

Shipbreaking – A Convenient Washing of Hands?

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Abstract

Shipbreaking is a sustainable industry, carried out under non-sustainable conditions. To those working in the industry on the beaches of India and Bangladesh, it represents employment and an important supply of resources for recycling, this, however, at a very high cost in terms of environmental and human health. To the ship owners, it represents a good income from the sale of end-of life ships and the avoidance of the “polluter pays” and other principles.

The article examines the background to this migrant industry, where hazardous waste follows the line of least resistance. It considers existing legislation on transboundary movements of hazardous waste and the strong polarisation of opinion regarding its interpretation. It also looks at several high profile cases of ships being exported for scrapping and the growing number of court decisions regarding the acceptability of this trade. Finally, it considers the issue of various voluntary guidelines and the move to produce an international convention on shipbreaking that is to demand mandatory compliance.

Introduction

The shipping industry facilitates the movement of most of the world’s trade and international shipping has become a truly global industry. Cumulative advances in technology have resulted in the construction of increasingly large and complex vessels, but their lives are still largely determined primarily by the swings in trade and the demand for shipping capacity. Ultimately most ships end their days at the hands of breakers and until recent years their disposal was not a matter of public concern until the issue was successfully raised by environmentally

conscious individuals and groups. Shipbreaking – also known as ship scrapping/wrecking/disposal/dismantling, and increasingly the more benign and anodyne “ship recycling” – is now the subject of growing international concern, with strong polarisation of the opposing groups.

Shipbreaking is essentially a question of economics. Ships are designed, constructed and operated in an environment of high technology and extensive legislative provisions. Their disposal is usually undertaken in circumstances at quite the opposite end of the spectrum, in an environment of low cost, very low technology, high labour content, high risk, and against a background of either inadequate, or more likely, inadequately enforced, legislation. The International Labour Organisation (ILO) now rates shipbreaking as one of the world’s most dangerous occupations.¹

The high level of regulation that pertains to working ships comes to an abrupt halt once vessels become surplus to requirements and they pass to the hands of the breakers. This transition represents a quite positive, final cash inflow to former owners from the sale of redundant vessels. At the same time, it allows them to draw a distinct line under their responsibilities for the high levels of hazardous waste that such vessels now represent, and to circumvent a whole range of legal principles such as the polluter pays, proximity, and precautionary principles.

Background

Shipbreaking had been traditionally carried out around the world, with ships often being scrapped in the places in which they were built. For a period, the UK and the USA became pre-eminent in breaking until the 1950s, when the market moved to the Mediterranean countries and, by the 1970s, to Taiwan and South Korea, with their low labour costs, high demand for scrap metal and low levels of regulatory control. By the 1980s, non-Asian countries were unable to compete with these areas. Currently the market for old ships is dominated by India and Bangladesh, and China, with Turkey taking a number of the smaller vessels each year. The export and dumping of toxic waste ultimately follows the line of least resistance.

The beaches of Alang, India, and Chittagong, Bangladesh, have become the focus of activity for the breaking of ships, since the long sloping inter-tidal zones and the high tidal ranges allow ships to beached for breaking where they rest. Unfortunately, this is a situation, which

¹ IMF 2003 at www.imfmetal.org/main/index.cfm?n=47&l=2&c=8238 viewed at 22.8.08

offers least control over waste containment and spillages.² Much of the work is carried out by hand by a large labour force, unregulated and with minimal resources in terms of equipment, medical care, representation or social provisions. Some 15-20% of the workers at the Bangladesh sites are reckoned to be below the age of 15.³ A report by India's Supreme Court in 2006 indicated that 16% of workers on the Alang beaches suffers from asbestosis.⁴ Mechanised dock and material handling equipment is largely absent and only China has made some move towards breaking ships alongside, on the Yangtze and Pearl Rivers.

These centres are in strong competition with one another; in 2006, only 15 or so of the 173 yards in Alang remained in operation because of competition from Bangladesh and China.⁵ Dominance is determined not only by the number and types of ships coming for disposal, but also changes in local taxation, local enforcement of whatever regulations may obtain, and particularly the national demand for scrap. This demand often emanates from the building programmes of the country, since the bulk of the steel from the ships is usually directed to the local rolling mills for conversion to rebar for use in the construction industry. Bangladesh has become pre-eminent in the breaking of large Very Large, and Ultra Large Crude Carriers (VLCCs and ULCCs), largely as a result of its lax enforcement of gas-free certification of ships prior to cutting. The recent massive boom in the Chinese construction industry has resulted in the high prices offered for end-of-life ships by China, attracting many ships that otherwise would have gone elsewhere for disposal. The Pakistan shipbreaking centre at Gaddani, once a major centre of shipbreaking, has now almost ceased operations, due to the high prices of surplus ships and the high level of import duties.⁶

Typically, ships are sold by owners to intermediary cash buyers. For years, prices fluctuated between US\$100 and US\$200 per lightweight displacement tons (ldt),⁷ but a period of low supply of ships, plus high demand from China can raise prices to over US\$500. A VLCC might command a price of US\$5-10 million and more, depending on other metals

2 DEFRA 2006. *Overview of the ship recycling process in the UK* p59 DEFRA 2006. *Overview of the ship recycling process in the UK* p13

3 International Federation for Human Rights 2008 *Childbreaking yards. Child labour in the ship recycling industry in Bangladesh*. at www.fidh.org/IMG/pdf/bgukreport.pdf viewed 4.10.2008

4 International Federation of Human Rights 2006 at www.fidh.org/spip.php?article/3873 viewed at 21.8.2008

5 BBC News 13.2.2006 at http://news.bbc.co.uk/1/hi/world/south_asia/4708530.stm

6 *Gaddani Ship-breaking* at www.lasbeladistrictgovt.com/gaddani/ship/%20breaking.htm viewed 3.9.2008

7 Light displacement tons – essentially a measure of the fabric of the ship, only employed when a ship goes for recycling.

and equipment present; the presence of hazardous materials on board appears to be irrelevant.⁸

Although the wide fluctuations in scrap prices can have distinct adverse effects on the different breaking sites and their workers, the views of the finance providers for many of the sales may be somewhat less concerned, the website of First International Merchant Bank cited their view of the trade as:

...a recession proof business (which) actually does better in times of world recession. The terrorism of September 11, which exacerbated the world economic slowdown has led to an increase in the volume of scrap ship finance business for FIMBank... We cover ourselves with full insurance.⁹

Despite a number of both ratified, and as yet to be ratified, conventions on the banning of the use of a number of specific substances, ships are still arriving at the breakers laden with asbestos, polychlorinated biphenyls (PCBs)¹⁰, radioactive materials, heavy metals, tributyl tin (TBT)¹¹ and chlorofluorocarbons (CFCs)¹² etc., incorporated throughout the ships' structure. Although the use of asbestos and PCBs have been prohibited for many years and a TBT ban is awaiting sufficient signatories before coming into effect, many of the ships arriving for disposal are of an age where they still contain large amounts of these substances. Oil, fuel and bunker residues may also be present in large amounts, as well as contaminated bilge wastes. As many vessels are sailed (as distinct from towed) to their final destination, oil and fuel may remain on board in significant quantities.

