Reaction to the Maersk Group’s “Responsible Ship Recycling Standard” shared with Maersk on 9 July 2016, updated on 11 October 2016

Maersk fails to invest in innovation and engineering solutions to ensure sustainable ship recycling – and legitimises instead the beaching method and unacceptable working and living conditions

The NGO Shipbreaking Platform strongly criticises Maersk’s new “Responsible Ship Recycling Standard” (RSRS) for its failure to recognise ship recycling practices that aim for ‘zero pollution, zero waste, 100% safety’ and for the unwillingness to invest in innovation and engineering solutions. Instead, the Standard and Maersk’s current shipbreaking practice in India legitimise both the beaching method and unacceptable working and living conditions. Reducing unnecessary risks for workers and the environment should be the aim of any company that seeks to call itself socially responsible – even more so when solutions and facilities able to ensure better and sustainable practices already exist. Innovative technology, modern methods and engineering solutions for state-of-the-art ship recycling are currently available and in use in different parts of the world. By accepting the substandard beaching method, Maersk is stalling the shift towards the use of methods that can effectively ensure safe working conditions and containment of pollutants.

Maersk’s new RSRS creates a ‘beaching standard’ to support the shipping line’s recent decision to turn its back on the more advanced ship recycling facilities it previously worked with in China. While Maersk argues that its RSRS can be applied to all facilities “regardless of the recycling method used”, the standard actually only sets minimum requirements that seek to avoid the worst in the beaching yards. The standard does not put out requirements that will drive innovation and the development of sustainable solutions off the beach.

The Platform welcomes industry commitments to make investments and to enter into cooperation with responsible recycling companies to ensure the improvement of ship recycling practices world-wide. Such steps must, however, be guided by the aim of ‘zero pollution, zero waste, 100% safety’. Cooperation with yards using a substandard method, in particular the beaching method, will not lead to the urgently needed shift towards sustainable ship recycling in modern facilities. This shift will only happen if shipping companies demand and invest in clean and safe recycling off the beach.

Instead of pushing for state-of-the-art technology in India, Maersk’s management has decided that the group needs to yield maximum profits as offered when using the low-cost method of beaching. The new RSRS is oriented towards the past, not the future of ship recycling.

The Standard refers to an impressively long list of issues; however, it remains vague on many critical aspects for sustainable ship recycling related to the environmental impact of breaking ships in the intertidal zone of a beach, the environmentally sound management of hazardous wastes downstream, and the right to decent working and living conditions. Recent research at Shree Ram has also shown that requirements set out in the RSRS are simply not followed.

Below is an outline of the concerns specifically relating to the shipbreaking practices in Alang neither addressed by Maersk’s new RSRS nor by its actual shipbreaking practices at Shree Ram yard. These concerns have been discussed with Maersk since December 2015, and this consolidated critique of the RSRS has been shared with Maersk in July 2016. The Platform has so far not received a satisfactory answer to all the questions and concerns raised.
1 GENERAL CONCERNS IN ALANG

Lack of transparency
Requirement A.1 of the RSRS states that the ship recycling facility (SRF) “shall provide information regarding the organisational structure and management policies, an overview of the SRF, and methodologies related to ship recycling”. This information may be available to Maersk; however, the Alang facilities are fully closed to any scrutiny from civil society, independent researchers, and media. Visits are only allowed for ‘friendly’ business partners or journalists and researchers invited by Maersk or the shipbreaking yards themselves. There is no functional, independent trade union in Alang that could verify information provided on the working conditions. This is particularly critical for accident records, which the SRFs are asked to keep under Requirement A.11, as there is no public scrutiny of such records. NGOs have regularly been denied access to Alang shipbreaking yards, and in particular to Shree Ram, the yard that Maersk is working with.

Fluctuation of work force and inadequate training
The SRF is required to provide information on the workforce, training levels, qualifications and responsibilities to ensure appropriate worker safety and environmental protection. While A.2 and A.3 provide basic guidance on various kinds of training, most workers are only required to do basic trainings. The yard is not asked to ensure a permanent work force with highly skilled staff for all hazardous jobs. This is particularly crucial in light of the fluctuating workforce of day labourers employed at all yards in Alang. As a consequence, Maersk seems to accept a basic training of a couple of days for most workers as sufficient; however, it is grossly insufficient to train workers for a hazardous industry in such a short time. The workers themselves have stated that they do not feel adequately trained to cope with all the hazardous in the yard.

