BEACHED WASTE AND WASTED BEACHES: A CRITICAL ANALYSIS OF THE NEW SHIP RECYCLING LAW IN INDIA

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ABSTRACT

India's share in the global shipbuilding market is a mere 0.03%[1]. Yet, India boasts of the largest ship-breaking yard in Asia, situated in a 10km coastal stretch at Alang-Sosiya, Gujarat. A simple online search shows a coastline where several ships are moored on the beach. What is not visible through the satellites is that these ships are being broken on the beach using large metal-cutting torches by a migrant labor force with minimal or no safety equipment. The entire process is laden with the risk of accidents and also of discharge of toxic, polluting materials into the coastal environment. A recent documentary[2] by BBC Network sheds light on this highly unsafe and polluting industry that is being operated at Alang-Sosiya. Aptly named, "Breaking Bad: Uncovering the Oil Industry's Dirty Secret", it not only highlights the concerning levels of violation of environmental and occupational safety laws, but also the apathy of the Indian Government to do something concrete about it. This is despite the fact that the President of India has acceded to the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships[3] and enacted the Ship Recycling Act in November 2019[4]. This article critically analyses the Act in light of the environmental and safety concerns revolving around the 'beaching method' and whether it actually meets

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[1] *UNCTAD Maritime Profile: India,* available at https://unctadstat.unctad.org/countryprofile/MaritimeProfile/en-GB/356/index.html, last seen on 03/03/2021.

[2] C. Foote*, Breaking Bad Uncovering The Oil Industry's Dirty Secret*, BBC News, available at https://www.bbc.co.uk/news/extra/ao726ind7u/shipbreaking, last seen on 03/03/2021.

[3] The Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, International Labor Organization, available at https://www.ilo.org/safework/info/publications/WCMS_154921/lang--en/index.htm, last seen on 03/03/2021.

[4] This enactment only came into force on 27th October 2020, S. 3 vide notification No. S.O. 3838(E), dated 27th October 2020, see Gazette of India, Extraordinary, Part II, S. 3(ii).

its objectives of 'safe and environmentally sound ship recycling'. The article also looks at whether the law can be said to be in compliance with standards under international law and domestic environmental regulations.

I. INTRODUCTION

South Asia including India, Bangladesh, and Pakistan are well-preferred destinations for ship breaking. The method adopted here is known as 'beaching' which involves crashing an 'end-of-life' vessel[5] ashore during high tide. When the tides recede, workers use gas torches to cut the ship up into segments, which are pulled up to the beach for further dismantling.[6] Thus, the primary cutting of the ship takes place in the intertidal zone implying direct contact between the vessel during dismantling operations and the intertidal beach sediments and sea, leaving no scope for proper disposal of the toxic heavy metal wastes that would be discharged during the cutting process. This method is highly unsafe from the perspective of labor safety and coastal and marine environment.[7] However, in terms of cost and labor, it turns out to be the cheapest. Weak enforcement of environmental regulation further makes this a cheaper option for shipowners who are looking to dispose of highly toxic old ships.[8] India has been deploying the beaching method since the 1980s. However, there was a sharp increase in the number of ships which ended up on the beaches of Alang.[9] A recent report commissioned by the Ministry of Environment,

[5] A vessel that has reached the end of its operational life and is ready to be scrapped.
[6] P. Poddar & S. Sood, *Revisiting the Shipbreaking Industry in India: Axing Out Environmental Damage, Labor Rights' Violation and Economic Myopia,* NUJS Law Review (2016), available at http://nujslawreview.org/wp-content/uploads/2016/12/Paridhi-Poddar-Sarthak-Sood.pdf, last seen on 05/04/2021.
[7] *Ship Dismantling*, Basel Convention, available at http://www.basel.int/Implementation/ShipDismantling/Overview/tabid/2762/Default.aspx, last seen on 27/01/2021.
[8] J. McElroy-Brown, *Ship Breaking at Alang, India: "What is the right thing for this place?",* 3 (2006), available at https://digital.lib.washington.edu/researchworks/bitstream/handle/1773/2630/McElroyBrown_project.pdf?sequence=1, last seen on 27/01/2021.
[9] Ministry of Environment, Forest and Climate Change, Government of India, *Marine Environmental Monitoring and Verification for Compliance of CRZ Notification at Alang Ship Recycling Yard*, available at https://greentribunal.gov.in/sites/default/files/news_updates/MOEF%20&%20CC%20Report%20in%20Appeal%20No.%2049%20of%202018%20titled%20CONSERVATION%20ACTION%20TRUST%20&%20Ors.%20Vs%20U.O.I.pdf , last seen on 27/01/2021.