Cutting usually begins with the creation of large openings into the ship's hull to create both access points and allow venting of fumes. However, the cutting may be into compartments or pipes that still contain inflammable materials or are fume-heavy, and fires and explosions are commonplace. India now enforces gas-free certification more formally,

8 Commission of the European Communities 2007 *Green Paper on better ship dismantling*. Brussels 2.2.2007 COM (2007) 269 Final p50p.cit. p5

9 www.fimbank.com/prmain.asp?id=14 viewed 28.7.2004

10 PCBs are persistent carcinogenic materials that bio-accumulate and are toxic to both humans and aquatic species. When heated they generate chemicals such as polychlorinated dibenzofurans, that are even more toxic. Their use has traditionally been in cable insulation, transformers, capacitors etc.

11 TBT is an aggressive organotin used in anti-fouling paints. It is a substance that accumulates in the blood and is highly toxic in the aquatic environment.

12 CFCs are non-toxic substances, but problematic in the atmosphere where their reaction with UV light contributes to ozone depletion. Although their use on board in refrigerants, solvents and fire extinguishing agents is now obsolete, they may still be present on many ships.

but this can add significantly to costs. At the board of enquiry after an explosion on a ship killed 50 (or more) workers in May 2000, Judge Mohammad Harisuddin described the process of dealing with some of the residues:

To clean tankers, workers cut windows in the bottom of the hull and let sea water...in at high tide to wash out the hydrocarbon residues... Residues are collected for re-sale if their quality is good enough. In some cases, residues are simply discharged to the sea.¹³

Large sections of the ship are cut away, usually starting from the bows. These sections are towed up the beach and are cut into smaller pieces, either by torch or by hammer and chisel for the rolling mills. Asbestos is frequently removed by hand; the prevalence of asbestosis amongst the workers is high and asbestos may be found in the living quarters of the workers.¹⁴ Many wastes may be burned on the beach, including electrical cabling, which is burned to remove the covering from the copper core, the process producing toxic fumes of dioxins and furans. A series of reports by Greenpeace, in association with organisations such as Det Norske Veritas (DNV), define in detail the extent to which pollution exists in the major ship breaking areas of Alang and Mumbai (India), Chiang Jiang (China), Aliaga (Turkey).¹⁵ Repeat visit reports indicate no improvement in the situation.

At the same time, ship breaking in these areas may be regarded as a very sustainable industry in terms of the high level of recycling that it practices. A ship may typically consist of around 95% of mild steel, and often accounts for a very high percentage of scrap for recycling in the absence of other local resources; some 80-90% of Bangladesh's steel output originated from end-of-life ships.¹⁶ Further, the ships' fittings and ancillary equipment are also recycled at a much higher level than would be the case in, for example, the UK, and many shops, selling a wide range of items from redundant ships line the road to Alang. The industry also offers employment to a huge migrant population from the poorer states, at rates

13 Judge Mohammad Harisuddin, heading the board of enquiry on the explosion in the tanker *Dena*, in May 2000.

14 Greenpeace 2001. *Ships for scrap III Steel and toxic wastes for Asia*. p5

15 See for example, Greenpeace reports *Ships for scrap: steel and toxic wastes for Asia (1999)*, *Ships for scrap II (1999)*, *Ships for scrap III and IV(2001)*, *Ships for scrap V (2002)*.

16 Commission of the European Communities 2007 *op.cit.* p2

that are low¹⁷ but still better than may be found in the more traditional occupations such as farming. All these returns, however, come at a very high cost to both human and environmental health, with extensive pollution of the local sea, inter-tidal zone, beaches and surrounding land areas, especially by persistent and bio-accumulative substances.

Legal Provisions

There exists a range of regulatory provisions relating to the shipping and shipbreaking industries. These provisions are extensive and include both a number of international conventions, differing national legislation and customary law, but the application and enforcement are not consistent. Applicability is made more difficult by the fact that ships are able to move freely between jurisdictions, and ownership can be transferred easily and even while vessels are at sea.

A ban or limit is in effect on a number of substances traditionally used in ship construction; nevertheless these substances are still present on many vessels coming for disposal. Top of the list of hazardous materials is asbestos, used as a thermal insulation, and hence found extensively in engine rooms, but also in other areas, as lagging for pipes etc. Airborne particles can accumulate in the lungs, causing mesothelioma and asbestosis; restrictions on the use of asbestos date from 1989 in the USA and in Europe from 1987.¹⁸ Following closely behind asbestos, although usually in much reduced quantities, are PCBs, persistent carcinogenic materials that bioaccumulate and are toxic to aquatic species as well as humans. PCBs can be still found in a wide range of applications, including cable insulation, transformers, capacitors etc. The production of PCBs was halted in 1979 in the USA and in much of Europe in 1978-82. There is a global campaign to prohibit the use of PCBs and their trade is regulated by both the Rotterdam and Stockholm Conventions.¹⁹

Other frequent hazards include CFCs, which are often found in refrigeration equipment and solvents and their reduction, together with

17 Whilst the costs of labourers in European shipbreaking sites is around US\$250 per day, costs in Bangladesh and India, where health and safety expenses are negligible, are just US\$1-2 per day. Commission of the European Communities 2007 *Green paper on better ship dismantling* COM(2007) 269 Final 22.5.2007 p6

18 *Council Directive 87/217/EEC of 19 March 1987 on the prevention and reduction of environmental pollution by asbestos as amended by Council Directive 91/692/EEC (further amended by Council Regulation 1882/2003/EC), and Council Regulation 807/2003/EC* OJ L 85 28.3.87 p40

19 The Rotterdam Convention on the prior informed consent for certain hazardous chemicals and pesticide in international trade 1989 and the Stockholm Convention on persistent organic pollutants 2001.

other substances that deplete the ozone layer, have been the subject of an international treaty since 1987.²⁰

An international convention banning the use of harmful organotins such as TBT has been defined, but is not yet in force until ratified by 25 states representing at least 25% of the world's merchant tonnage,²¹ however, the use of anti-fouling measures is covered in Europe by Regulation 782/2003.²²

Legislation relating directly to ship design and construction has, in the past, been the direct result of specific maritime accidents, which usually involved extensive oil pollution. The sinking of the tanker *Torrey Canyon* in 1987 led to requirements for double-hulled tankers to be incorporated into the MARPOL 73/78 Convention,²³ whilst the grounding of the oil tanker *Exxon Valdez* off Alaska in 1989 resulted in the passing of the US *Oil Pollution Act 1990* (OPA 90). The latter resulted in a ban on the use of single-hulled tankers in US waters, forcing these vessels to seek alternative markets. Both the IMO and USA measures, plus the difficulties of rebuilding single-hulled vessels and the 25-30 year age limit imposed on tankers, have resulted in the phasing out of single-hulled tankers.

