**Session I – Environmental Hazards in Shipbreaking**

Environmental and health problems in shipbreaking, presented by Marcelo Furtado – Greenpeace International Toxic Trade Coordinator.

Greenpeace is an international non-governmental organisation dedicated to preserve the treasures and resources of the globe for future generations and fights for a sustainable, toxics free future. We firmly believe in non-violent direct intervention methods for social activism – a concept that the father of Indian nation, Mahatma Gandhi, taught the world. As such we have over a decade of history of fighting the export of toxic and hazardous wastes from the rich on earth to the poor, from OECD countries to the rest of the world. Once the ban on hazardous waste trade from OECD to non-OCED had been established under the Basel Convention the world became aware of a gaping loophole: the scrapping of old vessels in Asia. This is one of the issues of interest to us in our efforts to address environmental pollution.

A scrapped ship contains a wide range of toxic substances. Most of them are already defined as hazardous waste under the Basel Convention. In Europe, Australia, Canada and U.S., such wastes are subject to special monitoring and their disposal is highly regulated and expensive.

Greenpeace and a partner coalition of NGOs, including the Basel Action Network (BAN) have been bearing witness and documenting shipbreaking activity in Asia since 1997. The data collected clearly shows that shipbreaking has been one of the most hazardous form of toxic trade that continues in violation of international and national laws. We have produced several publications, videos, and papers including reports on our various protest actions around the globe that are available to you on our respective websites.

Greenpeace and BAN have made a number of fact finding missions to shipbreaking yards in India, China and Philippines. Our findings indicate a common trend of hazardous waste dumping and poor worker safety. The shipping industry operates its vessels in a global theater looking into the new century and scrap its vessels at a technological level of the 1800’s. This cannot continue, this must change, and in fact this will change as the UN bodies of IMO, ILO and UNEP take up this issue.

Greenpeace and BAN are not opposed to the scrapping of vessels. However, we would like to ensure that the export of ships-for-scrap are not used as an excuse to dump hazardous wastes, such as asbestos, PCBs and heavy metals, on shipbreaking nations. We would like to ensure that the ships sent to Asia for scrapping are not contaminated. Though we have expressed our concerns and stated our position in various international fora during the past three years, there has been a need for a constant dialogue among all concerned parties to find out cleaner way to deal with the retiring ships. We have targeted through public campaigns the shipowners and operators such as P&O Nedloyd, Hamburg Sud, Hapag Loyd, Costamare, Andrew Shipping and others that have targeted Asia to
scrap their vessels. We have carried fact-finding missions in shipbreaking yards in India, China and Philippines to register the levels of contamination, impact on the environment and health of workers. We have taken direct action to prevent toxic dumping. Last December 1999 the Greenpeace flagship Rainbow Warrior sailed into the Gulf of Cambay to draw world’s attention at environmentally hazardous shipbreaking practices and abysmal working condition in the Alang-Sosya and Mumbai shipbreaking yards.

The victims

Our fact-finding missions to shipbreaking yards in India, China and Philippines and exploratory visit to Bangladesh indicate a common trend of hazardous waste dumping and poor working condition for workers.

Here in India for example, we documented the tens of thousands of young men who endure hard physical labor in permanent danger for 1 or 2 dollars a day are largely migrant workers. Not registered by name, they are difficult to identify. They work in shifts, in highly cramped conditions and mostly without adequate safety equipment. An average of 360 deaths a year is reported from Alang alone, the world’s biggest ships’ graveyard. The causes of death are explosions, fire, suffocation and falling steel beams and plates. We have seen people picking asbestos-containing insulation materials from ships with their bare hands. We have seen dozens of workers torch-cutting ship steel into small pieces, inhaling the toxic fumes of lead paints with no protection at all. We have seen women carrying asbestos wastes on their heads to dump them in the sea. Throughout the shipyards we visited the workers have no information regarding the hazardous materials they are handling or the safety measures such environment requires. Unprotected handling of the identified toxic substances have long been known to cause a wide range of complaints. For example:

Asbestos dust causes formation of scar-like tissue resulting in permanent breathing difficulties (asbestosis). In the longer term, cancer of the lungs and of the thin membrane surrounding these organs (mesothelioma) may result.

Lead accumulates in the blood and bones after inhalation or ingestion. It can cause anemia and is toxic to the nervous system and to the kidneys.

Arsenic exposure can result in lung, skin, intestinal, kidney, liver and bladder cancers. It can also cause damage to blood vessels. Inflammation of nervous tissue caused by arsenic can result in loss of feeling or paralysis. Disfiguring growths may also appear on the skin of exposed humans.

Chromium contained in some chrome-based chemicals (chromates) can cause eczema and respiratory disease in people exposed to dusts and fumes, including cancer of the lung.

Organotins (TBT, TBTO and TBTCL) are nerve toxins that accumulate in the blood, liver, kidneys and brain. TBTO is acutely poisonous, and is also genotoxic. In shellfish,
organotins affect the endocrine (hormone-producing) system causing damage to reproduction.

PAHs (polycyclic-aromatic hydrocarbon compounds) can cause various cancers including cancer of the lung and of the scrotum. Some PAHs can combine with genetic material (DNA) causing cell damage and mutations. Exposure can also suppress the immune system.

Dioxins are potent carcinogens and suppressors of the immune system and are accumulated in body fat tissue. In addition they are suspected of prenatal and postnatal effects on the nervous system of children. In animal studies they have been shown to reduce sperm production.