Forest and Climate Change in July 2020 clearly found high levels of heavy metals in samples taken from the shore and near shore locations at Alang.[10] It is noteworthy that over the years several other methods of ship breaking have been developed across the world. The safest and most environmentally sound method is dry-docking wherein, an end-of-life vessel is sailed into a dock and the water pumped out, leaving the ship in a dry environment.[11] All processes occur in a contained zone, thus, greatly reducing the risk of environmental harm and safety concerns for the labor force. Other methods include slipway, berthing, airbag method, etc. Globally, except in some South Asian countries such as India and Bangladesh, countries have shifted to cleaner and safer methods of ship breaking/recycling. These include recycling facilities in Turkey, China, Europe, etc. Most of these facilities use the dry dock method or a version of berthing/slipway methods.[12]

II. INTERNATIONAL LAW OBLIGATIONS IN RELATION TO SHIP RECYCLING

1. The Basel Convention and Transboundary Movement of Hazardous Waste and their Disposal

Under the international law regime, transboundary movement of hazardous waste is covered under the Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (**"Basel Convention"**)[13] which was adopted in March, 1989. The Basel Convention notes that the waste generator should carry out duties concerning the transport and disposal of hazardous wastes and other

[10] Ibid.

[11] *Glossary,* NGO Ship Breaking Platform, available at https://shipbreakingplatform.org/our-work/glossary/#:~:text=fully%20contained%20area.-,Beaching,as%20practiced%20in%20South%20Asia., last seen on 05/04/2021.

[12] *The Problem,* NGO Shipbreaking Platform, available at https://shipbreakingplatform.org/our-work/the-problem/, last seen on 05/04/2021.

[13] *Basel Convention On The Control Of Transboundary Movements Of Hazardous Wastes And Their Disposal Adopted By The Conference Of The Plenipotentiaries On 22 March,* 19891673 U.N.T.S. 126, May 1992, available at http://archive.basel.int/text/con-e.pdf, last seen on 27/01/2021.

wastes in a manner that is consistent with the protection of the environment, whatever the place of disposal.[14]

While 'waste' has been defined 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'[15], the Basel Convention itself does not define the term, 'hazardous waste' and simply refers to a list of substances that member states may notify to be hazardous waste.[16]

Likewise, 'transboundary movement' is defined as the movement of hazardous wastes from an area under one State's jurisdiction to or through an area under another State's jurisdiction or to or through any area which does not fall under the jurisdiction of any State.[17] The Convention places high significance to 'prior consent' of States with regard to movement through or import of hazardous waste within its territory.[18] Thus, no state can export hazardous waste, unless the importing state has consented to the same.

End-of-life ships have been the focus of discussion of the Basel Convention as these vessels are a source of a variety of hazardous materials such as asbestos, polychlorinated biphenyls, antifouling paints, waste oils, etc.[19] Thus, during the seventh Conference of Parties (**"COP"**) in 2004[20], parties recognized that end-of-life ships may be covered under the Convention. The parties affirmed that elements of prior informed consent under the Basel Convention enable the minimization of the impact on human health and the environment associated with the dismantling of ships.[21] The COP therefore invited the International Maritime Organization (**"IMO"**), as the United Nations specialized agency

[14] Basel Convention, Para 4, Preamble.
[15] Basel Convention, Article 2(1).
[16] Basel Convention, Annex-I.
[17] Basel Convention, Article 2(3).
[18] Basel Convention, Article 6.
[19] *Ship Dismantling*, Basel Convention, available at http://www.basel.int/Implementation/ShipDismantling/Overview/tabid/2762/Default.aspx, last seen on 27/01/2021.
[20] *Decision VII/26 Environmentally sound management of Ship Dismantling*, Basel Convention, available at http://www.basel.int/Portals/4/Basel%20Convention/docs/meetings/cop/cop7/docs/33eRep.pdf#page=63, last seen on 27/01/2021.
[21] Ibid.

responsible for the safety, security of shipping as well as the prevention of marine and atmospheric pollution by ships, to *"continue work aimed at the establishment of mandatory requirements to ensure the environmentally sound management of ship dismantling"*[22]. The IMO was requested to establish mandatory reporting systems for ships destined for dismantling.

2. Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships

In 2009, the member states of the IMO adopted the International Convention for the Safe and Environmentally Sound Recycling of Ships at Hong Kong **("Hong Kong Convention")**. This Convention not just covers the disposal of end-of-life vessels but also covers the design, construction, operation, and preparation of ships so as to facilitate safe and environmentally sound recycling without compromising the safety and operational efficiency of ships.[23] Thus, it is claimed that the Hong Kong Convention is essentially a 'cradle to grave' regulation of ships.

It requires States (both Flag States as well as the Port States) to "*prohibit and/or restrict the installation and use of hazardous materials listed in Appendix 1 to the Convention*" on ships flying their flags or "*whilst in their ports, shipyards, ship repair yards or offshore terminals*" respectively.[24] Another measure of control imposed under the convention relates to the mandate on maintaining an Inventory of Hazardous Material (**"IHM"**). However, this is to be in accordance with the requirements of the Flag State.[25]

It is noteworthy that though the Hong Kong Convention was adopted in 2009, it has still not come into force. The Hong Kong Convention mandates that it come into force 24 months after the date on which 15 States, representing 40 percent of world merchant shipping by gross tonnage, have either signed it without reservation as to ratification, acceptance, or approval or have deposited instruments of ratification,

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[22] Ibid.
[23] *Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships,* 19 May 2009, SR/CONF/45 (2009), available at http://www.basel.int/Portals/4/Basel%20Convention/docs/ships/HongKongConvention.pdf, last seen on 27/01/2021.
[24] Hong Kong Convention, Annexe, Regulation 4.
[25] Hong Kong Convention, Regulation 5.

acceptance, approval or accession with the Secretary-General.[26] As on date, only sixteen states, including India, have ratified the Hong Kong Convention and these states represent only about 30% of the gross tonnage of the world's merchant shipping.[27]

A glaring gap in the Hong Kong Convention which has been pointed out by several experts, including the former UN Special Rapporteur on toxics and human rights[28], is that it completely failed to address the method of ship breaking, especially the environmentally harmful beaching method[29]. Another weak link pointed out is the emphasis on flag state jurisdiction by making the flag state responsible for enforcement of the provisions of the Hong Kong Convention. This has led to a considerable watering down of the effectiveness of the provisions of the Hong Kong Convention. Thus, even if large ship-owning countries such as Norway, Netherlands, and Denmark do have stringent measures to ensure that their ships are not exported to South Asia for breaking, the ship owners have found their way around the same.[30] This has been achieved through the very common practice in maritime law known as the 'Flag of Convenience' (**"FOC"**)[31] under which ships often fly the flag of countries that have open registries (also referred to as FOC Countries), which enables ship-owners to avoid restrictive regulatory regimes by changing registration to those FOC countries that have open registries and minimal regulation.[32] The Hong

[26] Ibid, Art. 17.

[27] *India accession brings ship recycling convention a step closer to entry into force*, International Maritime Organization, available at https://www.imo.org/en/MediaCentre/PressBriefings/Pages/31-India-HKC.aspx, last seen on 27/01/2021.

[28] *Report of the Special Rapporteur on the Adverse Effects of the Illicit Movement and Dumping of Toxic and Dangerous Products and Wastes on the Enjoyment of Human Rights*, U.N. Human Rights Council, Sess. 12, U.N. Document A/HRC/12/26, (15/07/2009) available at https://digitallibrary.un.org/record/661231?ln=en.

[29] V. Rossi, *The Dismantling of End-of-Life Ships: The Hong Kong Convention for the Safe and Environmentally Sound Recycling of Ships*, Italian Yearbook of International Law (2010), available at http://www.sidi-isil.org/?page_id=1971, last seen on 27/01/2021.

