States, laws and regulations applicable to the ship recycling industry have existed for decades, which has resulted in both (a) increased safety for workers and better practices for hazardous waste remediation, and (b)

increased costs for American recyclers which has driven the majority of this business to other countries where standards are more lax and/or less expensive.

There are a variety of different types of hazardous wastes that can be found on vessels. The following table, taken from the MER Environmental Management and Compliance Plan ("EMCP") shows the primary types of hazardous wastes of concern that require identification, characterization, and management during remediation.

Hazardous Materials	Possible Vessel Systems/Instruments Containing Material	Chemicals of Concern
Oils and Fuel (POLs)	Piping and tanks, drums, machinery spaces, machine shops, tanker cargo holds	Hydrocarbons, heavy metals
Paints and Coatings	Anticorrosion paint and anti-fouling coatings	PCBs, heavy metals (lead and tin)
Asbestos Containing Materials and Suspected Asbestos Containing Materials (ACM and SACM)	Thermal system insulation and surfacing material	Friable asbestos
Bilge, Ballast and Other Wastewater	Bilge, ballast and other tanks	Biocides, heavy metals, hydrocarbons
Metals	Anodes and batteries, paints, motor components, generators, piping, cables, thermometers, electrical switches, light fittings, etc.	Heavy metals, including lead, tin and mercury
Ozone Depleting Substances (ODS)	Refrigerant and fire-suppression systems	CFCs
Poly Chlorinated Biphenyls (PCBs)	Paint, gaskets, caulk, electronics, light ballasts, insulating materials, soundproofing materials, cables	PCBs
Perfluorooctanesulfonic Acid	Fire suppression systems	PFOSs
Biologics and Bio-medical	Onboard hospital/clinic, first aid kits, state rooms, galleys, waste bins, sewage	Medical waste, including sharps, expired and unexpired medications (controlled substances)
Herbicides, Fungicides, Rodenticides, Pesticides	Supply rooms, state rooms, tanks	Herbicides, Fungicides, Rodenticides, Pesticides
Radioactive Materials	Onboard hospital/clinic, fuel tanks	Radio Isotopes

In order to ensure compliance with applicable regulations, a thorough review, identification and assessment of the following requirements is necessary.

The National Environmental Policy Act ("NEPA") Program, 40 C.F.R. Part 1500, was enacted in 1969. It requires preparation of environmental documents for certain categories of federal projects and requires opportunity for review by state and local governments as well as for public participation. The NEPA process is intended to help public officials make decisions that are based on understanding of environmental consequences, and take actions that protect, restore and enhance the environment. The results of the process will dictate whether the project can be issued a Finding of No Significant Impact ("FNSI") or whether an Environmental Assessment ("EA") or a full Environmental Impact Statement ("EIS") must be prepared.

The United States Army Corps of Engineers ("ACOE") is responsible for issuing permits for discharge of dredged or fill material into waters of the United States. This permit authority arises under 33 C.F.R. Part 323 in connection with both the Clean Water Act and the Rivers and Harbors Act of 1899. 33 C.F.R. Part 330 provides the ACOE with authority to issue permits under these same Acts in connection with vessel removal operations in regulated waterways. Typically no formal application or notification is required.

Title 33 of the United States Code concerns navigation and navigable waters, and 33 C.F.R. 151 provides regulations administered by the United States Coast Guard ("USCG") and the ACOE that govern a variety of activities that have direct impact on ship recycling: navigation, international navigation rules, inland navigation rules, vessel operating regulations, anchorages, bridges, vessel security, waterfront facilities, marine pollution financial responsibility and compensation, outer continental shelf activities, deepwater ports, pollution,

ports and waterways safety, boating safety, and permits for dams, dikes, structures or work impacting navigable waters, among others.

The Coastal Zone Act Reauthorization Amendments of 1990 ("CZARA"), 16 U.S.C. §1455b *et seq.* established a Coastal Nonpoint Pollution Control Program that requires coastal states to enact federally approved coastal zone management programs and to submit coastal nonpoint pollution control programs for approval by the National Oceanic and Atmospheric Administration ("NOAA") and the EPA. These programs were intended to address land and water uses affecting coastal waters. State coastal programs are required to include "enforceable policies and mechanisms" to ensure implementation. Section 6217 of CZARA (which references CZARA but technically is not part of that Act) requires NOAA to make recommendations to states on the geographical areas to be included in their coastal nonpoint programs in order to protect coastal waters from nonpoint source pollution. Recyclers can be affected by nonpoint pollution sources crossing over their facilities even if the recycler itself is nonpolluting. Related to this is 15 C.F.R. Part 930, which requires Federal Consistency with Approved Coastal Management Programs. The provisions of this regulation mandate that all federal agency activities, including development projects affecting any coastal use or resource will be undertaken in a manner consistent to the maximum extent practicable with the enforceable policies of approved management programs.