The grounding and breaking up of the oil tanker *Erika* in 1999, the break up of the aging tanker *Prestige* in 2003, and the extensive pollution that they generated, accelerated the IMO phase-out of single-hulled tankers by 2007 and 2015 (depending on category). In March 2000, the European Commission adopted the Erika I measure to speed up this process and strengthen port control. EC Regulations 417/2002/EC²⁴ contained the double-hull provisions for European ship owners. The *Prestige* accident promoted the reduction of previous scrapping deadlines to 2005 and 2010. One result of these new measures is an anticipated peak in scrapping for which the existing industry does not have capacity and which therefore promotes other states even further on the margin, to enter the industry.

With regard to the classification of scrap and the international trade in hazardous waste, there are predominantly two pieces of legislation currently in effect, namely the United Nation's Basel Convention²⁵ and the

20 The 1985 Vienna Convention for the protection of the ozone layer and the 1987 Montreal Protocol.

21 International Convention on the control of harmful anti-fouling systems on ships 2001.

22 Regulation EC 782/2003 on the prohibition of organotin compounds on ships OJ L 115/1 9.5.2003

23 Amendments to Regulation 13G of Annex 1 of MARPOL adopted 27.4.01 by the 46th session of the IMO Marine Environmental Committee (MEPC-46)

24 Regulation 417/2002/EC on the accelerated phasing-in of double hull or equivalent design requirements for single hull oil tankers and repealing Council Regulation 2978/94/EC

25 The Basel Convention on the control of transboundary movements of hazardous wastes and their disposal 1989

European Waste Shipment Regulation (EWSR).²⁶ The Basel Convention was adopted in 1989 in response to the rising trend of toxic wastes being shipped to developing countries and to Eastern Europe. Its central concept is one of ‘environmentally sound management’ (ESM) aimed at protecting human and environmental health. It is the most frequently quoted source in arguments concerning the status of ships-for-scrap, yet this instrument was not developed with ships specifically in mind, and although this in itself does not render it inapplicable, its applicability is considered very contentious by many representing the shipping industry. The convention seeks to ensure that wastes are dealt with where possible within the country of source (the proximity principle), by employing a system of Prior Informed Consent (PIC)²⁷ and written notification of movements by the exporting state to the state of import, which may refuse the shipment.

The Basel “ban” amendment²⁸ was adopted in 1995, and prohibits the export of hazardous waste from Annex VII countries (Basel Convention Parties that are members of the EU, OECD, Liechtenstein) to non-Annex VII countries (all other Parties to the Convention), irrespective of whether the waste is destined for disposal or recovery. This amendment is not yet in force, although its provisions have been incorporated in the European Waste Shipment Regulation and hence have the force of law for members of the EU.

The convention has been ratified by 168 countries, including the UK, India, Bangladesh, China and others, but not by the USA, which often displays a reluctance to ratify treaties to which it has been a signatory. The convention may represent a very real increase in liabilities and commercial costs to owners were ships to be decontaminated prior to despatch. The lack of precise definition regarding end-of-life ships has led to some interesting examples of creative interpretation by some of the parties involved.

Opinions differ as to when a ship might be deemed ‘waste’. Proponents of the Basel Convention, principally Greenpeace and the Basel Action Network (BAN)²⁹ consider that a ship becomes waste immediately the decision to scrap is made (a point difficult to define and easy to conceal), whilst the shipping industry, as represented by the International

26 Council Regulation 259/93/EEC on the supervision of the shipments of waste within the European Community 1993, as amended OJ L30 6.2.1993

27 Basel Convention, Article 6

28 Formally incorporated at the 2nd Conference of Parties 1995.

29 BAN is an organisation devoted to “confronting the global environmental injustice and economic inefficiency of toxic trade (toxic wastes, products and technologies) and its devastating impacts.” Its activities are not limited to shipbreaking.

Chamber of Shipping (ICS) and the International Maritime Organisation (IMO), is equally adamant that a ship en route to the breakers does not become waste until its ultimate arrival at the breakers.

In evidence to the House of Commons Select Committee in 2003, the ICS argued that the Basel Convention was intended to apply only to land-based wastes; it was never intended to apply to ships. The Environment Agency deemed it “extremely problematic”, whilst Greenpeace, in accepting the difficulties, argued that:

of all the instruments currently in place that impact this issue, the Basel Convention is the only one that is a) legally binding and b) in a clear position to actually minimise the export of ships containing hazardous materials to developing countries, and thus...prevent more impoverished workers from being poisoned or otherwise killed³⁰

In a submission to the IMO and the ILO Working Group³¹ on the subject, BAN stated that:

...it is well recognised that the unique nature of ships makes it easy to circumvent the intent and spirit of the letter of the Convention unless imperative guidelines, decisions and mechanisms are agreed.

Despite repeated rebuttals by the ICS, the Basel Convention at its Seventh Conference of Parties in 2005 passed Decision VII/26, stating that:

...a ship may become waste as defined in Article 2 of the Basel Convention and that at the same time it may be defined as a ship under other international rules.³²

The conclusion of the conference was that Parties should recognise their obligations with respect to ships as waste, minimise transboundary

30 Evidence to the Select Committee on Environment, Food and Rural Affairs, Eighteenth Report HC 834 11.11.04 *Dismantling Defunct Ships in the UK*.

31 Joint ILO/IMO/BC Working Group on Ship Scrapping, 1st. session 7.2.05, London

32 Basel Convention Decision VII/26, recital 6; Regulation (EC) 1013/2006 of the European Parliament and of the Council 14 June 2006 on the shipment of waste OJ L 190, 12.7.2006, p1 recital 35

movements, and ensure prior informed consent and environmentally sound management.³³

A number of rulings by the ECJ have determined that waste for recycling remains waste right up to the point of the recycling operation and pronouncements have been made on a diverse range of substances such as gravel chippings in the *Palin Granit* and *AvestiPolarit* cases³⁴ and oil used as a fuel for heating in the joint cases of *ARCO Chemie* and *EPON*.³⁵ Difficult though some of the ECJ rulings might have been, the wastes in question usually have had the distinction of being basically static. In comparison, ships-for-disposal might well be considered as mobile waste in more than one sense.