[30] S. Bhattacharjee, *From Basel to Hong Kong: International Environmental Regulation of Ship-Recycling Takes One Step Forward and Two Steps Back,* 1(2) Trade, Law & Development 193 (2009), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1760459, last seen on 27/01/2021.

[31] A flag of convenience ship is the one that flies the flag of a country other than the country of ownership. The International Transport Workers' Federation (ITWF) has identified thirty-eight FOC countries, available at https://www.itfglobal.org/en/sector/seafarers/flags-of-convenience, last seen on 27/01/2021.

[32] Supra 31, at 203.

Kong Convention has also been criticized for bringing in a visible imbalance by protecting the rights of the shipowners who have minimal responsibilities and shifting a large part of the responsibility on the ship recycling facilities to ensure safe and environmentally sound ship recycling.[33]

3. The European Union Ship Recycling Regulations

In 2013, noting the deficiencies in the Hong Kong Convention, the European Parliament and the Council of the European Union adopted the Ship Recycling Regulation (**"EU SRR"**)[34] which contains more stringent standards vis-à-vis safety and environmental requirements –- the beaching method is strictly prohibited and requirements related to downstream toxic waste management as well as labor rights are included.[35] In essence, the EU SRR requires that vessels registered under the flag of an European Union (**"EU"**) Member State be recycled in a safe and environmentally sound manner. For this purpose, the European Commission maintains a list of facilities worldwide that operate in line with the standards for ship recycling set by the EU SRR.[36] To be included in the List, any ship recycling facility, irrespective of its location, has to comply with a number of safety and environmental requirements. This includes operating from built structures (essentially prohibiting beaching operations); establishment of monitoring systems for preventing, reducing, minimizing health risks and environmental impacts from the ship recycling.[37] For facilities located in

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[33] K. P. Jain, *Critical Analysis of the Hong Kong International Convention on Ship Recycling ,* 7 (10) International Journal of Environmental, Chemical, Ecological, Geological and Geophysical Engineering (2013), available at https://publications.waset.org/17105/critical-analysis-of-the-hong-kong-international-convention-on-ship-recycling, last seen on 27/01/2021.

[34] *Regulation (EU) No 1257/2013 of the European Parliament and of the Council of 20 November 2013 on ship recycling and amending Regulation (EC) No 1013/2006 and Directive 2009/16/EC,* available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02013R1257-20180704&from=EN, last seen on 07/04/2021.

[35] *EU Ship Recycling Regulation*, NGO Ship Breaking Platform, available at https://shipbreakingplatform.org/issues-of-interest/the-law/eu-srr/, last seen on 27/01/2021.

[36] *Shipbreaking: Updated list of European ship recycling facilities to include seven new yards,* European Union, available at https://ec.europa.eu/info/news/shipbreaking-updated-list-european-ship-recycling-facilities-include-seven-new-yards-2020-jan-23_en, last seen on 07/04/2021.

[37] Supra 35, Art. 13.

the EU, it is for the competent national authorities in the concerned Member States to check that all the relevant conditions are met, and to then inform the Commission that the facility in question should be listed. Ship recycling facilities located in third countries and intending to recycle ships flying a flag of a Member State have to submit an application to the Commission for inclusion in the European List. Indian ship recyclers have to move away from the beach or move to safer methods of breaking in order to be eligible to be certified by the EU under its regulations. However, it may be noted that similar to the case of the Hong Kong Convention, the EU SRR also suffers from the flag state jurisdiction fallacy, in that, most of the EU owned ships convert to a flag of convenience during its last voyage thus, by passing the stringent conditions under the SRR. This becomes significant in light of the fact that European ship owners own 35% of the world fleet.[38]

III. BACKGROUND TO THE ENACTMENT OF THE RECYCLING OF SHIPS ACT, 2019

In a landmark order[39] in 2007, the Supreme Court of India had directed the Government of India to form an Expert Committee to report on the adequacy of the infrastructure as existing then in Alang and to suggest remedial measures to upgrade the infrastructural facilities. Pursuant to the said order, the Expert Committee gave several recommendations which were accepted by the Supreme Court, while directing that the same be formulated into a comprehensive Code.[40] The Supreme Court, while noting with concern the situation at Alang, did not discuss the methodology of ship recycling in these decisions. Thus, there was no discussion on the efficacy of the beaching method or a discussion on the need to move to better practices.