The Comprehensive Environmental Response, Compensation and Liability Act of 1980 ("CERCLA"), 42 U.S.C. §9601 *et seq.* requires that persons in charge of facilities from which hazardous substances have been released in quantities equal to or greater than the reportable quantities immediately notify the National Response Center ("NRC") of the release. The statute also addresses liability, abatement and penalties.

TSCA regulations concerning PCBs are found at 40 C.F.R. Part 761. These regulations provide the definition, storage, disposal, cleanup policy, exemptions, import, export, general housekeeping and reporting requirements for PCBs.

Oil pollution prevention regulations are found at 40 C.F.R. Part 112. When a facility has discharged or could reasonably be expected to discharge oil in harmful quantities and the total underground oil storage quantity exceeds 42,000 gallons or the above ground oil storage quantity exceeds 1,320 gallons in total, the facility is required to generate a Spill Prevention Control & Countermeasure ("SPCC") Plan.

Standards for management of used oil are found at 40 C.F.R. Part 279. These regulations provide that facilities handling used oil must follow certain good housekeeping practices. These management standards are considered common sense good business practice and are designed to ensure the safe handling of used oil to maximize recycling and minimize disposal.

The Solid Waste Disposal Act ("SWDA", a part of the Resource Conservation and Recovery Act ("RCRA")), 42 U.S.C. §6901 *et seq*. includes regulations found at 40 C.F.R Part 261-270 concerning hazardous waste management. These regulations require that facilities that generate hazardous waste must meet accumulation, manifesting and recordkeeping requirements. Notably, the only "e-waste" (hazardous wastes generated from disposal of cell phones, televisions, computers and the like) regulated by SWDA/RCRA concerns cathode-ray tubes. E-waste regulation, for now, is left to individual states to regulate.

If the recycler uses underground storage tanks ("USTs"), then 40 C.F.R. Part 280 applies. These regulations provide technical standards and corrective action requirements for owners and operators of USTs. USTs must have leak detection and spill, overfill, and corrosion protection.

Other UST requirements address notification, installation, corrective action, financial responsibility, and record keeping.

The National Pollutant Discharge Elimination System ("NPDES") regulations are found at 40 C.F.R. Part 122. There are 11 categories of facilities considered to be engaged in industrial activity as defined by 40 C.F.R. 122.26, which specifically includes ship scrapping facilities. All such facilities must obtain NPDES storm water permits and usually must prepare and implement a Storm Water Pollution Prevention ("SWPP") plan.

If the recycler intends to dispose of wastewater into a Publicly Owned Treatment Works ("POTW"), then 40 C.F.R. Part 403 is applicable, which provides General Pretreatment Regulations for Existing and New Sources of Pollution. Under this program, industrial sources discharging wastewater to POTWs must control the amount of pollutants discharged and meet certain pollution limits established by EPA, the state, and/or any local authorities. The control of these pollutants may necessitate treatment of the wastewater prior to discharge to the POTW.

There are a variety of air emission regulations that also impact recyclers, particularly as concerns torch burning activities. 40 C.F.R. Parts 70 and 71 is the regulatory authority for permits for facilities with potential air emissions of certain criteria pollutants (PM(10), SO(2), CO, NO(x) and VOC) in excess of 100 tons/year or hazardous air pollutants ("HAPs") in excess of 10 tons/year each or 25 tons/year of all HAPs combined. All such facilities must obtain a Title V Operating Permit as set out in 40 C.F.R. 70, which is a facility-wide air emissions permit that includes emission limits, monitoring, record keeping, and reporting requirements both for the facility and special emission units. Some state or local jurisdictions require registration of certain high emission pieces of equipment with an Air Quality Board (or equivalent). Most ship recycling facilities will encounter asbestos, and the regulations concerning air pollution with

respect to asbestos are found at 40 C.F.R. Part 61, Subparts A and M, the National Emission Standards for Hazardous Air Pollutants – National Emission Standard for Asbestos. The purpose of this regulation is to minimize the release of asbestos fibers during demolition and renovation activities (including ship recycling) through work practices. Some of the requirements for asbestos removal and disposal under these regulations include inspection, notification, supervisor training, and proper removal, transport, storage and disposal of asbestos.