Nevertheless, there are loopholes in the Basel provisions that are exploited daily by shipowners wishing to dispose of redundant vessels and these concern both the need to determine clearly the actual point of the decision to dispose (and hence render a ship waste) plus the need to define more closely the equivalent to “state of export” since ships can be deemed waste in literally any location.³⁶ The decision to determine (i.e. declare) when a ship becomes ready for disposal can easily be made by owners once the vessel is on the seas and already heading for the breaker’s yard. Declaring a sale once a ship is within the waters of the country of destination offers the potential to circumvent a transboundary movement once it has already been completed.³⁷ At the point of departure from any port, it can be – and often is – claimed that a vessel is sailing for sale to other owners, for repairs elsewhere, or for conversion to other uses. Such deceptions are commonplace, as some of the case law below illustrates. It is not uncommon for ships to be renamed whilst at sea, or change flags of registration, especially to open registers.³⁸ In some instances, ships may arrive at the breakers yard flying flags of quite fictitious countries, the former Danish ferry *Riky* (see below), for example, reputedly arriving at Alang under the flag of the state of “Roxa”.³⁹

33 Basel Convention 2005 Open-ended Working Group of the Basel Convention Fourth session Geneva 4-8 July 2005 *Environmentally sound management of ship dismantling. Note by Greenpeace and the Basel Action Network* p3

34 *Palin Granit Oy and Vehmassalon kansanterveysystyön kuntayhymän hallitus v. Lounais-Suomen Ympäristökeskus C-9/00 ELR 4 3* and *AvestiPolarit Chrome Oy C-114/01*

35 *ARCO Chemie Nederland Ltd v Minister von Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer C-418/97 and C-419/97 Vereniging Dorpsbelang Hees and Directeur van de dienst milieu en Water van de province Gelderland, joined party Elektriciteitsproductiemaatschapij Oost-en-Noord-Nederland [1997] Env LR 360*

36 Basel Convention 2005 *op.cit.* p8

37 Greenpeace 1999 *Shipbreaking and the Basel Convention – an analysis.*

38 Formerly more commonly know as Flags of Convenience

39 G Krishna 2006 *The scrapping of Riky* at www.Indiatogether.org/2006/mar/env-riky.htm#cont viewed 20.8.08

The difficulty of determining waste and responsibilities is further aggravated by the ease with which ownership may change quickly and frequently, with ship owners selling redundant vessels to cash buyers, intermediaries between sellers and the eventual owners, the breakers. Legal responsibilities are easily hidden at any number of points by the use of fictitious companies, or by companies which may exist only as Post Box registrations or “filing cabinet companies” (see below), such practices being condoned by some of the more questionable open register states, whose adherence to operating standards can be well below internationally accepted norms.

On the other hand, the ‘Basel ban’ has been quite unambiguously incorporated into European legislation, via Articles 14 and 16 of the European Waste Shipment Regulation 1993 as amended, making it binding on the ships under the flags of all Member States and ships arriving at, and departing from, their ports. Waste is defined under Community law as any subject or object in the categories set out in Annex I to the Waste Framework Directive,⁴⁰ ‘which the holder discards or intends or is required to discard.’ Ships that contain significant quantities of waste are to be considered hazardous waste and dismantling is to be carried out under environmentally sound management in an OECD country. The alternative is to have ships pre-cleaned or decontaminated prior to departure. This interpretation was further confirmed by the decision of the French *Conseil d’État* with respect to the aircraft carrier *Le Clemenceau* (see below).⁴¹

At the same time, it needs to be acknowledged that there are difficulties beyond simple health, environment, and cost issues associated with pre-cleaning; a complete removal of all hazardous materials incorporated into a ship’s structure may involve dismantling to the point where insurance is no longer available or the ship no longer sea worthy. There is also a distinct shortage of ocean-going tugs that could undertake long-distance dead tows.⁴²

Case Law Arising

A number of decisions have been held by various national courts on the subject of ships as hazardous waste and their acceptability in their

40 Directive 2006/12/EC of the European Parliament and of the Council of 5 April 2006 on waste OJ L 114, 27.4.2006 p9

41 Commission of the European Communities 2007 op.cit. p4

42 ENDS 2006 *Shipbuilders prepare to move into recycling* Report 377 June 2006 p21

uncleaned (contaminated) state. The number is still relatively small, but is growing apace and illustrates the determination by some organisations and by some governments to define what is no longer acceptable. The decisions also illustrate the extent to which some governments will act at odds with their own national courts and the legal contortions employed. In each of the cases, the environmental pressure group Greenpeace has played a major role in raising awareness of what was being proposed in the way of illegal trade in hazardous waste. The cases also illustrate the ease in which owners can evade their responsibilities by abandonment of vessels, last-minute sales and ship renaming, and by the hiding or obscuring of their identities, a practice facilitated by a number of open registers. The role of open register states should not be underestimated here as in other matters. Open registers now account for the majority of registered flag tonnage; as a consequence, the open register states play an important role within the IMO in the development (or perhaps the lack of development) of new and existing regulations and their enforcement. The five cases examined below are just some of the more significant high-profile cases amongst the many that now occur with increasing regularity.

a. The *Sandrien*

The *Sandrien*, a chemical tanker flying the flag of Mauritius, was detained in Amsterdam, where it was arrested by the Dutch Environmental Inspectorate in February 2001. Inspection had revealed serious corrosion, which required major repair before the vessel would be allowed to sail directly to its final destination, and without cargo. Before the ship was able to depart, it was determined by the authorities that the purpose of its final voyage was scrapping in Asia. The ruling of the Court of First Instance in the Council of State, the Hague in June 2002⁴³ was that the ship as a whole should be regarded as hazardous waste since it contained a substantial amount of asbestos (as well as other hazardous substances and cargo residues), thus putting the hull in the red list rather than the green waste list categories of both the ESWR and Basel.

It was further held that the owner's intentions to transfer the ship to Alang (a contract made in November 2002 and thus rendering the ship waste at that time) without due notice was also in contravention of the

⁴³ Council of State, The Hague. *Upperton Ltd. V the Minister of Housing, Spatial Planning and the Environment*, LjN number AE4310 Case number 200105168/2

ESWT, in the light of the ruling on what constitutes waste, given by the ECJ on the joined cases C-418/97 and C-419/97.⁴⁴

The *Sandrien* had been abandoned by her owners, who were registered at a Post Box in Mauritius and who were contactable only through lawyers. After occupying a berth in Amsterdam since 2000, the ship was finally broken up in the port in 2004, the cost being borne by the ministries and the city of Amsterdam, but not recovered from the owners.

The case was significant in that not only was it the first case in which it was defined that a ship containing asbestos is to be treated as hazardous waste, but it also demonstrated how difficult it can be to define the actual ownership of a vessel and how easy it can be for owners to simply abandon their responsibilities – a situation that needs to be addressed directly and remedied in any forthcoming IMO legislation.

b. The *Sea Beirut*

Whilst sailing under the Liberian flag, the *Sea Beirut* broke down off the autonomous port of Dunkirk in 1999 and was, by formal letter of abandonment, eventually abandoned to the port by her owners, Lane Holding SA, another Post Box-registered owner (the actual owners were never traced). The port authorities thus became responsible for the ship. Asbestos was found on board, although no action was taken by the port following the assessment. The abandonment of the ship rendered it waste; the presence of asbestos on board rendered it hazardous waste.

The ship was auctioned off by the port and bought by the German company MSK, a front for the Turkish ship breaking company CESMAN. It left Dunkirk in April 2002, ostensibly for scrapping, but in fact destined for breaking at CESMAN's yard at Aliaga. No notification was given by the port authorities to either the French or the Turkish environmental authorities in accordance with Article 6 of the Basel Convention and the EWSR. This despatch was also in contravention of both French and Turkish domestic legislation. At the point of departure, France became the country of export under Basel.

