

# MARINE LITTER MANAGEMENT IN MALAYSIA

## 1. Introduction

Marine litter apart from being an aesthetic problem in Malaysia, also poses severe environmental impacts on the ecology and local wildlife such as birds, mammals and turtles. Marine litter is deemed as objects that is discarded, disposed or abandoned which ends up in the coastal and marine environment. This includes plastics, derelict vessels, glass, metals and rubbers. There are two main sources of marine litter in Malaysia namely from ships (sea-based) and from land activities (land-based).

## 2. Ship-based Sources

Ship-based sources originate from activities carried out at sea. Besides ships and vessels, ports and oil platforms are the main terminals from which unwanted objects are discarded directly into the sea. Offshore oil and gas platforms are surrounded by water, and all items lost from these structures become marine debris. Materials such as discarded waste from fishing vessels, fishing gears that are lost from commercial fishing vessels, recreational boats and shore fishing activities contribute much to the sea-based sources. Illegal dumping by ships and vessels adds on to the long list.

Malaysia has ratified MARPOL 73/78 Annex V which is in relation to the prevention of pollution by garbage from ships. With the ratification of MARPOL 73/78, Malaysia to date has 15 ports that have reception facilities for garbage waste. The garbage removal and disposal services at these facilities are provided by contractors.

## 3. Land-based Sources

Land-based sources may occur when waste is carried to the sea via rivers and streams that is subsequently washed up on local beaches. Tourism and recreational activities along the coastal areas are one of the major contributors to land-based marine litter. Besides that, improper management of solid waste on land contributes much of the marine litter at sea.

Solid waste is mainly generated from residential areas, recreational areas, public amenities, commercial centers, industrial areas, landfill sites (dumpsites) and agricultural activities.

Hence, it is fundamental to have good practice in solid waste management and handling (pick-up, collection, transport and transfer, disposal, landfill). Waste management in Malaysia is fully privatized at municipal level and municipal waste management is regulated by local governments.

In line with the National Strategic Plan in Solid Waste Management, it is targeted to reduce sources and prevent generation of waste; to have waste diversion which includes recycling and composting; conversion technologies; and having other means of solid waste facilities like transfer stations, rail loading facilities, material recovery facilities and waste-to-energy facilities.

#### **4. Beach Clean-ups (Garbage)**

Beach clean-ups of garbage are mainly initiated by NGO's, local governments and marine related bodies (i.e. divers) as well as hoteliers. Such activity is commonly carried out in Malaysia and is usually done with much public participation. This increases public awareness and instill good beach practices.

#### **5. Recommendations**

There is a need to assess the extent of the marine litter problem in the region as to whether it is a transboundary problem or a problem that is best addressed at the national level. For Malaysia, there is a need to assess the real extent of this problem, do monitoring of the marine litter, develop systematic public awareness programmes and initiate actions to address and properly manage marine litter.

#### **6. Conclusion**

Due to the lack of data in the country, the proportion of marine litter sources is unknown and the impacts have yet to be studied in-depth. However, generally Malaysians are well aware of this emerging problem and with this regard, beach clean-ups and awareness programmes which aim at locals as well as tourists are being initiated on a regular basis.