Moreover, many of the workers working at Shree Ram and dismantling Maersk vessels, have been shown not to have contracts with the yard. That means, the workers have no stable employment relationship with the yards, which in return cannot guarantee an adequate level of training.

Inappropriate licenses
Requirement A.6 states that the SRF must have all necessary permits, licences and certification in place in accordance with national law. Whilst it is understandable that Maersk cannot work with a yard that is not allowed to operate by national laws, it should be noted that all Alang shipbreaking yards are licensed by the Government under the Indian Ship Recycling Code regardless of their level of operation. Therefore, the availability of such licenses has no value to determine the factual performance of the SRF with regards to environmental protection and occupational health and safety.

2 ENVIRONMENTAL IMPACTS OF THE BEACHING METHOD

Lack of environmental impact assessments and poor environmental monitoring
The Maersk standard does not require that the facility must undergo a proper environmental impact assessment (EIA). No yard in Alang has gone through a proper EIA, which is required for any new industrial activity in India since 2006 and which would have allowed for a transparent process including civil society and local communities such as fishermen to express their view.

Regarding environmental monitoring, Maersk trusted the findings of a local company hired to conduct the environmental monitoring as required under the Indian Ship Recycling Code 2013. The results, however, showed hardly any contamination which is very doubtful in such a hazardous industry. The samples taken do not allow for a meaningful environmental monitoring of the breaking activities. For instance, the results in the intertidal zone showed “nil” copper while the substance is widely used in anti-fouling ship paints and is bound to be released during the cutting process.

The RSRS does not add any requirements to tackle the poor quality of the existing environmental monitoring in Alang, as C.2 only asks the facility to ensure monitoring without spelling out the procedures to be followed. The question remains how such low quality environmental monitoring can
even fulfil the requirement of MEPC.210(63) – 3.4.1, in particular, when it should identify “chemical, biological and physical changes in the environment surrounding the Ship Recycling Facility.”

Despite promises to allow for independent environmental monitoring and a discharge analysis of the whole recycling process of both the “Maersk Georgia” and the “Maersk Wyoming”, Maersk has been unable to name the independent body who is responsible for that research and to share the methodology used to ensure proper monitoring.

The various negative environmental impacts of water, soil and air pollution in the shipbreaking yards are widely documented by scientific research – from the contamination of sediments to air pollution by toxic fumes, from the loss of fish species to the mutation of marine animals caused by toxins – a proper environmental impact assessment and constant environmental monitoring throughout the whole process would surely have identified the harmful environmental impacts as a result of the beaching practice.

**Emissions to the intertidal zone**

The RSRS does not sufficiently address critical environmental impacts caused by breaking ships in the intertidal zone, in particular those caused by toxic paints, slag, debris and oily parts falling into the intertidal zone. The Platform is particularly concerned about the environmental impact of slag, paint particles and debris that are released into the environment during the primary cutting of the vessel in the intertidal zone with torch cutters. The pollutants are then washed out by the tide. Moreover, the use of the gravity method leads to the creation of debris consisting of metal scrap, plastic and rubber as well as further release of paint and dust into the environment. These issues have been addressed by many experts, including the report Maersk itself commissioned from Litehauz. None of the Alang yards offer solutions to these problems, and Maersk continuously downplays the emissions to the intertidal zone as if they do not exist.

While C.20 asks the SRFs to “ensure a programme that defines measures to minimize the potential for debris deposition into the environment”, Maersk cannot solve the problem of debris created by the use of the gravity method in the intertidal zone. While Maersk claims that all blocks fall inside the hull and therefore do not release any debris, this is in reality not possible: recent research at Shree Ram shows that cut sections are dropped into the intertidal zone directly and that even secondary cutting takes place in the intertidal zone rather than on the concrete impermeable floor. The paints are not removed before breaking, and there are no signs that the requirement set by Maersk to remove “deleterious paints” is actually implemented.