As the ship neared Aliaga, samples of materials on board were again taken and the Turkish Environment Minister refused to accept the ship under Turkish hazardous waste import law (itself based on Basel) and

⁴⁴ See footnote 29 above for citations.

ordered the ship to be returned to its country of departure.⁴⁵ Turkey thus became the first country to refuse a ship for scrap on the basis of the Basel Convention. In its turn, France refused to accept back the vessel, which in 2005 was still anchored off Aliaga. The ultimate fate of the vessel is not known.

c. The *Riky*

In April 2005, Denmark took steps to prevent the scrapping of an asbestos-contaminated ship when the 51 year old former Danish ferry *Kong Frederik IX* was sold to a Post Box company, Tummel Ltd., in St Vincent. The ship left Denmark under her new name of *Frederik*, ostensibly for refurbishing in Greece. When her actual destination of Alang was discovered, the Danish Environmental Minister wrote to her Indian equivalent, the Minister of Environment and Forests, warning that ship, now under the name of *Riky*, was due to arrive at Alang, that it be considered illegal waste traffic under Basel, and requested that it not be allowed to enter Indian waters but returned to Denmark for decontamination. The vessel also reminded the Indian authorities of the order of their own Supreme Court prohibiting the import of hazardous waste,⁴⁶ which include three provisions, namely that: prior to arrival in port, the vessel must have proper consent from the appropriate agencies stating that it contains no hazardous waste; the ship should have been properly decontaminated by the owners prior to breaking; a complete inventory of hazardous waste be available.

Repeated requests by Denmark for the ship's return were rejected by the Indian minister, who affirmed that India had been a party to the Basel Convention since 1992 and had strengthened its own national legislation to ensure compliance, but that a ship sailing under its own power was not deemed to be waste and that moreover, waste on board should be defined purely as *cargo*. Hazardous material incorporated into the structure of the ship was deemed to be of no relevance.

In October 2005, another Danish ship, the *Dronning Margrethe II*, similarly arrived at Alang illegally laden with hazardous wastes. The Indian authorities again ignored alerts and requests by Denmark for the return of the ship.

45 *CEMSAN Ship Dismantling Metal and Steel Industry Trade Ltd. Co. v Ministry of Environment; Governorship of Izmir; Sub-Provincial Governorship Aliaga. "The Sea Beirut"* Izmir 2nd Administrative Court, Decision of 30.9.2003 Decision No. 2003/1184 Case No. 2002/496
46 Writ petition No. 657 of 1995 *Research Foundation for Science Technology National Resources Policy v. Union of India & Anr.* SLP C No. 16175/1997 Supreme Court in a ruling.

d. *Le Clemenceau*

Le Clemenceau was a large French aircraft carrier, the owners of which spent several years trying to find a suitable base for breaking. Decommissioned in 1997, responsibility for the ship passed from the French Navy to the Ministry of Finance. After plans to sink the ship as an artificial reef were abandoned in 2001 and after France's own naval shipyard's bid was rejected as too expensive, the contract for disposal was won by the Spanish company Gijonese de Desquaces. France had insisted that the ship remained its property until it was completely scrapped and that all hazardous waste had to be removed in Gijon, Spain (in accordance with European waste regulations) before the ship could leave for Alang.⁴⁷ The ship represented a major asset to a breaker as it contained an estimated yield of 22,000 tons of steel, despite many tons of the usual toxic wastes.

In 2003 the ship, now officially known as Q790, left Toulon headed for Turkey but was blocked by the French navy. Attempts later that year to remove the visible asbestos first in Italy and then in Greece prior to its intended export to Bangladesh were both failures, the Greek military boarding the ship in the Mediterranean and forcing it to return to France. By now the ship, owned by the Panamanian company Shipping Decommissioning Industry Corporation (SDIC), had become an international *cause célèbre*. The ship was eventually returned to Toulon, where further unsuccessful attempts were made to decontaminate the vessel. Finally, in 2005, a court ruling⁴⁸ allowed the ship to depart for India for breaking in December, the court claiming that the matter was beyond its jurisdiction, since the ship was deemed to remain a warship until it was completely scrapped and hence beyond the provisions of the Basel rules on hazardous waste exports.⁴⁹

By January 2006, the ship had reached the Suez Canal, where it was detained for a week whilst Egypt requested details on the waste on board from the French authorities in accordance with the Basel COP7 Decision – (see footnote 30). Numerous claims and counter claims have been made about the mix and extent of hazardous materials involved. Meanwhile, India's Supreme Court had determined on January 6th that the ship should remain outside Indian waters, citing the Basel convention and pending an

47 Zarach S. 2006 *The Clemenceau* BIMCO. At www.bimco.org/Print.aspx?itemId={B4B63544-A707-4255-9243-7AE5A12AF} viewed 5.10.2008

48 Ruling of the Administrative Court of Paris 30.12.2005

49 Zarach S. 2006 *op.cit.*

assessment by a Defence Ministry panel on the amount of toxic waste involved.⁵⁰

The following month, on February 13th, the Supreme Court sought to set up a new advisory panel to address the issue after dismissing its Monitoring Committee, which had submitted two contradictory reports.⁵¹ At the same time, it issued a ban on all public debate and writing on the affair, claiming that these represented a challenge to its authority.

Shortly afterwards, on 15th February, after complaints from Greenpeace about contested amounts of hazardous materials on board and in the face of impending investigation by the European Commission, the French Supreme Court, the *Conseil d'État*, suspended the transfer⁵² whilst a lower court began a review of the case. Immediately afterwards, France's President Chirac ordered that the ship be returned to France, just days before he began an official visit to India.⁵³ The question faced by the *Conseil d'État* was whether the ship should be defined as waste and whether its export to India was valid under Regulation 259/93. Initially the government was adamant that the *Clemenceau* was not waste, but the court considered the case against Community case law,⁵⁴

...according to which the act of disposing of is not restrained solely to the abandonment of materials...and must be considered as waste materials susceptible of being used for economic purposes, as long as they had not been regenerated or recycled and even if the holders had the intention of recycling them.⁵⁵

A statement issued by the French government in defence of their actions prior to the return, included the claims that it was not waste but a state-owned ship, it was to be recycled not discarded, it was not waste but weaponry, etc. They also claimed that the 45 tonnes of asbestos supposedly remaining on board fell below the Basel threshold. These claims were dismissed point by point by the BAN and others, defining both France's and India's actions as merely 'a sad effort at revisionist history with respect to the proper implementation of the Basel

50 Noronha F 2006. *Toxic warship not allowed to disrupt India-France summit* at www.ens-newswire.com/ens/feb2006/2006-02-20-04.asp viewed 5.10.2008

51 Zarach S. 2006 *op.cit.*

52 *CE, Association Ban Asbestos France et autres, req. no. 288801,288811*

53 American Society of International Law 2006 *Shipbreaking and Le Clemenceau row* at www.asil.org/insights/2006/02/insights060224.html viewed 20.8.08

54 *C-206 and 207/88 Vessoso and Zaneth, C-389/88 Zanetti*

55 Association of the Councils of State and Supreme Administrative Jurisdictions of the European Union. www.juradmin.enseminars/Brussels2008/France_en.pdf viewed at 5.10.2008