[38] Supra 37.

[39] Order dated 17th February 2006, *Research Foundation for Science Technology Natural Resource Policy v. Union of India & Anr.,* (2005) (10) SCC 510. The case was filed concerning the breaking of the French ship, *Clemenceau* at Alang. Even though the said ship was sent back to France, the Supreme Court took note of the dangerous and hazardous conditions of the ship breaking yards in Alang.

[40] Order dated 6th September 2007 in *Research Foundation for Science Technology Natural Resource Policy v. Union of India & Anr.* (2007) 8 SCC 583.

In 2013, the Ministry of Steel, Government of India notified the Ship Breaking Code (**"the Code"**). The Code consisting of eight chapters, dealt with procedures for obtaining anchorage permission, beaching permissions, recycling permissions, mandatory conditions regarding environmental safeguards, and occupational safety and health. The Code was thus formulated on the basic presumption that the ships in India are to be broken/recycled by adopting the beaching method and envisages 'environmentally safe and sound' beaching operations in ship-breaking yards in India. This Code was revised in 2017 with the objective of addressing concerns in relation to the responsibility of storage and disposal of hazardous substances on the ship recycler.[41] In terms of effectiveness, the compliance of mandatory provisions of the Code remained highly questionable at the Alang Shipyards. In fact, as per publicly available reports, it is clear that even these conditions which aim to minimize the impact of the beaching operations are not being complied with satisfactorily.[42]

In 2019, India acceded to the Hong Kong Convention and enacted the Recycling of Ships Act, 2019 (**"the Act"**)for providing regulation of ship recycling by setting standards and laying down the statutory mechanism for enforcement of such standards.[43] The preamble of the Act notes the need to address the gaps in the Ship Breaking Code of 2013 to bring the legal position in line with India's obligations under the Hong Kong Convention.[44] But, again, despite constantly rising global concerns regarding ship breaking on the beach, the Act does not make any reference to the same, and the status quo remains in this regard.

[41] DTE Staff, *Centre proposes amendments to Ship breaking Code 2013 for safe recycling,* Down to Earth, (17/06/2016), available at https://www.downtoearth.org.in/news/environment/centre-proposes-amendments-to-shipbreaking-code-2013-for-safe-recycling-54438, last seen on 27/01/2021.

[42] *Report of the European Commission Directorate-General for the Environment of the Priya Blue Ship Recycling Facility in India,* European Union, available at http://ec.europa.eu/environment/waste/ships/pdf/Site%20Inspection%20Report%20Application%20003.pdf, last seen on 12/04/2021.

[43] The Recycling of Ships Act, 2019.

[44] The Recycling of Ships Act, Preamble.

IV. SALIENT PROVISIONS OF THE ACT

The Act follows the same methodology as the earlier Code with regard to ship breaking, in that it has provisions in relation to the responsibilities of the ship owners, ship recyclers, and also with regard to the preparation of ship recycling plans for each vessel that is received at Alang for scrapping. Thus, the Act states that it is applicable[45] to:

i. any new or existing ship which is registered in India,
ii. ships entering a port or terminal in India, or the territorial waters of India,
iii. any warship, or other ship owned and operated by an administration and used on government non-commercial service, and
iv. ship recycling facilities operating in India or areas coming within the exclusive territorial jurisdiction of India

'Ship recycling' has been defined in the following terms:

> the activity of dismantling of a ship at a ship recycling facility in order to recover components and materials for reprocessing and reuse, while taking care of hazardous and other materials and includes associated operations such as storage, treatment of components and materials on-site, but not their further processing or disposal in separate facilities[46]

The definition refers to the various components of ship recycling within the ship recycling facility. Thus, it does not cover the further processing of hazardous materials or their disposal. Besides, the Act has not included the method of ship recycling in the definition clause. This follows the methodology adopted in the erstwhile Code, and is a critical gap in the law, especially if the aim is to achieve safe and environmentally sound ship breaking.