In the light of the scientific data available there should be no doubt that ships from the 1970s containing maximum levels of hazardous substances. These ships are now being cut up in the inter-tidal zones of Asian beaches without any safety or environmental precautions. All ship-owners and operators have a hand in this fatal business. Some admit that conditions in India are “unacceptable“ and are now looking to China.

But in fact, the conditions are quite similar in most shipbreaking yards across Asia. People work without protection handling the same toxic and hazardous substances. The main difference seems to be that in China and Philippines more cranes and machinery are being used than in India or Bangladesh. Nevertheless, in China and Philippines we have found asbestos being stored in the open, dumping on site and open burning of hazardous wastes, just as we see in Alang. We believe the situation in the Chittagong yard, Bangladesh and Karachi yard in Pakistan are not different.

Legal Framework

Ships destined for shipbreaking operations are “hazardous wastes” under the Basel Convention. Ships destined for shipbreaking subject to the Convention are in most cases prohibited (unless they do not possess hazardous constituents, which is rare). The Basel Ban prohibits exports of hazardous waste from Annex VII countries (OECD countries and Liechtenstein) to non-Annex VII countries. The convention also prohibits the export of hazardous waste to Parties that have prohibited the import of hazardous wastes. The Convention also prohibits hazardous waste exports from a Party “if it has reason to believe that the wastes in question will not be managed in an environmentally sound manner ...”. And, each Party is required to prohibit the import of hazardous wastes “if it has reason to believe that the wastes in question will not be managed in an environmentally sound manner”.

All known shipbreaking operations in non-OECD countries do not constitute environmentally sound management as required by the Convention. Ships destined for shipbreaking contain significant quantities of asbestos, PCBs, hydraulic fluids, paints containing lead and/or other heavy metals, tributyltin or TBT antifouling coatings, contaminated holding tanks, and other substances rendering them hazardous waste and
extremely dangerous to human health and the environment when scrapped in the existing shipbreaking yards. Most of the shipbreaking is taking place in Asia, where the conditions are documented to be exceptionally dangerous and damaging to the health of the workers, surrounding community, and the environment.

Consequently, transboundary movements of ships destined for shipbreaking are prohibited under the Convention as not constituting environmentally sound management, in addition to the other prohibition provisions such as national import bans. India, China and Philippines have national import bans (Nity - Bangladesh also?).

The Belgium government arrested a vessel in December 1999 bound for scrapping in Asia following the analysis above. The vessel was only released after the owners pledged the vessel was not bound for scrapping.

The import of ships containing hazardous substances is also a clear violation under Indian law. It may be noted here that following Greenpeace action at high seas near Alang in December 1999, the Supreme Court of India had intervened and ordered an investigation into the possible violation its 1997 order that banned import of hazardous wastes. In May of 1997, the Supreme Court of India had ruled that the import of hazardous wastes as defined by the Basel Convention into India was prohibited.

Further, the Central Pollution Control Board in its “Environmental Guidelines for Shipbreaking Industries” has declared that “old vessels containing or contaminated with any of the above substances [lead, cadmium, PCB, asbestos] are accordingly [as per the Basel Convention] classified as hazardous. The customs authority and/or the concerned State Maritime Board should ensure this and issue a certificate to this effect that the vessel is free from the prohibited materials.”

Clearly, there are a number of legal loopholes that can be used to evade the national and international laws in place. Some governments, industry associations and representatives of the civil society see the need for taking action and support change.

Possible solutions

We are still beginning the debate on how to best solve the problem but it is already clear for the international community that we cannot keep “business as usual”. We need a solution driven approach. Therefore, even while addressing the inventory waste (old ships), we should be working on Eco-friendly designs for new ships.

The main question now is not if, but how, and how fast we begin to clean up. We believe regulations can be drawn up by the IMO (International Maritime Organisation), ILO (International Labor Organisation), and the United Nations Environment Programme (UNEP) – Basel Convention, all under, the United Nations’ umbrella and supported by classification bodies and technical universities. The main players – shipowners/operators and ship exporting countries – must take immediate action to protect people’s health and environment. Shipbreakers have the responsibility to
carry out their business without jeopardizing the state of the environment or the health of workers.

Our demands to shipowners, operators and shipbreakers are:

• present a complete inventory of all the hazardous materials and constituents on board of the vessel, making a register of the pollutants and analysis of the risks of from the ships;
• remove hazardous materials from the ship prior to sending it for scrapping;

Upon the fulfillment of these demands, we also want shipowners, operators and Shipbreakers to:

• disclose the selected shipbreaking facility and the assessment done to ascertain the good working conditions and environmental record on site;
• ensure extensive consultations on the shipbreaking plan with the breakers; and carry out expert monitor;
• ensure public access to the facility scrapping the vessel and contact with the monitoring team following the scrapping process;

National governments must enforce their laws to protect their people and the environment against the effects of toxic wastes, as well as their workforce against occupational hazards from accidents, disease and toxic substances.

Finally, let me reiterate: Greenpeace and BAN are not against the shipping or shipbreaking industry. We fully appreciate the contribution it has been making to poor economies, not only by availing them the recycled steel but also by generating valuable jobs. But the industry has a responsibility to act as citizens of this planet. The industry cannot compromise people’s right to have clean and sustainable future.

We want to bear witness to the process of change that this industry will undergo. We want to help you move forward and ensure to the public that the shipping industry and particularly shipbuilding and shipbreaking can be part of the solution and not add to the environmental problems we are already suffering from.

We are here to help, we are here to learn, we are here to engage you in our struggle for a toxic free future.

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