Convention.⁵⁶ Some attempts had, however, been made to establish some acceptable conditions for the scrapping in that the Indian yard chosen was

...an exemplary yard in line with European ISO standards. Teams had been put in place for the transfer of technology and necessary materials and there would have included medical follow-ups for the workers involved.⁵⁷

The loss of the ship was a great blow to the employment prospects of the Indian breakers since such a vessel might have taken some five years to dismantle⁵⁸ and reports in the Indian press had placed a scrap value of US\$10 million on the carrier.⁵⁹

On 1st July 2008, the final demise of the *Clemenceau* was defined in a press statement,⁶⁰ which announced that the ship was to be broken up at Graysthorp, Hartlepool by Able UK, the Teesside company at the centre of the Ghost Ships saga, which began in 2003 with the import of four aged ships from the US Reserve Fleet.

e. The *Blue Lady*

The former liner *France* was one of the largest of liners operating on the transatlantic service until the demise of that trade saw her laid up in Le Havre until 1979, when she was sold to the Norwegian Cruise Line for conversion to a cruise ship under the name of *Norway*. Although still a popular cruise ship, the mounting cost of upgrading her to meet current standards of the new genre of cruise ships, plus a boiler explosion on board in 2003 finally saw the ship retired from service. From Miami, the ship was despatched to Bremerhaven, Germany and from there the ship was towed to Malaysia where, the German authorities were informed, repairs would be undertaken.

The ship lay for months at anchor off the Malaysian port of Penang waiting for a buyer. In May 2005, the ship, now under the name of *Blue Lady*, left Malaysia under tow, ostensibly to be repaired in Dubai, but

56 Basel Action Network 2006 *Comments on statement of French government on Clemenceau by the Basel Action Network on behalf of the Greater Coalition demanding return of Clemenceau to France for decontamination. Prepared 24 January 2006*

57 Zarach S. 2006 *op.cit.*

58 Jeena K 2006 *Analysis; despair as Clemenceau returns* Basel Action Network Toxic Trade News 20.2.2006 at www.ban.org/ban_news/2006/060220_clemenceau_returns.html at 5.10.2008

59 International Centre for Trade and Sustainable Development 2006. *Chirac recalls asbestos-laden ship from India, orders inquiry.* www.ictsd.net/news/bridgesweekly/6226 viewed 5.10.2008

60 Lloyd's List *Able UK wins contract to dismantle Clemenceau* 2.7.2008

actually purchased by a Bangladesh breaker. However, following demands and demonstrations by a group of environmental organisations, permission to enter Bangladesh waters was denied by the Bangladesh government by inter-ministerial decree, citing Basel obligations and the dangers likely to arise from scrapping the vessel without adequate prior decontamination.⁶¹ The buyer's letter of credit was revoked.

The ship was reportedly containing some 1,200 tons of asbestos, plus the usually accompanying mixture of PCBs etc., but the absence of any formal and independent survey of the actual contents made many numbers speculative (although a large amount of hazardous waste must have been on board a vessel of that size).

Ultimately, the ship made its way round to the beaches of Alang in 2006. India's Supreme Court, after questionable findings of the Technical Experts Committee on ship breaking that it established, and in contravention of its own ruling No. 657/95,⁶² allowed the ship to anchor in Indian territorial waters under "humanitarian" rather than legal arguments in the face of oncoming monsoon weather and a low level of supplies on board. Although by this time the ship was owned by the Indian company Haryana Ship Demolitions Private Limited, details of ownership were unknown to the Technical Committee. The court's logic that a ship sailing under its own power is not waste conveniently ignored the fact that the ship had arrived under tow.

A purely visual, two-part inspection in July 2006 by a Gujarat Pollution Control Board committee looking for instances of loose hazardous material on board reported only on the finding of some oily rags, despite two previous technical reports to the contrary issued by French companies in 2004 and 2005.⁶³ "No other hazardous material of any kind or quantity was found that could not safely be removed, handled and disposed of at Alang."⁶⁴ The Additional Solicitor General once more used the argument that the ship contained no asbestos or asbestos-containing materials *as cargo*.

61 Gutierrez 2006 *Legal obligations can prohibit entry of the Blue Lady* at www.merinews.com/catFull.jsp?articleID=211&category=Nation&catID=2 viewed at 18.8.2008

62 *Directions of the Supreme Court on Ship Building 657/95*

63 A letter dated 16th July 2006 to the Secretary, Ministry of Environment and Forests from the CEO of Ship Decommissioning Industries SAS, Paris advised the Ministry of a survey that the company had undertaken of the ship at Bremerhaven and found extensive contamination by a range of hazardous materials, including some 1,200 tons of asbestos, some of which had been released into the atmosphere during the earlier explosion in the boiler room. Annex 2 of the NGO Platform on Shipbreaking report 2006 *Comments on the Indian committee inspection report on the hazardous materials onboard the SS Blue Lady*. 31 July 2006

64 Inspection Committee Report p5, as cited by the NGO Platform on Shipbreaking 2006 *op.cit.*

Following an inspection of the twelve decks of the 315metre long ship in just some four hours in August 2006, the Atomic Energy Regulatory Board (AERB) and the Gujarat Maritime Board (GMB) found twelve smoke detectors containing radioactive materials and thereafter declared the ship free of radioactive material, despite the fact that plans showing the locations of more than one thousand further units was available. This report was issued by the Technical Experts Committee (TEC), the chairman of which was Secretary at the Environment Ministry.

Another principal factor accepted by the court was the statement made by the TEC; that since the vessel was now grounded, this was an ‘irreversible process’ and the ship could no longer be refloated, a stance rejected by more than one salvage company.⁶⁵

On September 11th 2007, claiming the issue to be a recurring one, the Supreme Court gave judgement⁶⁶ allowing the breaking of the *Blue Lady*, in the face of its own order of October 14th 2003, its Direction 657/95, a number of international agreements, including Basel, which India has ratified, India’s own Environmental Protection Act, the absence of an owner’s inventory of hazardous material, the absence of the mandatory Form F from the country of export, the absence of any pre-contamination and the inability of Alang to dispose of materials such as PCBs in the tightly defined and strictly controlled manner required by convention. Advancing the “concept of balance”⁶⁷ under the principle of proportionality relating to sustainability, the court determined that no development is possible without some adverse effect on the ecology and environment and the convenience to the larger section of the people has to get primacy.⁶⁸ The breaking offered the prospect of work for 700 in the breaking and the production of 41,000MT of scrap steel, this being important in the face of competition from Bangladesh and China

With the decision made under pressure by the authorities, selective logic and the avoidance of known facts, the workers of Alang began stripping and dismantling up the *Blue Lady* on October 2007.