Moreover, claiming that blocks are “cleaned” before they are allowed to crash onto the beach is not a solution: the blocks are not fully cleaned from oil and similar pollutants, but are simply treated with binding agents. Workers at Shree Ram have reported that they use sand to bind oil on the parts they cut. If chemicals are used to wash off oils there is no satisfactory way to collect the run-offs on a beached vessel.

**Impossibility to remediate oil spills**

If an oil spill occurs in the intertidal zone, where all of the primary cutting of the hull takes place, the large tidal difference does not allow for a meaningful use of oil booms around the vessel. The effective clean-up of a spill in the intertidal zone is impossible due to the short periods between high and low tide. Requirement C.18 asks for “adequate containment and spill clean-up equipment and procedures”, however, it remains unclear whether the requirements and equipment detailed in the annex for “adequate” oil spill control and remediation are first of all in place, and how they can actually be used if an oil spills occurs in the intertidal zone.

**Sea water entering the hull**

The beached vessels are not brought over the high tide line, but the ship is fully beached in the intertidal zone. Even if the beach is gently inclined, sea water can enter the bottom of the hull once it has been cut. It is likely that the bottom of the hull contains bilge water, ballast water or even oil residues that cannot be pre-cleaned before cutting. While Maersk claims that Shree Ram has
developed a method to cut the bottom in a way that sea water cannot enter, the RSRS does not address the problem at all.

**Insufficient control of storm water runoff**
The Gujarat coast is prone to strong monsoons and other heavy rainfall. It is unclear whether the drainage system is adequate to prevent storm water runoff during the monsoon season and other strong rainfall. In any case, the un-cemented part of the beach, which is polluted with debris, slag, paint particles and other pollutants, does not have any runoff protection. Therefore, rainwater washes all pollutants out to the sea.

**Risks posed by use of inflammable gases**
The workers use torch cutters that need gas supply. In order to reduce the risk of explosions, the gas line should either be underground or should be suspended above the working areas. At Shree Ram, the gas supply is found through pipes above ground where these can easily be cut or damaged. The explosion of gas bottles and gas supply equipment has long been identified as a major cause for accidents in shipbreaking yards, and in the Maersk case, experts have recently confirmed the high risk this practice poses for workers. Maersk has not identified that risk and has not taken any steps to minimise it.

**3 POOR DOWNSTREAM WASTE MANAGEMENT**

**Weak reference to national requirements**
Requirement C.6 is only asking that “final waste-management facilities shall adhere to national standards and shall take into account applicable international standards and requirements”. This entails that Maersk is satisfied if the low Indian waste management standards are fulfilled, while internationally agreed standards remain optional. The Indian legal system is both weak in legislation and in enforcement of waste management standards.

There is further no specific requirement that all asbestos-containing materials, including equipment parts containing asbestos, have to be disposed of and cannot be resold. Indian domestic law allows for the sale and resale of asbestos-containing materials. Moreover, the RSRS does not define where and how PCBs need to be destroyed – a particularly worrying lacuna given the fact that India does not have a single high temperature incinerator that can destroy PCBs. There are no specific requirements for the removal of anti-fouling paints and where and how these can be adequately disposed of. Anti-fouling paints fall off during the beaching process, during torch cutting and finally end up in re-rolling mills (see next paragraph).

**Toxic emissions at steel mills ignored**
Scrap steel is sold to re-rolling mills. Indian scrap steel mills do not use furnaces and lack emission filters. As the toxic paints are not removed, the reutilisation of scrap steel results in toxic fumes and emissions. While C.13 asks SRFS to ensure the environmentally sound treatment of antifouling compounds and systems (organotin compounds incl. TBT), the RSRS gives no answer how this can be achieved when toxic ship paints are undoubtedly released in the intertidal zone, and the rest is released in the re-rolling mills.