It may be surprising to learn that asbestos is still found on ships. However, one recent study found that not only is asbestos found on over 90% of all ships, it is still found on more than 80% of ***new*** ships. This is so, even though the builders of those ships declared the ships to be "asbestos free".[49] The reason for this is that the definition of "asbestos free" is not quite as straightforward as it may seem. In the United States, material can be declared "asbestos free" if the asbestos content is no more than 1%. In the E.U., the limit is .1% and in Australia the limit is actually 0%.[50] China, on the other hand – where most ships are built – has no official standard. The usual procedure is that a shipyard issues a declaration that a ship is "asbestos free". The relevant classification society[51] then makes a notation on the ship's operating certificate that the ship is asbestos free based on this shipyard declaration, taking it to be a statement of fact.[52]

Shipowners are generally reluctant to have asbestos surveys conducted on their operational vessels, because they are entitled to rely on their "asbestos free" classification society notation. Most flag states accept such declarations, and so shipowners are disincentivized to go looking for asbestos on their ships – they either believe that there truly is no asbestos on board,

---

[49] http://www.ibasecretariat.org/jc-why-most-ships-still-contain-asbestos.php
[50] *Id.*
[51] Classification Societies are nongovernmental organizations that inspect ships. There are currently more than 50 such societies located at various ports around the world. Only a few are members of the International Association of Classification Societies ("IACS"), which requires its members to conform to certain regulations, practices, and quality control standards.
[52] *Id.*

or they do not wish to voluntarily incur the problems that will accompany a finding that asbestos has been found. However, shipowners have a duty of care for their crews and anyone that works on their ships – including recyclers, so they should have asbestos surveys carried out.[53] Australia and the Netherlands are among the only nations that do not merely accept an "asbestos free" notation by a shipyard or classification society and require an asbestos survey prior to allowing registration under their flags. The European Union has started to follow this lead pursuant to the EU SRR. That 2013 legislation, which was intended (among other matters) to protect shipyard workers involved in ship recycling, mandated that by 2018, all newly built ships must have an Inventory of Hazardous Materials ("IHM") that specifically addresses the presence (or absence) of asbestos.[54] The quality of the IHM, however, depends entirely on the quality of the inspector. There are many companies willing to provide IHMs, but only a smaller number of these IHM issuers meet stringent quality control standards. Accordingly, even when an IHM states that the vessel is "asbestos free", the fact of the matter is that asbestos may still be present.[55]

IHM inaccuracy raises interesting questions of liability which to the author's knowledge have not yet been resolved by the courts. For example, if an IHM states that a vessel is "asbestos free", but is later found to have asbestos, can the recycler successfully bring an action against the seller (and/or the classification society) for the unanticipated increased costs of asbestos removal

---

[53] *Id.*

[54] Existing ships are required to obtain an IHM over a period of time. The EU SRR was preceded by the 2009 Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships (Hong Kong, May 15, 2009), 1672 UNTS 126, which also requires ships to have IHMs. As of this writing, the Hong Kong Convention is not yet in force.

[55] Indeed, MER purchased a vessel for recycling that had an IHM issued by an IACS class society which certified that following an asbestos removal program at a well-known and well-respected shipyard, the vessel was "asbestos free". Despite such IHM declaration, however, during the recycling process, numerous pipes were found on board with asbestos. For that matter, the same vessel was also said in the same IHM declaration to be PCB free, but PCBs were found in paint, gaskets and cabling that MER sampled as a precautionary measure. Understanding that IHMs could be inaccurate, MER always took the position that an IHM was a "nice to have" but not a "need to have" aspect of ship acquisition. The most helpful IHMs, in MER's experience, were those that identified hazardous materials in specific locations, because this allowed MER the opportunity to anticipate remediation costs.

and disposal when the recycler relies upon such inaccuracy in pricing the purchase of the vessel? Further, if a shipyard worker is afflicted with an asbestos-related disease following work on a vessel that had an inaccurate IHM declaration as regard asbestos, is there a viable cause of action against the seller and/or the classification society?

Compounding the problem is that there is no testing and certification of materials by manufacturers. Accordingly, a shipyard is entitled to rely entirely on the representation of the seller of components and is not required to perform any sort of asbestos quality check. Many components, materials and equipment originate in China where it is legal to use asbestos. Even Chinese manufacturers who set up production lines to provide asbestos free products are constrained by the fact that the suppliers of materials to them are reliant upon the accuracy of their own suppliers' material content declarations. Again, even if such manufacturers demand truly asbestos-free materials from their own suppliers, the fact is that asbestos may be utilized by the supplier for other customers in the same factory, leading to cross-contamination of the supposedly asbestos-free material.[56]

There are additionally a large number of regulations relating to safety that need to be considered. Primarily found at 29 C.F.R. 1910, 1915 and 1926, these regulations are enforced by the United States Occupational Safety and Health Administration ("OSHA") simultaneously with any state equivalent agency, and cover, among other matters, the need to the following safety practices: Work Breakdown and Work Control Program; Work Package Preparation Guidelines; Job Hazard Analysis Program; Hazardous Energy Control Program; Electrical Hazard Awareness Program; Hazardous and Waste Material Handling; Fire Protection Program; Fall Protection Program; Hoisting and Rigging Program; Accident Investigation and Reporting; Near

[56] *Id.*

Miss Investigation and Reporting; Inspections and Assessment; Subcontractor Monitoring and Reporting; Emergency Response Program; Heat and Cold Stress Guidelines; Diving Operations; Welding, Cutting and Heating Operations; Confined Space Entry; Decontamination; and Pre-Job Briefings.