The Act is a framework legislation comprising ten chapters dealing with various aspects of ship recycling including identification, powers, and responsibilities of authorities[47], the requirement of ships[48] (laying down the

[45] S. 1(3), The Recycling of Ships Act, 2019.
[46] S. 2(n), The Recycling of Ships Act, 2019.
[47] Chapters III & VII, The Recycling of Ships Act, 2019.
[48] Chapter IV, The Recycling of Ships Act, 2019.

responsibilities of the shipowners), ship recycling facilities[49] (dealing with responsibilities of ship recyclers in setting up and maintaining such facilities), process of recycling[50] and reporting[51]. The Act also provides for penal action in case of violation or non-compliance of the provisions of the Act which may lead to imprisonment up to three months and/or fine up to Rs. 15 lakhs. It also provides for an appeal process against the decisions made under the Act before the national authority[52]. The Act identifies the following stakeholders for its effective enforcement and implementation — a national authority[53], concerned authority[54], ship owners and ship recyclers.

V. RESPONSIBILITIES OF THE SHIP OWNER

The Act prohibits and restricts the use of hazardous material on ships[55] and requires ship owners to obtain a certificate of inventory of hazardous materials specific to each ship. This is to be maintained and updated throughout the operational life of the ship.[56]

When a ship is brought to a recycling facility, the owner must first obtain a 'ready for recycling' certificate from the National Authority which will be issued after a survey of the vessel.[57] During the process of ship recycling, the Act imposes a further obligation on the ship owner to ensure that advance intimation is given to the Maritime Rescue Coordination Centre and the competent agencies regarding date of arrival and to ensure that the vessel is cargo, fuel oil, and waste-free.[58]

[49] Chapter V, The Recycling of Ships Act, 2019.
[50] Chapter VI, The Recycling of Ships Act, 2019.
[51] Chapter VII, The Recycling of Ships Act, 2019.
[52] S. 25, The Recycling of Ships Act, 2019.
[53] The National Authority is to be notified under Section 3 of the Act. On 15th October 2020, the Director-General of Shipping has been notified as the National Authority. The National Authority is to be set up in Gandhinagar, Gujarat. See PIB Press Release here: https://pib.gov.in/PressReleasePage.aspx?PRID=1664703.
[54] Though not notified under the Act till date, this would probably include the Maritime Board, Coast Guard, and the State Pollution Control Board.
[55] S. 6, The Recycling of Ships Act, 2019.
[56] S. 8, The Recycling of Ships Act, 2019.
[57] S. 16, The Recycling of Ships Act, 2019.
[58] S. 19, The Recycling of Ships Act, 2019.

VI. RESPONSIBILITIES OF THE SHIP RECYCLER

The Act imposes a fiduciary responsibility on ship recyclers to ensure the safe recycling of end-of-life vessels. Thus, the Act requires each ship recycler to obtain prior authorization from the Competent Authority for operating a ship recycling facility.[59] Such an authorization can be obtained only upon furnishing a satisfactory 'ship recycling facility management plan'. The ship recycler is also under a statutory obligation to maintain adequate measures for emergency preparedness and the safety, health, training, and welfare of workers in his ship recycling facility.[60]

Chapter V of the Act is critical as it entails the statutory mandates in relation to the process of ship recycling. It may be noted herein that there is no mention of the methodology to be adopted by the ship recycler while undertaking such an activity. The provisions under this Chapter address the process of ship breaking and involves detailed procedures including grant of ship recycling permission[61], and also the obligation of the ship recycler to ensure 'safe and environmentally sound' management of hazardous materials[62], and to take 'necessary measures' for protection of the environment[63]. The Act mandates that in case of an oil spill in the facility, the recycler shall be liable to pay 'environmental damages' and 'cleanup operation compensation'[64] There is no explanation on how such damages or compensation are to be quantified.