**4 DIRE WORKING AND LIVING CONDITIONS**

**Living wage not required**
The RSRS does not require the SRFs to pay a living wage to workers. The wages paid to unskilled migrant workers in Alang do not constitute a living wage. The RSRS only asks (in F.107) that “wages are sufficient to allow workers to meet basic needs and provide discretionary income”. According to F.126, “a wage in line with cost of living and inflation” is only deemed best practice, and not a requirement that needs to be fulfilled before choosing a SRF, that is, Maersk may benefit from wages which are not even a living wage.
Weak recognition of trade unions and collective bargaining – threats to workers
While the RSRS demands non-discrimination of unionised workers, it does not require SRFs to enter collective bargaining. Collective bargaining agreements are absent in the shipbreaking industry of Alang, and the trade unions remain weak. Therefore, the workers at the SRF are widely unorganised and not effectively represented by a trade union. While it is welcomed that F.10 and F.11 ask the SRF to keep a record of agreements with trade unions and to comply with regulations on collective bargaining agreements; these requirements remain void as long as both agreements with trade unions and collective bargaining agreements are absent. Requirement F.43 defines the importance of making sure “that all worker groups are proportionally represented in workers’ committees and trade unions” of minor importance, an assessment which does not reflect a critical situation in which workers are not protected by a functional system of workers representation. Investigations at Shree Ram have shown that workers are threatened to speak out against the working conditions. They are afraid to lose their jobs if they criticise the conditions at Shree Ram. That means, workers at Shree Ram are in a very vulnerable situation: no protection through trade unions or proper representation on the one hand, and threats and silencing on the other hand.

Subcontracted workers left unprotected and without contracts
The conditions for subcontracted workers under the RSRS remain unclear. The large majority of the Alang workforce consists of informal migrant workers who are brought into the yards by “contractors”. Therefore, the yards do not have a formal employment relationship with the majority of their workforce. F.2 says that all workers shall be provided with formal employment agreements that clearly state terms and conditions of employment, while a worker is defined as “any person who performs work, either regularly or temporarily, in the context of an employment relationship including contractor personnel.” Therefore, according to F.2, all workers should be entitled to a formal employment relationship with the SRF, even if they are recruited through external contractors. However, if the SRF uses a recruitment agency or broker to recruit workers, the requirements F.66 – F.73 are applicable. These ask the “contractor” to have an agreement with the worker, and not the SRF – a clear contradiction of the different chapters of the Standard. A hazardous industry requires that the SRF enters into long-term employment relationships to ensure that workers are adequately trained, skilled, and followed-up by medical check-ups. If a SRF trusts a “contractor”, it does not actually control its workforce, nor enforce its responsibilities to ensure decent working conditions. Recent investigations at Shree Ram have shown that workers deployed to dismantle the Maersk ships do not have any contract or any other document showing their employment relationship with Shree Ram. This is of grave concern as it stops the workers from enjoying their rights on all levels.

Health and accident insurance lacking
F.127 asks SRF to provide workers with health care for all occupational injuries and illnesses. This requirement has to be rated as “critical”, not “major”, given the fact the shipbreaking is a hazardous industry with a high risk of accidents. Moreover, it remains doubtful whether the yards actually offer full health care in reality, especially in light of the fact that most workers are brought to the yards via ‘contractors’. As workers at Shree Rams have been found working without contracts, the Platform fears that these workers do not have a health and accident insurance provided by the yard. In case of an accident, the yard can always claim that the victim has never worked at the yard as the workers have no proof of their employment relationship with Shree Ram.

Hazardous child labour not banned in RSRS
F.49 allows for child workers to be employed in the SRF if they are between 15 and 18 years old, as long as they are not engaged in hazardous work that could harm their physical, mental or moral development. It has to be clearly defined what constitutes “hazardous” work, as most jobs inside a SRF are hazardous. Exceptions may be office work as part of a vocational or professional training; however, it has to be clearly defined that young workers, that is, children between 14 and 17 are under no circumstance allowed to work on a ship, in the primary or secondary cutting areas, or in any area where hazardous waste is handled or where they can be exposed to fumes and smoke. Child labour in the Indian shipbreaking industry is often hidden and occurs in the scrap yards downstream to which shipbreaking yards sell various recovered materials for further sorting and resale. So even if child labour may not occur in the SRF itself, illegal child labour may well be present
in the value chain. Therefore, it is insufficient that requirement E.4, which asks SRFs to audit its suppliers and partners in the area of human rights and labour, has been rated as “minor”. This means Maersk is willing to work with SRFs from which it does not immediately require to exclude substandard scrap yards downstream which are likely to employ children and women without any protection.