E Component Recovery, Metal Reclamation and Sales

For a recycler, this is where the money is. The foregoing regulations concerning waste and hazardous waste notwithstanding, recycling can be a profitable business if performed safely, efficiently, and with due regard for the environment.

Nearly every ship will have some components that could potentially be reutilized. Generally speaking, a component will be worth more than its weight in scrap, if a buyer can be found. Understanding ship components and their condition (or ability to be refurbished) requires the knowledge of an experienced marine engineer. Generally at many recycling facilities, however, components that have been removed from vessels in the hope that they will sell may sit in inventory for long periods of time, generally due to a failure of marketing. For American recyclers, finding buyers interested in refurbishable (or actually refurbished) ship components can be difficult because so many vessel owners requiring parts in the U.S. prefer to buy new components or from authorized dealers, regardless of the quality of the refurbished component. Many American recyclers, therefore, will set a period of time to hold components and will not invest in refurbishing without a specific request from a buyer. After the period expires, these recyclers will reduce the components to scrap. While it may seem wasteful to do so, the recycler must weigh the time and cost of carefully removing the component, documenting it, refurbishing it (or not) and then marketing it against the probability that it will not sell for a better price than its weight as scrap. Spare parts are often found on ships as well, but since recyclers often don't

have the licensure to re-sell parts (even in original packaging), marketing and selling such spares can be quite challenging. This is particularly so when the authorized dealers refuse to buy back spares from a new owner, even when the unit is in new condition, original packaging, and accompanied by the purchase documentation.

Ships are generally made almost entirely of steel, and due to construction requirements, the steel is generally of a thickness that qualifies as one of the highest grades of scrap: plate and structural ("P&S") steel. P&S steel is highly sought-after in the scrap market, as very little needs to be done to P&S steel to recycle it into other uses. Indeed, shipments of lower grade scrap steel are often "spiced up" with a quantity of P&S steel. Accordingly, ship recyclers have found that they can sometimes obtain superior pricing for their P&S scrap by selling to amalgamators of lower grade scrap that is often generated by operations that focus on recycling white goods (including, for example, household appliances) and other low-grade metals.

In order to maximize returns, recyclers need to keep an eye on the market pricing for various different sized pieces of scrap. For example, steel plate scrap (measuring approximately 6' x 8') can bring prices far in excess of P&S pieces (often cut to 3' or 5' lengths). However, planning and successfully cutting plate takes time and costs substantially more. It should also be noted that removing paint, even lead- or tin-based paint, may not be a requirement. So long as the paint is adhered and not peeling or flaking, then paint removal is usually unnecessary. This is because the paint burns off during the smelting process. However, PCB-laden paint must be removed for the following reasons: (1) torch cutting PCB paint is illegal because it cannot lawfully be burned (and it will expose the worker to unhealthy levels of this carcinogen); (2) exporting PCB paint (when PCB levels are greater than 50 ppm) is illegal under TSCA; and (3)

the smelter will not allow PCBs to be burned off during the smelting process because of the harmful carcinogens that will be released.

Ships also contain small volumes of nonferrous metals, typically in cabling, quite often around 2% of the ship's overall weight. Due to the difference in price between steel and nonferrous metal, the value of the nonferrous metal – even at such low volume – can be as much as half again the value of the ship's steel. This assumes that the nonferrous metal has been processed and is not still bound in some form of insulation (usually plastic). Recyclers have access to processing machines that have the ability to chop and strip way the non-metal parts of wire, creating granular nonferrous metals. The recycler must be careful to sample the waste material before disposal, though: there is a possibility that wire wrapping may contain PCBs, in which case this material needs to be disposed as hazardous waste.

II A Word about Maritime Jurisdiction

A question arises as to whether ship scrapping gives rise to the admiralty and maritime contract jurisdiction of the federal courts under 28 U.S.C. §1333. Admiralty tort jurisdiction to shipyard workers performing ship recycling work (both environmental remediation work and scrapping activities) is presumed on the basis that the work performed by such workers is included within the Longshore and Harbor Workers Compensation Act, 33 U.S.C. §901 *et seq.*

Is a Contract to Scrap a Ship Maritime?