VII. ANALYSIS

A bare reading of the law clearly points out that it envisages a mere legal framework. Section 42 of the Act does give wide powers to the Central Government to make rules on a wide range of matters including, *inter-alia,* duties of the competent authority, requirements of surveys, verification, and assessment of environmental damages and compensation. Section 43

[59] Ss. 11 & 12, The Recycling of Ships Act, 2019.
[60] Ss. 14 & 15, The Recycling of Ships Act, 2019.
[61] S. 20, The Recycling of Ships Act, 2019.
[62] S. 21, The Recycling of Ships Act, 2019.
[63] S. 22, The Recycling of Ships Act, 2019.
[64] Ibid.

also grants power to make regulations in addition to the rule-making powers of the Central Government.

The Act leaves warships, naval ships, and government-owned ships and ships having less than 500 gross tonnages outside the ambit of the statutory requirements under Chapter III[65] with respect to the prohibition of installation and use of hazardous materials, surveys, and inventorization of hazardous materials onboard such vessels. There seems to be no rational basis for such an exemption.

What is most conspicuously missing is that the Act does not define what method is to be followed, thus leaving the gap wide open to interpretation. This is clear from the above-referred definition of the term 'ship recycling'[66]. This leaves the legislative gap (which was also a flaw in the Ship Breaking Code) still unaddressed. The growing literature on the problems associated with the beaching method (both environmental and safety concerns) of ship breaking ought to have been considered by the lawmakers.

The Act does not expressly repeal or supersede the Ship Breaking Code, 2013. However, it may be noted that Section 41 of the Act categorically states that the provisions of the Act shall be in addition to and not in derogation of any other law in force. Thus, it can be argued that the provisions of the Act are in addition to the mandatory provisions and procedures entailed in the Code. It would be highly problematic if the Act does repeal/supersede the Code as it was much more detailed in terms of the requirements with relation to anchoring, beaching, and other steps involved before the ship being brought into the ship recycling facility which is not addressed in the new law.[67]

The provision under Section 41 of the Act is also indicative of the Act's deference to existing environmental laws and regulations in force. In this regard, the Central Government has issued successive regulations since

[65] S. 5, The Recycling of Ships Act, 2019. This is also in line with the Hong Kong Convention as well as the EU SRR.
[66] Supra 47.
[67] Chapters III and IV of the Ship Breaking Code, 2013, which has detailed requirements for ship owners to comply with before entering the ship recycling facility.

1991 for the protection of the coastal environment under the Environment (Protection) Act, 1986.[68] An argument thus can be made that the provisions of the Act of 2019 must be given an interpretation that is in line with the strictures under these regulations. The Costal Regulation Zone (**"CRZ"**) Notification, 2011 as well as 2019, are essentially zoning regulations having strict provisions relating to the prohibited and regulated activities in each zone.[69] The inter-tidal zone where the beaching process is undertaken is declared as CRZ 1-B under the Notification.[70] The provisions of the Notification indicate that ship-breaking activities cannot be permitted in the CRZ 1B area.[71] Thus, the beaching method is impermissible under the Notification. However, this seems to have been completely ignored or neglected by the Government of India and the Gujarat Maritime Board who are planning to further expand the ship-breaking activities on the beach at Alang.[72]

In terms of compliance with international legal obligations, the Act does follow the Hong Kong standards, having even stricter provisions in relation to the responsibilities of a shipowner. However, it is yet to be seen if it meets the more stringent standards under the Basel Convention in relation to the strict standards of transboundary movement of hazardous materials.

VIII. CONCLUSION

The Government of India had proclaimed that, *"accession to Hong Kong Convention by India and enactment of Recycling of Ships Act, 2019 will raise the profile*

[68] Coastal Regulation Zone Notification was initially issued in 1991, then it was updated in 2011, and 2019. The 2019 Notification is under legal challenge before several High Courts of India (Goa, Chennai, etc.) on the ground of being highly diluted from its earlier versions. For the purpose of this discussion, the author would be referring to the provisions of the 2011 Notification.

[69] Para 3, 4, & 8 of the Coastal Regulation Zone Notification of 2011.

[70] Para 7, Coastal Regulation Zone Notification of 2011.

[71] Para 8 I (ii), Coastal Regulation Zone Notification of 2011 deals with the permissible activities in CRZ 1-B area. The list enumerated therein does not include shipbreaking and thus an argument can be made that ship breaking activities are not permissible in the inter-tidal zone. The Supreme Court of India has consistently held that the provisions of the CRZ Notification must be given strict interpretation.

