

# [Environmental impact of ship breaking industry](https://assignbuster.com/environmental-impact-of-ship-breaking-industry/)

### Introduction:

We are going to look into Ship breaking industry around the world and its impact on the environment, health and safety, social values and human rights issues. Ship breaking is the course of dismantling an archaic vessel’s structure for scrapping or recycle, mean to be conducted at a pier or dry dock to dismantling ship, it includes various activities, from removing all gears, parts and equipment to cutting down the ship’s substructure. Ship breaking is a difficult course of action due to the structural complication of ships. There are thousands of people involved in this industry. So many issues come up during breaking ships which remains beyond our knowledge.

We are trying to demonstrate these serious issues and overcome these problems. Increasing demand of raw materials for re-rolling mills and other purposes and negative impacts on coastal environments, ship breaking activities present both challenges and opportunities for coastal zone management in a holistic manner. These activities are example of both the potentialities and the dangers of an increasingly globalised economy. It has achieved a good fame for being profitable but it cost huge environmental damage. A variety of disposable materials and refuse are being discharged from scrapped ships are often mixed with the beach soil and sea water which in turn has a negative impact on our coastal environment and biodiversity. However, accidents are normal phenomena in the ship breaking yards. Over the years more than 1000 workers have lost their lives and were seriously injured. Due to unconsciousness and lack of government patronization, the activities are facing several internal and external problems. Considering all these facts, a distinct and well-balanced policy is necessary for sustainable ship breaking activities.

### Aims & Objectives:

There are some aims and objectives have been set to conducting this research:

Aims   
• Solve the serious issues   
• Set proper guidelines   
• Make awareness of the workers   
• Keep the child workers away   
• Awareness of the government   
• Finding pros/cons

Objectives   
• Finding the problems   
• Co-operate with the local authority   
• Training for the workers   
• Education for all   
• Collecting data and analyze them   
• Implement the outcomes of the research

### Environmental pollution:

According to the report of Jim Puckett (International Conference on the Safe and Environmentally Sound Recycling of Ships, 2009), the “ Beaching Method” whereby ships are run grounded on ocean beaches for cutting and breaking apart in the intertidal zone can never be achieved in a manner which is environmentally noise or shielding of human health. Careful analyses of the intrinsic characteristics of beaching operations are conclusive that no amount of prescriptive improvements or protections can remedy the four fatal characteristics of intertidal beaching operations:

\* there is the impossibility of containing pollutants on a tidal beach where hulls of ships are often breached accidentally or by cutting, or toxic paints erode or are abraded sending persistent organic pollutants, heavy metals and oils onto the beach and into the seawater;

\* due to a shifting and soft wet tidal sand surface, there is the impossibility of rapidly bringing emergency response equipment, including fire-fighting equipment and vehicles, ambulances and cranes alongside the ship, to assist or remove persons hurt inside the hull;

\* the impossibility of allowing cranes to work alongside to lift heavy cut sections of a ship and thereby preventing heavy cut sections from being subject to gravity, shifting or falling directly into workers or into the marine environment; and

\* There is the absolute incompatibility of conducting hazardous waste management operations (which is what they are as long as ships contain hazardous wastes) in the ecologically delicate and vital coastal zone.   
Puckett revealed that these fatal flaws of the beaching method inevitably will result in causing avoidable death and pollution and thus make a mockery of the application of Regulation 19 of this Convention. No amount of band-aid guidelines and criteria can cure the malignancy inherent in beaching operations. To ask Parties to prevent adverse effects to human health and the environment from massive toxic ships on an intertidal beach already makes the fulfilment of this objective impossible. However the worst outcome is that by not drawing a clear line at the outset, this fatally flawed method will be legitimized, millions of dollars will be thrown into trying to mitigate the inherently inappropriate and dangerous working platform and the IMO will have succeeded in perpetuating death and pollution for many years to come.

### Hazardous activities:

Ship breaking activities are being condemned as the whole process entails a series of risky tasks and as a depot of hazardous substances, which pose threats to the ambient environment and working people. Depending on their size and function, scrapped ships have an unloaded weight of between 5, 000 and 40, 000 tonnes (an average of 13000+), 95% of which is steel, coated with between 10 and 100 tonnes of paint containing lead, cadmium, organ tins, arsenic, zinc and chromium. Ships also contain a wide range of other hazardous wastes, sealants containing PCBs; up to 7. 5 tonnes of various types of asbestos; several thousand litres of oil (engine oil, bilge oil, hydraulic and lubricant oils and grease). Tankers additionally hold up to 1, 000 cubic meters of residual oil. Most of these materials are defined as hazardous waste under the Basel Convention. In Asia old Ships containing these materials are being cut up by hand, on open beaches, under inhumane working conditions. Experts are unanimous in their opinion that ship breaking is a high-risk industry. Paul J. Bailey criticized in his ILO discussion papers (2000) that “ By any standards, the demolition of ships is a dirty and dangerous occupation”. The ship breaking hazards generally fall into two categories: intoxication by dangerous substances and risk of accidents on the plots.

### Violations of Human and labour rights:

Be short of professional health and safety standard, personal or limited of training protection equipment provided.

• Limited or no access to emergency services, compensation when a worker is injured or killed on the job, and treatment.   
• Less than bare minimum wages.   
• Child labour uses.   
• Wide range of working hours without right to overtime, annual leaves or sick.   
• Short of job security: there is no pay where no work.   
• No right to form or join or any trade union.