Generally speaking, a maritime contract for purposes of determining admiralty jurisdiction requires transport by sea, commerce or navigation on navigable waters, or maritime employment.[57] The mere fact that a ship is somehow involved in the contract does not bring the action within admiralty jurisdiction.[58] Contracts to build vessels are famously non-maritime in

[57] *CTI-Container Leasing Corp. v. Oceanic Operations Corp.*, 682 F.2d 377 (2d Cir. 1982).
[58] *Chi Shun Hua Steel Co., Ltd. v. Crest Tankers, Inc.*, 708 F.Supp. 18 (D.N.H. 1989).

nature,[59] but contracts to repair ships are maritime, unless the purpose of the repair is a complete re-build of the vessel that requires the vessel to be removed from navigation.[60] The logic behind the distinction in these cases appears to be tied to the notion that before the ship is built, there is no maritime commerce to be conducted and the contract for shipbuilding is "preliminary" to any future maritime contract, but the repair of the ship is necessary for marine commerce to continue. That said, however, once a vessel is removed from navigation, whether for repair purposes or otherwise, there can be no longer be any maritime contract jurisdiction because there is no longer any relationship to commerce or navigation by sea.[61]

Following this logic, then, one would think that a ship that has already reached the end of its life, which has specifically been sold for recycling, which has allowed its vessel registry to lapse, which has already been withdrawn from navigation and has already been substantially recycled to the point where an enormous amount of work would be required in order to return the ship to active navigation, would seem to be the proverbial "dead ship" that cannot support the maritime jurisdiction of the federal courts. But the Southern District of New York recently saw it differently and held that a pollution insurance coverage question with respect to the remains of such a former vessel was "salty enough" to give rise to the court's admiralty jurisdiction and denied a motion to dismiss for want of maritime subject matter jurisdiction.[62] Accordingly, at least in that Court, a contract related to a dead ship that was being scrapped *might* nonetheless be held to be maritime.

---

[59] *Morewood v. Enequist,* 64 U.S. 491 (1860); *Thames Towboat Co. v. The FRANCIS MCDONALD*, 254 U.S. 242 (1920); Boat *La Sambra v. Lewis*, 321 F.2d 29 (9th Cir. 1963).
[60] *New Bedford Dry Dock Co. v. Purdy*, 258 U.S. 96 (1922); *First Marine Shipyard Inc. v. Vessel VERNON C. BAIN*, 1991 A.M.C. 332 (S.D.N.Y. 1990); *North Pacific S.S. Co. v. Hall Bros. Shipbuilding*, 249 U.S. 119 (1919).
[61] *Id.* This is so, even if the intent is to do repairs for the purpose of returning the vessel to commerce. Once the vessel is removed from navigation, Supreme Court precedent clearly holds that admiralty contract jurisdiction is destroyed. *Id.*
[62] *Starr Indem. & Liab. Co. v. Marine Environmental Remediation Grp., LLC*, 2018 WL 3611970 (S.D.N.Y. July 27, 2018).

There are many examples of "dead ships" that have returned from the grave (so to speak) through careful repair and recertification by classification society and approval by a flag state. This fact presents an important issue to a shipowner selling its vessel to a recycler: it is important to the shipowner that the vessel not be re-sold to a competitor and placed back into service. The shipowner who sells the ship for recycling would probably have an argument for damages in terms of future lost profits if the recycler was to put the vessel to further use instead of dismantling and destroying the vessel (assuming, of course, that the vessel re-entered service in the same (or similar) trade).[63] A contract for ship recycling is both a contract for the sale of a vessel (which does not give rise to maritime contract jurisdiction)[64] and a contract for services to a ship (recycling it). There are no cases known to the author that specifically hold that performing recycling services to a ship give rise to maritime contract jurisdiction or not, but inasmuch as the services include (as set out above) performing the same sort of work as would be involved in a contract to repair a vessel, it would seem that a case could be made that this portion of the contract could potentially support maritime contract jurisdiction.

How, then, is a jurisdictional question to be dealt with in a mixed contract? The Second Circuit's decision in *The ADA*, which concerned a mixed contract situation (a charter of a vessel with option to purchase) is possibly instructive on how a court might determine maritime

---

[63] In our experience at MER, a client had a very unique set of equipment on board one of its vessels. The client needed to be assured that the equipment would be completely destroyed as a condition to selling the vessel to MER for recycling. The client was concerned that if the equipment was not destroyed, it could be sold to and utilized by a competitor and that this would damage the client's business. The client proposed that MER post a bond for the market value of the vessel (which was still usable and had merely aged out of the client's own internal fleet quality requirements), but this market value was so substantially out of proportion to the purchase price, it was not practicable to provide this security. Instead, MER worked out a compromise with the client that the client would retain ownership of the vessel and its equipment and would pay MER on a T&M basis to destroy the relevant equipment. The client also arranged to have its own observers to confirm and direct the permanent destruction of the equipment, and only after this was to be accomplished could the vessel be sold for recycling.