**Poor housing and sanitation**

It is known that the general housing situation for the migrant workers in Alang is extremely dire. Some yards have set up small accommodation blocks for workers in order to ensure basic hygiene, supply with drinking water, shower facilities, and a decent place to live. An accommodation block to house several thousand workers is being built; however, these efforts are far from sufficient in order to ensure accommodation for all of the Alang work force. Moreover, the completion of the housing block has been promised for years with such buildings remaining unfinished or unused. Most workers have to live in slums which they set up themselves or which they rent from the local community. They do not have free access to drinking water and sanitation facilities are miserably lacking.

The RSRS requires that the offered accommodation has to be in line with minimum standards only if the yard offers accommodation. Given the fact that most yards do not offer accommodation at all, the requirement is void. Maersk should require that the SRF has an obligation to offer accommodation for all the workers employed at the yard. Given the fact that most Alang workers have to defecate in the open, which causes a major challenge to public hygiene, it is insufficient that F.135, which requires clean toilets, has been rated as “minor”. Investigations at Shree Ram have shown that more than one fourth of the workers still live in makeshift slums in unhygienic conditions.

### 5 OCCUPATIONAL HEALTH AND SAFETY RISKS

**Unclear emergency response for a beached vessel**

While requirement B.29 asks that the “SRF shall establish and maintain a robust emergency preparedness and response plan (EPRP)”, the RSRS does not spell out how adequate emergency response can be ensured in a beached vessel with very limited access to the inside of the ship and no access for fire fighter or ambulances towards the side of the beached vessel on the intertidal mudflat.

**Lack of proper personal protective equipment - exposure to toxic materials not minimised**

Requirement B.21 asks for “personnel monitoring for heavy-metals exposure” and “respiratory protection” for welders and cutters; however, Maersk does not guarantee that heavy metal poisoning of welders and cutters is actually avoided, nor does the RSRS clearly specify the standard for respiratory protection. For cutters, it only foresees dust / filter masks instead of full respirators, which is not sufficient for proper protection. During recent investigations at Shree Ram, workers have been found with disposable dust masks instead of proper respiratory protection against toxic fumes. Other workers at Shree Ram have been found working without any mask in the cutting and welding zone. B.27 of the Standard asks for equipment for the workers to protect them from the various risks associated with ship recycling. It also mentions hearing conservation programmes. First of all, the SRF is only asked to ensure that the personal protective equipment and related measures are in line with national laws, which are known to be weak and not enforced properly. Moreover, Maersk does not seem to have a control mechanism to ensure that PPEs are actually distributed and used properly. Recent research at Shree Ram yard has shown that workers involved in the torch-cutting of the ship have not been provided with durable, flame-retardant protective clothes. They have been found wearing cotton T-shirts. They have also been found without goggles and ear protection. The recent research at Shree Ram has therefore clearly shown that the requirements for the proper use of PPEs as outlined in the Standard and its Annex are not being followed at all, and that Maersk’s supervisor has been able to rectify the situation. Moreover, Maersk’s Standard lacks proper provisions for the protection of the respiratory system in areas where workers are exposed to toxic fumes.

**Removal of hazardous waste – dangers of asbestos removal**

C.7 on hazmat removal calls for the safe removal, handling and/or cleaning of the hazardous materials from the ship without providing any further detail, for instance, concerning the particularly hazardous removal of asbestos. The RSRS only asks for removal “in accordance with the applicable national
requirements”. The Indian legal framework provides little guidance and little regulatory control for the safe removal of asbestos so that Maersk’s requirements are far from being sufficient. The standard does not give an answer to how a mobile asbestos removal unit including equipment to set up a low pressure environment for asbestos removal can be used on a beached vessel with limited access.