Developments in Guidelines and Convention

With the growing unease about conditions in today’s major ship breaking areas, a number of separate guidelines have been formulated,

65 G Krishna 2007 *op.cit.*

66 Judgement 11.9.2007 Order No.34 of 2006 in Writ Petition (civil) No. 657 of 1995

67 Citing the precedent of *T N Godavarman Thirumalpad v Union of India and Ors.* (2002) SCC 606

68 G Krishna 2007 *Setting a precedent for trafficking hazardous waste* at www.indiatogether.org/cgi-bin/tools/pfriend.cgi viewed 22.8.08

each giving slightly differing coverage to the various aspects of the operation. The common element of them all has been the voluntary observance required by the shipping and breaking industries and the emphasis laid upon the breakers for improvements.

The subject of ship breaking was brought to the IMO's Marine Environmental Protection Committee (MEPC) by Norway in 1998. At the MEPC's 46th session (March 2001) a Correspondence Group confirmed the lack of any international framework for ship recycling practices, the deficiencies in national regulations on environmental concerns, the health and safety of workers and the enforcement of standards. The IMO's primary role at that stage was recognised as dealing with ships before the recycling process began by taking overall responsibility for aspects of ship design, building and operations which might impact on recycling. It also sought to establish technical guidelines and codes of conduct for shipowners that would be internationally binding. At the 23rd Assembly in December 2003, the IMO formally adopted its *Guidelines on Ship Recycling*,⁶⁹ a voluntary set of rules with a wide scope, covering ship builders and owners through to intergovernmental bodies and ship breakers. Included in the guidelines were provisions for a *Green Passport*, an inventory of potentially hazardous materials included within the structure and equipment at the time of construction. Intended to accompany the ship throughout its life with necessary updates as required, it is to provide a comprehensive detailing of hazards to be available for those finally recycling the ship. However, a comprehensive listing of such materials does not guarantee that the breaking operation will be carried out in any way radically different from that of today.

These proposals were met with some disdain by BAN and Greenpeace, who regarded them as a cynical ploy by the shipping industry to usurp some of the Basel Convention by adopting a regime based on lowest rather than highest common denominator, declaring:

...a precedent of allowing an industry to go “forum shopping” within the “UN store” for the weakest international law available threatens not only the future of the Basel Convention, but the credibility of the entire UN system.⁷⁰

The guidelines are not compatible with Basel in that they still endorse the export of hazardous waste. Although a number of conventions and

69 Resolution A.962(23)

70 BAN 2004 *Briefing paper 5 The shame of shipping: breaking the principle to break ships.*

protocols are mentioned in the guidelines, the Basel Convention is not amongst them.

In 2002, at the 6th meeting of the Conference of Parties (COP-6), the Basel Convention adopted their own '*Technical guidelines for the environmentally sound management of the full and partial dismantling of ships,*'⁷¹ which it issued the following year. The guidelines restricted themselves to the technical aspects of ship dismantling, but recognised the IMO focus on the use of hazardous materials in ship construction and the ILO involvement with occupational health and safety of workers in the breakers' yard.

The International Labour Organisation is another UN agency, whose concerns included since 2000 the health and safety of those working in the ship breaking yards, rather than the shipping industry *per se*. In 2003, its Governing Body charged the ILO to:

...draw up a compendium of best practice... leading to the preparation of a comprehensive code on occupational health and safety in shipbreaking, and that Governments should be encouraged to require ships to have an inventory of hazardous materials on board that is required throughout the life of the vessel..⁷²

The ILO subsequently issued its '*Safety and Health in Shipbreaking: Guidelines for Asian countries and Turkey*'⁷³ at its 289th session in March 2004. Aimed at both the shipbreakers and the competent authorities, the guidelines provided help and guidance directly to improve working conditions and developed minimum criteria in order that the facilities might be ranked. Again the guidelines carried no legal force, nor were they intended to replace national legislation, but were issued to complement other provisions of the IMO, the ICS, and the range of existing conventions and protocols.

In order to co-ordinate and rationalise the efforts of the various organisations, a Joint ILO/IMO/BC Working Group on Ship Scrapping was incorporated by the IMO and their first meeting took place in February 2005, their efforts being fed into the Marine Environmental

71 Decision UNEP/CHW.6/L.1

72 Conclusion of the Tripartite Meeting on the Social and Labour Impact of Globalization in the Manufacture of Transport, endorsed by the ILO's Governing Body at its 279th Session, November 2000.

73 International Labour Office, Geneva. 2003 Interregional Tripartite Meeting of Experts on Safety and Health in Shipbreaking for Selected Asian Countries and Turkey Bangkok, 7-14 October 2003

Protection Committee (MEPC). In 2005 the MEPC agreed⁷⁴ to develop a new international instrument for both the shipping and the recycling industries that would be legally binding. Design, construction, and operation are to be included as well as provisions covering the preparation of end-of-life ships for safe and environmentally sound recycling. New provisions for formal assessment of ships prior to scrapping are contained in proposed measures for a ready-for-recycling register and certificates of approval for recycling sites. With regard to disposal itself, some appropriate enforcement mechanism is to be incorporated for recycling facilities based upon a system of certification and reporting, the whole instrument to be completed for adoption in 2008-9. The Committee's proposal was formally accepted at the IMO Assembly November-December 2005.⁷⁵ At the same session, the Assembly also adopted further enhancements to the existing Guidelines on Ship Recycling in terms of requirements for inventories of potentially hazardous materials – the *Green Passports*.⁷⁶

In the anticipated response to the proposed measures, BAN welcomed the attention to the environmental considerations in ship design and construction that are not currently incorporated elsewhere⁷⁷ and an assessment of both ships and sites at the point of recycling. It is vociferous in the apparent lack of concern within the proposals for the human rights of those upon whom the environmental and health burdens fall, expecting far more from a United Nations organisation, and with the failure to strengthen in any way the “polluter pays” principle by addressing the roles and responsibilities of flag states, states of registration of shipping companies, and states of export of waste. It is of great concern that the new convention does not become the alternative to the Basel Convention as far as ships-for-disposal are concerned, but adds to the existing convention by making the inclusion of such ships beyond question in the definition of hazardous waste. Once accepted, the new convention may take a further five or six years before it actually comes into force.