[64] *Chase Manhattan Financial Services, Inc. v. McMillian*, 878 F.2d 452 (10th Cir. 1990); *Twin City Barge & Towing Co. v. Aiple*, 709 F.2d 507 (8th Cir. 1983); *Jones v. One 50 Foot Gulf Star Sailing Yacht*, 625 F.2d 44 (5th Cir. 1980); *Richard Bertram & Co. v. Yacht WANDA*, 447 F.2d 966 (5th Cir. 1971); *The ADA*, 250 F. 194 (2d Cir. 1918).

contract jurisdiction in such cases: a charter party is plainly a maritime contract and disputes arising under such a contract of course give rise to maritime jurisdiction, but as set out above, a contract to sell a vessel is not a contract that gives rise to maritime jurisdiction. In *The ADA*, the dispute arose under the purchase option portion of the contract and so the Second Circuit determined that admiralty jurisdiction was absent. The reverse situation occurred in the Fifth Circuit in *The TUG PEGGY*, in which a cause of action arose under a similar contract concerning the charter provisions, not the purchase option provisions.[65] Following *The ADA*, the Fifth Circuit held that the dispute arose under the maritime portion of the contract and so supported the exercise of admiralty contract jurisdiction by the Court. It seems, therefore, that it is not the contract itself that gives rise (or doesn't) to maritime contract jurisdiction, but rather on whether the *cause of action* arises under a set of circumstances that would support admiralty jurisdiction. The Fourth Circuit stated as much in *Snoble*:

> while the principle is one of general validity when the non-maritime elements are substantial and inseparable from the maritime elements, it has long been recognized that where the maritime elements of a contract are susceptible to separate adjudication, admiralty jurisdiction may be exercised to that extent.[66]

As between the seller and the recycler, it is important to know whether a dispute arising under such a contract could give rise to admiralty contract jurisdiction. Certainly, for the reasons set out previously, a dispute under the sale portion of the contract would not support maritime jurisdiction: disputes concerning vessel sale contracts are not justiciable in admiralty. But what about a dispute arising under the recycling portion (say, for example, that the recycler does not

---

[65] *Jack Nielson, Inc. v. The TUG PEGGY*, 428 F.2d 54 (5th Cir. 1970).
[66] *Flota Maritime Browning de Cuba v. Snoble*, 363 F.2d 733, 735 (4th Cir. 1966). See similarly, *Rex Oil, Ltd. v. M/V JACINTH*, 873 F.2d 82 (5th Cir. 1989); *Cary Marine Inc. v. M/V PAPILLION*, 872 F.2d 751 (6th Cir. 1989); *Kuehne & Nagle (AG & Co.) v. Geosource Inc.*, 874 F.2d 283 (5th Cir. 1989).

recycle the vessel)? It is very peculiar that the seller's intent in such a case would be to have the vessel withdrawn from navigation, but the recycler's intent in returning the vessel to navigation would seem to have the effect of preserving admiralty jurisdiction, since the vessel would not *actually* have been a dead ship. In this instance, the seller – who intended to remove maritime jurisdiction would be arguing for maritime-related remedies (including attachment and arrest) while the recycler – whose actions probably preserved maritime jurisdiction – would argue lack of admiralty jurisdiction.

III The Warranty of Seaworthiness

It is a typical feature of marine insurance contracts that the owners of the vessel warrant to the insurer that the vessel is seaworthy. Insurers depend on such warranties and to the extent that the warranty made by the ship owner is untrue, the insurer has the option to seek to avoid the contract for breach of the principal of *uberrimae fidei* ("utmost good faith").[67]

When an insurer provides a policy of insurance to a ship recycler, however, the insurer does not do so in a complete vacuum. It is decidedly unreasonable for an insurer to believe, and it is certainly unethical for the insurer to attempt to make the case, that the vessel being recycled was believed to have been in a condition that would have rendered the vessel "seaworthy" for all purposes. Indeed, ships are not typically sent to recyclers while in good general condition ready to sail across the ocean, but rather are sent to recyclers because they are decrepit, damaged or obsolete. When an insurer knowingly issues a policy of insurance on such a vessel, the insurer does so knowing that the vessel is a "dead ship" – it is "without any likely prospect…of

