# A CHINA ENVIRONMENTAL HEALTH PROJECT FACT SHEET

# A Toxic Trade: Ship Breaking in China

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In recent years, the international dialogue on pollution in the shipping industry has shifted from waste on ships to ships as waste. Industrialized countries with aging fleets of oil tankers and military vessels have found it cheaper to sell these retired ships to developing countries where they are dismantled for scrap than to do such work domestically. As recently as 2004, China dominated this dangerous business of ship breaking. While today Bangladesh has assumed this position due primarily to price competitiveness, industrialized countries view China's ship breaking industry—while still highly polluting—as a more hi-tech and somewhat more "respectable." The addition of ship breaking to the Basel Convention and growing news media coverage of the hazardous waste pollution dangers of ship breaking highlight how China is likely to continue to be a major player in this industry. The hunger for steel in China fuels demand for expanding ship breaking operations, however, the practice of ship breaking is posing serious danger to the health of workers and the coastal environment.

#### Health and Environmental Costs

Most ships that are ready to be dismantled were built in the 1970s, before many hazardous materials were banned. These older ships contain potentially health-damaging substances such as the fire retardant asbestos; the anti-corrosives lead oxide and zinc chromate; and antifouling paints that often contain mercury, arsenic, and tributyl tin (TBT). Similar to other developing countries, ship breaking in China is often done by workers who lack proper equipment or protective gear.\* Most of these workers are migrants from rural areas who are poorly paid and also do not receive any health care coverage for their work. Thus, workers injured from toxins or accidents on the ship breaking site often must impoverish their families to receive medical treatment. After boats are dismantled, the waste is rarely appropriately disposed. Moreover toxic waste may burn in open fires and carcinogenic material is casually sold for re-use.

# Where Ship Breaking is Taking Place

China has approximately 90 breaking yards dotting the deltas and lower reaches of the Pearl and Yangtze rivers. The major ship-breaking yard is Zhang Jiagang in Jiangsu Province and there are additional breaking yards in Fujian and Guangdong provinces. China is the only nation where scrap ships are not beached, which makes it easier for ship exporters to deliver them to be demolished.

### Addressing the Problem

Despite impacts on health and environment, the global practice of ship breaking continues due of the lack of regulation enforcement in the countries of both ship exporters and importers. The recent introduction of stricter environmental and safety laws in China has arguably made the industry less profitable, but has in no way brought it to a halt. Unlike electronic waste, the informal sector for ship breaking (due to the massive size of the ships) is small to nonexistent, which means all ship breaking in China is recognized as legitimate by the government.

The Basel Convention now specifically prohibits the transfer of hazardous ships, i.e., those that have not been cleaned of all hazardous waste, from developed (OECD) countries to developing countries. The Chinese government, which has ratified the Basel Convention, still uses subsidies to promote the industry. For example, in 2004, the customs duty on ships for demolition in China was only 5 percent and a capital subsidy of 14 percent was provided to ship breaking companies.

The Basel Action Network (BAN), a global watchdog organization dedicated to halting exports of toxic waste from rich to poor countries, has successfully halted the export of some U.S. military ships to China as scrap. The U.S. Environmental Protection Agency bans the export of certain toxic materials, which are often prevalent on older ships. With a focus on the growing number of deaths and illnesses of workers in this industry, BAN, Greenpeace and human rights groups are campaigning together to halt this trade.

Greenpeace China used to include ship breaking in its toxics campaigning, but has not focused on the issue since publishing a report in 2000 on how the industry was polluting China's coastal areas and communities. Certain private companies, such as the Dutch shipping company, P&O Nedlloyd, are working to improve the impact of shipping yards in China on environment and health.

# Future CEF Coverage of Ship Breaking Issues in China

The China Environment Forum will be adding other fact sheets on this and other waste topics throughout 2007 and 2008.

#### References

"Shipbreaking: Toxic Waste in Disguise, the China Connection." Greenpeace, Washington DC. http://www.greenpeaceweb.org/shipbreak/chinaconnection.pdf

"Port Resources, China." Global Marketing Systems, Inc. Cumberland, MD. http://www.gmsinc.net/gms/locations\_china.php.

"The Ship Recycling Industry: Where It's Done." Global Marketing Systems, Inc. Cumberland, MD. http://www.gmsinc.net/gms/recycling\_industry.php.

"Shock Waves Demolish Alang." (March 2004). *Times Shipping Journal*. http://www.timesb2b.com/shipping/mar2004/sbreaking.html.

"India Media Ban Over 'toxic' ship." (February 13, 2006). *BBC News*. http://news.bbc.co.uk/2/hi/south\_asia/4708530.stm.

McGowan, Robert. (November 14, 2003). "Asian Draw for Ship-Breaking." BBC News. http://news.bbc.co.uk/2/hi/science/nature/3266963.stm.

Secretariat of the Basel Convention, United Nations Environment Program, Switzerland. http://www.basel.int/.

"Improving Conditions in Shipbreaking." International Metalworkers Foundation. http://www.imfmetal.org/main/index.cfm?n=47&l=2&c=8268.

Puckett, Jim. (January 23, 2007). Basel Action Network. Personal communication.