

Shipbreaking: Toxic Waste In Disguise **The China Connection**

General Background

At the end of their average 28-year life span, ocean-going ships are scrapped, primarily for their recyclable steel content. There are roughly 45,000 ocean-going ships in the world including container ships, general cargo ships and cruise liners. Each year about 700 are taken out of service and scrapped to retrieve their steel content.

While ships have historically been demolished in shipyards all across the industrialised world, today, due to the high costs of reducing risk from accidents and toxic contamination in most industrialised countries, that industry has shifted to Asia. Now most of the world's ships are exported to developing countries where labour is significantly cheaper and environmental and occupational laws are lax.

Almost all ocean-going ships, while often owned or operated by companies in developed countries, are currently scrapped in developing countries including China, India, Pakistan, Bangladesh, and the Philippines. Greenpeace and the Basel Action Network (BAN) have sent teams to investigate the world's largest ship scrapping site located at Alang in Gujarat, India. While Greenpeace China campaigners have investigated the state of Chinese shipbreaking industry by visiting scrapyards in Panyu City, Guangdong Province in southern China.

Why is an old ship toxic waste?

In the 1970s, in the absence of substance bans, materials were chosen exclusively according to maximum fulfilment of the function for which they were intended. Large amounts of asbestos were used as a fire retardant. To prevent ships from rusting, anti-corrosives -- lead oxide and zinc chromate -- were used. To ensure that the hull would be free from algae, molluscs and barnacles which would create frictional drag and raise fuel consumption, anti-fouling paints, containing mercury, arsenic, and Tributyl Tin (TBT), were applied.

Ship scrapping, often referred to as shipbreaking, is a dirty and dangerous business. The cutting and removal of the steel structure itself is extremely hazardous, posing serious risks for the scrapyards workers. More importantly most of the vessels slated for demolition contain hazardous substances, including asbestos, lead-based paints, and TBT (Annex I).

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Half of the world's ocean going fleet ends up in Alang -- approximately one vessel arriving per day. Most of the rest go to similar shipbreaking sites in China, Pakistan, Bangladesh, and the Philippines. Around 700 ships are scrapped each year. Since the early 1980s, shipbreaking has been increasingly shifted to poor Asian nations. By 1993, half of all ocean-going ships were scrapped in China. Now India has claimed the top spot (70%), followed by Pakistan, Bangladesh and China.

China's shipbreaking activities took a downturn in recent years due to government's concerns about environmental degradation (Annex II). It is believed that China has at least another 10m dwt (million dry weight tonnes) of capacity unused at present, almost as much as the capacity that is active in India now. The worrying factor is that China has expressed its intention to make a comeback and reclaim the number one slot in the world's shipbreaking industry.

At these Asian shipbreaking locations, ships are simply driven onto the beach during high tide or docked near the scrapyards where they are cut up by thousands of workers, using nothing more than hand held cutting torches, hammers, saws and chisels.

Depending on their size, and the current price of steel, the ships are sold for up to several million dollars each but workers often earn negligible wages. In China, workers earn between 300RMB and 700RMB per month (US\$33-US\$78) The Encounter Bay, for instance, was sold by its Anglo-Dutch owner P&O Nedlloyd to a Chinese shipbreaker for US\$1.5 million.

Hazardous Working Conditions

As witnessed by Greenpeace China investigation team at two scrapyards in southern China, workers are only protected by their straw hats and light shoes while working in a very primitive and dangerous environment. Only a few wear hard hats, rubber boots and cotton gloves. Workers do not have proper protective masks to guard against toxic fumes generated from steel-cutting process, they only use towels to cover their faces. Greenpeace China campaigners interviewed a number of workers who revealed that they do not wear protective gear or breathing apparatus when handling harmful carcinogenic asbestos or stripping the material from the vessel.

Samples taken by Greenpeace from those two sites proved that asbestos was lying around and that soil samples collected from there contained asbestos (Annex III).

According to Greenpeace researches on other shipbreaking sites, explosions from cutting torches in contact with residual fuels and lubricants are common, as well as accidents from falling steel beams and plates.

Tracking of Encounter Bay

Greenpeace and Basel Action Network (BAN) have been tracking Encounter Bay since last November and have demonstrated at P&O Nedlloyd's headquarters in Rotterdam, and protested on the ship in Barcelona, Sydney, Auckland and Singapore before it departed for southern China.

Greenpeace China campaigners have spent six weeks trying to track down Encounter Bay. During the process, campaigners coincidentally came across its sister ship, Botany Bay, in Lianhuashan (Lotus Hill), Panyu City, where it was being dismantled.

After six research trips, the elusive Encounter Bay was finally located at a scrapyards in Siahoh (Little Tiger), Panyu City, on 22nd February. The name of Encounter Bay and the sign of its owner, P&O, had been painted over in an attempt to disguise its identity.

Legal Background

The only international convention that directly addresses the concerns raised by current ship demolition practices is the Basel Convention on Transboundary Movement of Hazardous Waste. Specifically, under the auspices of the Basel Convention, the international community has *banned* the export of hazardous wastes for any reason, including recycling as of January 1, 1998, from OECD countries to non-OECD countries.

By any reading of the definitions of hazardous waste covered under the scope of the Basel Convention, it must be concluded that ships destined for scrapping are first considered wastes, and second considered hazardous wastes subject to the Basel Convention and the Basel Ban. Under the Basel Convention, OECD countries are prohibited from exporting obsolete ships for scrapping unless they have been decontaminated to the extent where they do not have any hazardous characteristics as defined by the OECD and Basel regimes.

Conclusion

The practice of profiting by exporting the costs of pollution to developing economies is immoral, which has prompted the international regimes of the OECD and the Basel Convention to make the continuation of such trade increasingly impossible.

Greenpeace is not against shipbreaking but advocates that all ships-for-scrap should be properly decontaminated before being sent to non-OECD countries for breaking and calls on the shipbuilding industry to build ships that are toxics-free.

Note: The Hong Kong Government imposes strict control over the handling of asbestos as stated in the Air Pollution Control Ordinance (see attached information).