[67] *Employers Ins. Of Wausau v. Avondale Shipyards,* 1992 A.M.C. 477 (E.D.LA. 1991), *citing Tropical Marine Products, Inc. v. Birmingham Fire Ins. Co. of Pa.*, 247 F.2d 116 (5th Cir. 1957) for the proposition that a "breach of the warranty of seaworthiness at the inception of an insurance policy will void the policy only if the shipowner has prior knowledge of the unseaworthy condition."

returning to navigation."[68] The Supreme Court has long held that a dead ship cannot afford any "express or implied warranty of seaworthiness to any person". In *West v. United States*, 361 U.S. 118 (1959), a contractor's employee who was injured while working to repair a previously mothballed ship claimed that the shipowner had extended a warranty of seaworthiness to the employee.[69] The U.S. Supreme Court, however, held that the previously mothballed ship, which the injured employee knew was "undergoing major repair and renovation," could not have been the subject of any "express or implied warranty of seaworthiness to any person."[70] Because the ship was "not in maritime service," the Court found that "[i]t would be an unfair contradiction to say that the owner held the vessel out as seaworthy in such a case."[71]

This makes sense in the context of the very definition of "seaworthiness". The test of "seaworthiness" is not pursuant to the same set of standards in every case. For example, a special-purpose vessel designed for use in sheltered waters is held to a different standard than a vessel built for unlimited use on the open sea: "seaworthiness" is relative to the voyage anticipated by the particular ship involved.[72] The Supreme Court in *E.J. Dupont de Nemours & Co. v. Vance* 60 US 162 (1857) set out the following standard for seaworthiness: "[*t*]o *constitute seaworthiness…the hull must be so tight, staunch, and strong, as to be competent to resist all ordinary action of the sea, and to prosecute and complete the voyage without damage to the cargo under deck.*" This definition has evolved to mean that to be considered seaworthy, a vessel must be reasonably safe to use and perform her assigned tasks. "Stated another simpler way, to be seaworthy, a vessel must be reasonably fit for her intended purpose."[73] The

---

[68] *Sirius Ins. Co. (UK) Ltd. v. Collins*, 16 F.3d 34, 37-38 (2d Cir. 1994).
[69] *West* at 120.
[70] *Id.*
[71] *Id.* at 122.
[72] *Compania de Navegacion v. Fireman's Fund Ins. Co.*, 277 U.S. 66 (1928).
[73] http://www.bullivant.com/Seaworthiness-Defined-Article

seaworthiness standard imposes on the owner a duty to exercise due diligence to make the vessel as seaworthy "as reasonably practicable".[74]

What should "seaworthy" mean, then, for a vessel intended to be broken up? Such ships are not going on ***any*** voyage, so how can they be made fit for a voyage they will never undertake? It is likewise ridiculous to think that it may be required of a recycler to renew the steel in a decrepit ship in order to preserve its seaworthiness while simultaneously removing steel from the vessel in order to sell the same for scrap. It may be undesirable, but it is not uncommon, for such vessels (or for parts of them) to sink as part of the recycling process. Typically, a recycler obtains a policy of insurance on a vessel when it arrives at the facility for recycling, so the vessel's condition upon arrival is as good as it will ever be. It is incomprehensible how a recycler could be charged with exercising "due diligence" to improve the vessel's condition. Accordingly, the requirement for the vessel to be warranted as "seaworthy" in a policy of marine insurance can have no real meaning for a dead ship that has been withdrawn from navigation for the purpose of being broken up: the term is simply unenforceable.

Does this result in any unfairness to the underwriter? It does not. The burden to prove a breach of the warranty of seaworthiness is already on the insurer,[75] which is quite difficult since the general rule is that the insured must have *actual* knowledge of the unseaworthy condition in order for coverage to be denied.[76] Moreover, the insurer cannot avoid coverage if it had actual or constructive knowledge of the vessel's condition before the loss.[77] If the insurer is underwriting

---

[74] 9 Couch on Insurance, 2d Ed. §37B:357, p. 271; 1 Arnould, Law of Marine Insurance and Average, 16th Ed., §§110-111.
[75] *Saskatchewan Gov. Ins. Office v. Spot Pack Inc.*, 242 F.2d 385, 388 (5th Cir. 1957).
[76] *Tropical Marine Products, Inc. v. Birmingham Fire Ins. Co.*, 247 F.2d 16 (5th Cir. 1957)
[77] *Luria Bros. & Co., Inc. v. Alliance Assurance Co., Ltd.*, 780 F.2d 1082 (2d Cir. 1986).

a vessel due to be scrapped, then the insurer has actual knowledge that the vessel has been removed from navigation and the insurer also has constructive (if not actual) knowledge that the best and highest use of the vessel is as scrap. If the insurer chooses to insure the vessel anyway, then it should not be heard to complain about a claim on the basis that the vessel is unseaworthy. Given the foregoing, an insurer should only be able to avoid coverage due to unseaworthiness in the narrowest of circumstances anyway, and almost certainly cannot do so in the case of a ship being recycled.