In the most of the shipyards, workforces are being privileged of their human rights. They work under dangerous situation however they have no right of entry to job security, a take-home pay or safety kit.

### OHS, accidents and diseases:

Over the last twenty years more than 400 workers have been killed and 6000 seriously injured according to the Bangladeshi media. These are the ones that have been reported. The explosion of the Iranian tanker TT Dena on 31st May 2000 alone is said to have caused 50 deaths. To this toll, the thousands of cases of irreversible diseases which have occurred and will continue to occur due to the toxic materials that are handled and inhaled without any precautions or protective gear need to be considered. On average, one worker dies in the yards a week and everyday a worker is injured (End of Life Ships: the Human Cost of Breaking Ships). It seems like nobody really cares: ship breaking workers are easily replaceable to the yard owners: if one is lost they know another 10 is waiting to replace him due to the lack of work. The Government collects the taxes and turns a blind eye. Workers are not aware of hazards to which they are exposed. The overwhelming majority of workers wear no protective gear and many of them work barefoot. There is hardly any testing system for the use of cranes, lifting machinery or a motorized pulley. The yards re-use ropes and chains recovered from the broken ships without testing and examining their strength. There is no marking system of loading capacity of the chains of cranes and other lifting machineries. Consequently, workers suffer from lung problems which cause temporary loss of working capacity. The hatches and pockets of vessel may contain explosive or inflammable gases. The cutters, if they understand from experience, drill small holes in order to release gases or fumes. This still however, often cause severe explosions. Gas cutters and their helpers, cut steel plates almost around the clock without eye protection. This leaves their eyes vulnerable to effects of welding. They do not wear a uniform and most don’t have access to gloves and boots. Those that are ‘ unskilled’ carry truck able pieces of iron sheets on their shoulders and there are no weight limits to the sheets they carry. Usually, these workers carry weights far above the limit prescribed in the Factories Act and Factories Rules. The beaches are strewn with chemicals and toxic substances, small pieces of pointed and sharp iron splinters causing injuries. Workers enter into the areas without wearing or using any protective equipment. Occupational health and safety is clearly not a priority for the owners and as for the workers their desperate need to find employment to support their families means that their livelihoods take precedence over their lives.

### Treatment and compensation:

When there is an injury some immediate treatment may be given but there is no long term treatment for those who have a long term or permanent injury. In terms of compensation, only a nominal amount of compensation given and often only when there is public pressure. When a worker becomes disabled by a major accident, he gets a maximum of 10 to 15 thousand taka (1 USD= 71 taka) and forced back to his home district. In most cases a worker will only get transportation costs to go back to their home district. When a worker killed in an accident, the contractor, who is responsible for the workers, will only pay the costs of sending the body back to the victim’s family and arranging for their burial. In the case of local workers from the area, if they die on the job, their family receives more than 50, 000 taka as compensation. This is mainly due to the fact that the yard owners and contractors cannot avoid the locals who yield some power and pressure them. Prior to 2006, the labour laws in Bangladesh had a lot of limitations. The Workers Compensation Act 1965, only 30, 000 taka was proposed for a 100% disable worker and 21, 000 taka for dead worker’s family. The recently passed Labour Law Act 2006 now stipulates that a 100% disabled worker will receive 100, 000 taka and a deceased worker’s family will receive xxx taka.

### Child labour:

In Bangladesh, most poor families are more or less dependent on the children’s income for survival. The Bangladesh Shishu Adhikar Forum (BASF) has identified 430 risky jobs. Within these 67 professions are classified as very much risky and 11 are classified as dangerous. Ship breaking is falls in the latter. YPSA’s baseline survey in 2003, 10. 94% of the labour force is made up with children (age up to 18). Most of 5the children come from the northern regions of Bangladesh. It was noticed that ship breaking contractors prefer to recruit children as they are less expensive than their adult counterparts. The children work mainly as gas cutters assistants and move small iron pieces from one place to another. They either work in the yard from sunrise to sunset or do the night shift. On average they receive 50-60 BDT a day for their efforts. There are no educational or recreational facilities.

### Conclusion:

Nobody seems to really care about the workers and their families. Neither the ship owners, nor the exporting countries, the ship breakers or the local governments. They are simply numbers that can be replaced. There is an urgent need to interconnect the reality on the ground, the dominating economic interests of the shipping industry and the discussions taking place at the international level, in order to change the working and environmental conditions on the yards.

### References:

Akther, M. et al, YPSA (2005). Workers in Shipbreaking industry: a base line survey of Chittagong (Bangladesh), chapter 4, pp. 29-36.

Bailey, P. J. (2000). Is there a decent way to break up ships? Sectoral activities programme discussion paper, International Labour Organization (ILO). Retrieved at 03: 00 (GMT) Aug 22, 2009, from http://www. ilo. org/public/english/dialogue/sector/papers/shpbreak/index. htm

Dr. Hossain, Md. M. M. & Islam, M. M. (2006). Ship Breaking Activities and its Impact on the Coastal Zone of Chittagong, Bangladesh: Towards Sustainable Management, Young Power in Social Action   
(YPSA). pp 13-17

Vardar, E. et al, Greenpeace-FIDH (2005), End of life ships: the human cost of breaking ships, Human rights report,

Puckett, J. (2009). The NGO platform on Ship breaking on the Beaching Method, Presented at the International Conference on the Safe and Environmentally Sound Recycling of Ships.