In 2006, a spokesman for the ICS warned that if pre-cleaning did become mandatory (and thus replace what has hitherto been a good cash income to shipowners with a large cost imposition), then ship owners

74 Marine Environmental Protection Committee 53rd session, Agenda item 3 MEPC 53/3/7

13 May 2005. Recycling of Ships. Proposal for an enforceable legally binding system for the recycling of ships

75 Assembly resolution A.981(24) *New legally binding instrument on ship recycling*.

76 Assembly resolution A.962(23) *Amendments to the IMO guidelines on ship recycling*

77 BAN 2006 *Critique of draft IMO “international convention for safe and environmentally sound recycling of ships”*. Prepared by the Basel Action Network on behalf of the Global NGO Platform on Shipbreaking 16 March 2006

might prefer to sell ships to non-OECD countries “ a year before their life ends” rather than pay for dismantling. “It’s entirely possible – and legal.”⁷⁸

Other Developments

Not all proposals relate to the development of international conventions. One aspect of the growing concern over the state of shipbreaking has been the amalgamation of environmental pressure groups that has been taking place. The Basel Action Network, together with the ever-present Greenpeace organisation, has addressed directly many gatherings of the IMO, ICS etc., with formal submissions for consideration and responded publicly and in detail to the output of those bodies. Further amalgamation has resulted in the joining of forces with other established international organisations to form the Global NGO Platform on Shipbreaking, an organisation that combines a growing number of voices to counter the extensive judicial injustices that they recognise.⁷⁹

Concentrating more directly on the actual processes of shipbreaking are the actions of a (as yet) small number of ship owners such as BP and P&O Nedderlloyd, who seek to take practical steps to improve the general conditions, and hence the sustainability, of selected breaking sites. Disturbed by the circumstances in which they saw one of their former VLCCs being dismantled in Pakistan, BP now use sites in China, which they deem to be more acceptable, and where operations are supervised by BP staff and disposal of hazardous waste is audited. P&O similarly stipulates that its vessels may now only be scrapped in two dry-docks scrapping facilities in China. P&O goes further, in removing much hazardous material from vessels prior to departure to China and in providing protective equipment for the workers.⁸⁰ Although conditions and practices at these sites may still be far from perfect, they do indicate a rising improvement and importantly, one that comes from the owner side of the shipping industry.

In a report issued in 2001 for the European Commission,⁸¹ on the prospects for controlled shipbreaking, DNV concluded that the potential for this activity to be carried out in European ports was very small.

78 ENDS 2006 *op.cit.*p22

79 Members of the Global Platform include the Basel Action Network, Ban Asbestos, Bellona Europa, European Federation of Transport and Environment, Greenpeace, International Federation of Human Rights and others.

80 D Graham-Rowe 2004 *Breaking up is hard to do*. Nature vol. 429 24.6.2004

81 Det Norske Veritas, Appledore International 2001 *Technology and economic feasibility study of ship scrapping in Europe*. Final report no. 2000-3527

Although Europe may not become the destination for the increasingly large end-of-life tankers and container ships, there is, in addition to some traditional sites in Belgium, Netherlands and Italy, embryonic growth to augment existing facilities. In Holland, the Stitching Tanker Ontmanteling Platform (STOP) planned a €45 million EcoDock at Eemshaven, where heavy cutting machinery is utilised to scrap a ship in a fraction of the time, whilst containing pollution within the dock. EcoDock, which subsequently became Greendock, announced its intention to establish a range of 20 docks, mainly in Asia, including up to five docks initially in Thailand, and then possibly in China Singapore and Cambodia.

In the UK, a number of former shipbuilders received licences to operate shipbreaking operations, including Swan Hunter on Tyneside and Harland and Wolff at Belfast. Able UK on Teesside was finally granted a licence in June 2008. Other companies are considering applications. Able is to start work on dismantling the four ex-US ships it imported in 2003 and Harland and Wolff began to break up the forward section of the container ship *Napoli*, which ran aground off the Devon coast in January 2007. In September 2008, the former landing ship HMS Intrepid was towed to Liverpool for dismantling – its sister ship having been towed to Belgium for breaking the previous December.

Following the start of the protracted Able UK contest over licences, the House of Commons Environment Committee called for a UK ship dismantling industry to be established to end reliance on Asian shipyards and published its report - *Dismantling defunct ships*⁸² – in November 2004. This report was accepted by the government, and in 2007, a strategy was released by the Environment Department (DEFRA), with particular reference to Government-owned vessels, which will be sold for further use only after a defined assessment has been undertaken.⁸³ Alongside the strategy, DEFRA has also issued guidance on ship recycling, with details of technical and regulatory requirements for UK ship recycling facilities.⁸⁴ Whilst these may represent rather minor additions to worldwide shipbreaking capacity, they do represent a move towards the direction in which such activities should be undertaken.

The EU issued a *Green Paper on maritime policy* in June 2006 and prioritised environmentally sound management of ship dismantling for the

82 Report of the House of Commons Committee on Environment, Food and Rural Affairs 2004 *Dismantling Defunct Ships in the UK*. Eighteenth report 2003-4 session HC834 3.11.2004

83ENDS 2007 *Ship recycling strategy sets minimum standards* Report 386 March 2007 p 44

84 DEFRA 2007. *Overview of ship recycling in the UK – guidance*. February 2007

European Union in the following November.⁸⁵ Following the IMO proposals for a shipbreaking convention, The EU then issued its own proposals in the form of a *Green Paper on better ship dismantling* in 2007.⁸⁶ Recognising the relative ease with which the EWSR can be bypassed, the 2007 Green Paper called for much better enforcement in European ports and the identification and targeting of ships likely to be at or near the disposal state. It is stated quite clearly in the 2007 Green Paper that the overall direction is to improve the protection of environmental and human health worldwide, it is not intended to ‘artificially bring back recycling business to the EU, thus depriving countries in South Asia of a major source of revenue.’⁸⁷

Whilst the proposed IMO convention discusses funding for the various aspects of the introduction of the convention, provisions relating to funding for the breakers appear almost as an after thought. The EU proposes the development of a ship recycling fund but, in compliance with EU legislation on restrictions on the use of public funding for subsidies, such funding should be provided directly by the shipping industry and those who have benefited from it, based on the principle of producer responsibility, and similar to the MARPOL oil pollution funds. This regime should be mandatory.⁸⁸

Conclusions

Shipbreaking today is basically a sustainable industry, carried out in unsustainable conditions. The industry is centred upon India, Bangladesh and China, where it represents an important source of employment and of resources, and where the level of recycling of ships and all their fittings and equipment is carried out at a much higher than might be found elsewhere.

Hazardous waste, however, follows the line of least resistance. Shipping is very much a global industry but ship breaking is essentially a national one, where the damage to human and environmental health is extensive, but where any improvements in the provision *and* enforcement of appropriate legislation is usually to the disadvantage of the centre involved in terms of additional costs.

85 European Commission 2006 *Towards a future maritime policy for the Union. A European vision for the oceans and seas*. Brussels COM(2006) 275 7.6.2006

86 Commission of the European Communities 2007 *op.cit.*

87 Commission of the European Community 2007 *op.cit* p3

88 Commission of the European Community 2007 *op.cit* p15

The present state of affairs hangs on three premises, the first of which is the Basel convention's applicability to end-of-life ships, a matter which is strongly contested by the shipping industry, as well as many of the owners of the breaking yards (but not by the EU legislators). Secondly, the point at which a ship eventually becomes waste is easily hidden and may only be declared once a ship is at sea and beyond various jurisdictions. Thirdly, actual ownership of end-of-life ships is often deliberately obscured, especially via the numerous open register states. There is a growing international concern over this state of affairs, whereby ship owners, who have profited from the employment of vessels over the years, may now relinquish their responsibilities for the hazardous wastes that such vessels represent and the damage to human and environmental health that their dismantling elsewhere entails. The call for change was led initially by environmental pressure groups, but has been joined more recently by certain governments and a token few ship owners, and this is finally, but slowly, starting to make a mark through new and growing practices and legal precedence.

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