

Waste Management Practices for Users of Port Reception Facilities

People need to bring generated marine litter to port and marinas, and marine litter should be discharged to port reception facilities through proper procedures, so that unnecessary litter is not to travel around the ocean. Users of port reception facilities need to bear in mind the procedures of use of port reception facilities. More detailed guidelines are provided in the *Guidelines for providing and improving port reception facilities and services for ship-generated marine litter in the Northwest Pacific region* which were developed by MERRAC as another outcome of MALITA project. Users also need to separate ship-generated marine litter and discharge into the appropriate receptacles depending on the categories.

- Plastics.
- Floating dunnage, lining, or packing material.
- Ground paper products, rags, glass, metal, bottles, crockery, etc.
- Cargo residues, paper products, rags, glass, metal, bottles, crockery, etc.
- Food waste.
- Incinerator ash except from plastic products which may contain toxic or heavy metal residues.

Acknowledgement: The guidelines were prepared by NOWPAP MERRAC as part of the NOWPAP MALITA. The following individuals contributed to writing various drafts of the guideline and to the overall editing of the document: Hyon-Jeong NOH, Chang-Gu KANG, Seong-Gil KANG and Jeong-Hwan OH of MERRAC; and Jong-Myoung LEE and Sun-Wook HONG of Korea Marine Rescue Center (KMRC). The guidelines have been circulated to the NOWPAP MERRAC Focal Points, the NOWPAP Marine Litter Focal Points, NOWPAP RCU, UNEP and IMO, and then revised according to the comments that were received.



NOWPAP MERRAC

Northwest Pacific Action Plan
Marine Environmental Emergency Preparedness and Response
Regional Activity Centre

P.O. Box 23, Yuseong, Daejeon 305-600, Republic of Korea
Tel : +82 42 868 7281 / Fax : +82 42 868 7268 / Website : <http://merrac.nowpap.org> / E-mail : nowpap@moeri.re.kr

NOWPAP MERRAC

Northwest Pacific Action Plan
Marine Environmental Emergency Preparedness and Response
Regional Activity Centre

Background

Marine litter is any persistent, manufactured or processed solid material discarded, disposed of or abandoned in the marine and coastal environment. Marine litter comes from multiple sources, land-based and sea-based sources. In particular sea-based activities include fishing, shipping, recreational activities and passenger ships that generate a significant proportion of marine litter. Among others, sea-based litter such as derelict fishing nets, wire, rope and plastic bags, remains on the seabed, in the water column and on the sea surface. It can also be transported with ocean currents and winds and found on the beaches and shorelines.

Marine litter can cause injury or death of human and other living thing by entanglement and ingestion. Animal might occasionally feed on plastic bag looks like food which may lead them to starvation or malnutrition. Abandoned fishing nets can trap a number of animals and lead to their death consequentially. Vessels can also be damaged by buoyant materials which can result in considerable costs to repair. In this regard, marine litter is now recognized as one of major marine pollution that destroys the ecological, economical and cultural values of the marine and coastal environment.

These guidelines were developed as a part of the NOWPAP Marine Litter Activity (MALITA) in order to provide good action tips how to reduce the amount of marine litter from the sources that will also be helpful to understand regulations on sea-based marine litter and practical principles of environment-friendly behaviors.

Global Regulations Related To Marine Litter Management

There are several global conventions and agreements which aim at protecting the marine environment from marine litter.

- **MARPOL Convention (Annex V):** Regulations for the prevention of pollution by garbage from ships.
- **London Convention:** Prevention of marine pollution by dumping of wastes and other matter.
- **FAO Code of Conduct for Responsible Fisheries:** The Code of Conduct for the appropriate shipboard management.

Recreational Activities

Many people come to the sea to enjoy the recreational activities like fishing, boating and diving. The amount of marine litter generated carelessly during the recreational activities such as fishing lines, lures and plastic bags might be relatively small among the total amount of marine litter from a variety of sea-based human activities. However, if these kinds of litter are continuously accumulated, the marine and coastal environment can be seriously damaged. Therefore, practical methods to reduce marine litter from recreational activities need to be developed and informed to the public. In this regard, education programmes and public awareness campaigns will be helpful. The below marine litter items are examples related to recreational activities. Some helpful action tips that are common and activity-specific to reduce marine litter are also listed.

Examples of Marine Litter Generated from Recreational Activities

Recreational Fishing

- Bait containers and packaging;
- Fishing line;
- Light sticks;
- Baits, and fishing lures;
- Fishing weights;
- Plastic bags.

Boating and Diving

- Oil and lube bottles;
- Balloons;
- Fireworks items;
- Plastic bags.

Shipboard Life

- Plastic material (bags, etc.);
- Food wrappers and containers;
- Cigarette butts and filters;
- Beverage bottles and cans;
- Tableware (cups, plates, forks, knives, spoons);
- Grocery bags and miscellaneous goods.



Action Tips for Reducing Marine Litter

Activities Related to Shipboard Life

- Remove packaging material on shore to eliminate potential marine litter onboard.
- Pack food in reusable containers rather than plastic bags.
- Use permanent or reusable tableware instead of disposable ones.
- Do not throw away overboard cigarette butts, beverage cans, food wrappers, etc.

Tackle Shop

- Recommend your customers the environment-friendly items.
- Let your customers leave the excessive wraps of purchased items in your shop to reduce potential marine litter.

Charter Boat Captain

- Make boat policy that 'NO TRASH' is discarded overboard.
- Do not let crews and clients toss waste overboard.
- Retrieve fishing line, net or other litters encountered in the water or, if not retrievable, report to the relevant authority.
- Set up an onboard system to segregate trash for recycling.
- Bring all generated marine litter ashore.
- Use the port reception facilities. If they are inadequate, request better services from the facility manager.

Marina and Diving Center

- Set up trash bins for boaters.
- Encourage boaters to set up an onboard system to segregate marine litter for easy disposal and recycling on shore.
- Clearly label recycling bins and make sure they are accessible.