[72]The Gujarat Maritime Board obtained an Environmental and CRZ Clearance under the EIA Notification, 2006 and CRZ Notification, 2011, respectively, in November 2016 for upgradation of existing infrastructure and adding fifteen new plots at Alang.

of our ship recycling industry as being environmentally friendly and safety conscious and would go a long way in consolidating India's position as the market leader."[73] Such a proclamation seems misplaced in light of the gaps in the Act which can exacerbate the already deteriorating conditions at Alang. This has to be seen in the light of the fact that in November 2016, the Central Government permitted the Gujarat Maritime Board to expand the existing ship-breaking facilities at Alang under a Japan International Cooperation Agency sponsored project.[74]

It is interesting to consider the value being created from the ship breaking activity in India. Steel recycled from ship-breaking activity contributes to only around 1.5% of India's total steel requirement.[75] However, when it comes to global recycling of ships, India's contribution is around 27.23%, only behind Bangladesh which has overtaken India in the last few years as the world's most favored destination for recycling end-of-life ships. This presents the dilemma which still persists and remains unaddressed. It has been opined that the growth of ship-breaking operations in India, along with its neighboring countries illustrated the contradictory impulses of trade and economic globalization and presented an acute dilemma for policymakers. On one end, the ship-recycling industry provides valuable materials like steel and is a source of generating employment. At the same time, there is a legitimate risk of long-term and irreversible harm to the coastal and marine environment and the health of the laborers.[76] It has also been opined that this is also the reason why India and other ship-breaking states do not have the political will to adopt more stringent standards under national law. Thus, it has been advocated that international supervision is

[73] Press Information Bureau, Government of India, Ministry of Ports, Shipping and Waterways, *The Recycling of Ships Bill, 2019 becomes an Act after receiving the assent of President of India* (Dec. 17, 2019), available at https://pib.gov.in/Pressreleaseshare.aspx?PRID=1596730, last seen on 27/01/2021.
[74] Supra 72
[75] G Seetharaman & P. Katiyar, *Can a new ship-recycling law help India regain its status as the world's top dismantler of vessels?*, The Economic Times (22/12/2019), available at https://economictimes.indiatimes.com/industry/transportation/shipping-/-transport/can-a-new-ship-recycling-law-help-india-regain-its-status-as-the-worlds-top-dismantler-of-vessels/articleshow/72918468.cms?from=mdr, last seen on 27/01/2021.
[76] S. Bhattacharjee, *From Basel to Hong Kong: International Environmental Regulation of Ship-Recycling Takes One Step Forward and Two Steps Back* 1(2) Trade, Law & Development 193 (2009), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1760459, last seen on 27/01/2021.

required for balancing out this dilemma.[77] But, today this must be addressed in light of the latest statistics on the contribution of the ship-breaking industry to the steel industry, vis-à-vis high risk to the environment and workers' safety. Such a situation warrants the application of the cardinal principle of environmental law — the precautionary principle. The principle clearly mandates that where there is a serious threat of irreversible damage, actions should be taken that err on the side of precaution rather than increasing risk.[78] In this regard, it would be befitting to refer to the observation of the Supreme Court of India surrounding the principle, and where the court held that environment protection should not only aim at protecting health, property and economic interest but also protect the environment for its own sake.[79] In light of this principle, it is clear that the Government ought to move away from such unsustainable and unsafe practices towards safer options which are already being followed in several other countries. However, there has been a clear failure on part of the Government to do so, and unfortunately, what is being practiced and what is now being allowed for further expansion is nowhere close to being 'Safe and Environmentally Sound'. It is imperative that India take a strong stand on moving away from the beach, concerning ship recycling. One can only hope that the Central Government takes effective measures in this regard by making stringent rules and regulations under the powers granted under the Act, clearly emphasizing the need for upgrading the infrastructure at Alang by moving away from the beach.

[77] Ibid.
[78] UNEP, *"Environmental Rule of Law: First Global Report",* (2019).
[79] *A.P. Pollution Control Board v. Prof. M.V. Nayudu,* (1999) 2 SCC 718.