FINAL THOUGHTS

On April 14, 1998, reporters Gary Cohn and Will Englund of The Baltimore Sun won journalism's highest award – the Pulitzer Prize – for their investigative reporting exposé of the shipbreaking industry. Their series of stories told of the extraordinary hazards to workers and the environment in what was a sloppy and unregulated industry stretching from Texas to India, and it caused the U.S. Navy to drop a plan it had to dispose of retired warships overseas by selling them for scrap. Following the end of the Cold War, the Navy sought to dispose of surplus and obsolete vessels by scrapping them at various locations, but the reporters found that at each such facility there was a pattern of oil spills, asbestos exposure, lax safety standards and other health, safety and environmental disasters that had led to numerous maimings and deaths. As bad as things were at U.S. facilities, the reporters then found conditions that they described as "hell on Earth" in India, where more than 30,000 laborers (many of them children) performed work in bare feet and loincloths with no safety gear whatsoever, lived in squalid shacks nearby, and conducted makeshift funerals on an almost daily basis for their comrades who did not survive their job that day.

The tremendous reporting work performed by Cohn and Englund has, just two decades later, led to a tremendous turnaround in the shipbreaking industry. Shortly after the stories were published, the U.S. Department of Defense conducted a study to determine how retired naval vessels could be safely scrapped. A shipbreaker in Maryland was convicted of a felony for safety and environmental violations at his facility and served a multi-year prison sentence. The United States didn't lack the proper laws – only the will to enforce – and the responsible agencies met their call to action. Poorly run facilities all over the country were forced by EPA and OSHA to meet health, safety and environmental regulatory requirements or face being shut down. In 2006, the European Union adopted the Waste Shipment Regulation, which enforced throughout all member states the principles of the Ban Amendment to the Basel Convention, which specified that ships sold for scrap had to be treated as hazardous waste. Between 2008 and 2009, the NGO Shipbreaking Platform was founded to put an end to improper shipbreaking practices. In 2009, an international convention was held at Hong Kong that set minimum standards for safe and environmentally sound ship recycling, and numerous countries – including recently India – have now ratified this convention. In 2013, the European Union pressed forward again and enacted the EU SRR, which is without a doubt the strictest ship recycling regime on the planet. BIMCO developed the RECYCLECON form in order to help parties agree to standard rules for safe and environmentally sound ship recycling. European shipowners who have violated either the Waste Shipment Regulation or the EU SRR have been arrested and been convicted of crimes. Classification societies have established rules and procedures for certifying recycling facilities as meeting Hong Kong Convention standards and EU SRR standards. Over the last several years, leading ship brokers such as London-based Clarksons Platou and Paris-based Barry Rogliano Salles have each established green ship recycling specialist brokerage

practices. The world's largest cash buyer, GMS, has established a green ship recycling specialty and now publishes the monthly "GMS Green Briefing". Earlier this month, leading P&I insurer Gard announced it became a signatory to the Ship Recycling Transparency Initiative, a cross-sectoral coalition calling for increased transparency around ship recycling practices. It is not often that a single piece of powerful writing can galvanize such a momentous sea change across the entire planet, but the work done by Cohn and Englund undoubtedly succeeded in this.

This is not to say that the problems in the ship breaking industry have gone away. They have not. Many recyclers operate in the shadows and have made no effort at running safe and environmentally sound business. Others put on a show when regulators appear and then return to dangerous and illegal practices when they believe no one is watching. But there are good operators in the industry and there are those who are truly seeking to improve.

MER, for its part, was awarded a patent for the Waistcoat™ pollution control device it invented.[78] MER has written a white paper to the E.U. to develop an economic incentive that is not tax-based for fostering the development of ship recycling facilities that meet EU SRR standards, leading to the formation of an E.U. study. Numerous public and private entities in Europe, North and South America, Africa, the Middle East and Eastern Asia have also sought MER's consultation to develop new safe and environmentally sound ship recycling facilities. MER is hardly alone in these efforts. Numerous companies, including Norway-based Grieg Green, compete in this space to improve the state of ship recycling worldwide and are accomplishing achievements in health, safety and the environment that would presumably make Cohn and Englund proud.

[78] U.S. Patent No. 9,556,578 (Jan. 31, 2017).