**Prevention of accidents caused by gravity method**
The RSRS does not account for the fact that the gravity method is a source of serious and often fatal accidents in the shipbreaking industry. While B.23 asks for the prevention of accidents caused by falling objects, there are no requirements that directly address the safety risks caused by the use of the gravity method, how these can be minimised, and most importantly, how the gravity method can be completely avoided. Maersk obviously accepts the gravity method as a sufficiently ‘safe’ procedure. Workers interviewed at Shree Ram have stated their fear of being hit by falling steel parts and have reported accidents.

**Medical check-up**
B.28 asks for “procedures to be used for monitoring exposure and for medical surveillance”; however, the details of proper medical check-ups and documentation are not spelled out. It is widely known that the level of awareness concerning occupational diseases in India is extremely low. Medical check-ups are superficial (general fitness and health problems) and are not targeted to detect occupational diseases typical for the shipbreaking industry such as heavy metal poisoning or asbestos-related diseases. Moreover, as many workers at Shree Ram do not have contracts and are part of a migrant work force it seems questionable that the yard is able to keep track of medical records.

**Hospital situation**
The fact that the Alang shipbreaking zone is void of any hospital where injured workers can be treated adequately is not addressed by the RSRS. The local “hospitals” are two small health centres only equipped for first aid and general treatment. For instance, there is no blood bank for severely injured workers. One local hospital has been reported to remain unfinished and is not open to receive any patients. Accident victims have to be transported to Bhavnagar, which is too far to ensure immediate emergency treatment.

**RECOMMENDATIONS: towards ‘zero pollution, zero waste, 100% safety’**
The NGO Shipbreaking Platform’s calls for clean, safe and just ship recycling that aims for ‘zero pollution, zero waste, 100% safety’. Technological innovation, clean and safe methods and modern equipment are available to the ship recycling industry and are already in use. Their aim is to minimise risks posed to workers and the environment, and to reduce the amounts of hazardous waste that leaves the ship recycling facility. The European Union will shortly be publishing a list of facilities globally that need to meet high environmental and safety standards. The requirements go beyond the gates of the facility and also scrutinise the downstream waste management and issues related to workers’ rights. We urge any responsible shipping company to use facilities that meet the EU standard, and to invest in innovations and solutions that can ensure sustainable ship recycling off the beach.

**Zero pollution**
Available technologies, methods and equipment that allow for the reduction of harmful emissions to the air, water and soil include, amongst others:
- the use of the quay-side method while maintaining the watertight integrity and stability of the hull in combination with equipment to collect all slag and debris and all handling of cut sections over impermeable floor, or the use of dry docks offering full containment;
- the use of fully protected cutting areas for both primary and secondary cutting with an effective drainage system ensuring also zero storm water runoff;
- the use of an indoor cutting facility to capture and filter contaminants from the air; and/or the use of emission-free shears, cold cutting or low-emission torches to reduce toxic fumes.
**Zero waste**
During the recycling process, hazardous wastes are recovered from the vessel and need to be disposed of in an environmentally sound manner. With the help of state-of-the-art technology, the amount of hazardous materials that are either landfilled or are released through the reselling or processing of recovered materials, can be reduced significantly. Modern technologies include:
- high temperature incineration of all PCB- and POP-containing materials;
- the use of electric arc furnaces for the processing of scrap steel including dust and emission filters to reduce toxic fumes from ship paints and other harmful emissions;
- best available techniques for the reuse of slop and oil sludge in order to maximise their utilisation as an energy source.

**100% safety**
Modern methods and innovation in ship recycling can drastically reduce the hazards workers are exposed to and minimize both the risks for accidents and occupational diseases. These include:
- the use of the quay-side method or dry docks that allow egress to all areas of the ships in case of emergencies and accidents;
- the use of safe gangways to access the vessels;
- the use of cranes to move rescue boxes in cases of accidents;
- the use of heavy cranes to fully avoid the falling of cut sections and to ensure the safe lifting of cut-off blocks to the secondary cutting area;
- the use of a fully skilled and permanent work force;
- expert staff for the removal of hazardous waste such as trained asbestos removal experts;
- high quality personal protection equipment including respirators and welding googles for all staff employed in cutting operations.