



Administrative Functions

- Reduce the office supplies and reuse of products or materials.
- Use a notice board instead of papers or brochures.
- Educate the crews about marine environmental problems and their company's environmental management system.

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.

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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.

Passenger Ships

Passenger ships include cruise lines, ferries, and ocean liners with the purpose of carrying passengers. Marine litter related to accommodation facilities, food and beverage services and administrative functions can be generated from passenger ships such as food containers, tableware and office supplies. Passengers and crew need to understand the severity of the marine litter problem and its impact on the marine and coastal environment in order to reduce it. Relevant education measures introducing good management practices will help to increase the awareness and to reduce the amount of marine litter. Marine litter items generated from passenger ships, and the action tips for passengers and crews are listed below.

Examples of Marine Litter Generated from Passenger ships

Accommodation Facilities

- Shampoo bottles, cosmetic soap bottles and lotion bottles;
- Old towels, linens, and bed sheets;
- Furniture.

Food and Beverage Services

- Cans, bottles, tins and glasses;
- Containers (sugar, salt, pepper, flour and cream);
- Tableware (cups, plates, forks, knives, spoon, etc.);
- Paper serviettes, coasters, straws, and toothpicks;
- Used aprons, kitchen towels and napkins;
- Plastic material (bags, etc.);
- Grocery bags and miscellaneous goods.

Administrative Functions

- Office supplies (paper, envelopes, etc.);
- Newspapers and magazines;
- Stationary;
- Travel pamphlets and brochures which are often quickly discarded by tourists.

Action Tips for Reducing Marine Litter

Shipboard Marine Litter Management

- Remove packaging material on shore to eliminate space-consuming waste onboard.
- Never leave used oil or fuel filters unattended. Store them in a safe and secure place.
- Separate and store recyclable materials like cans and bottles, glass, paper, antifreeze, oil, oil filters, and lead batteries.
- Designate a permanent onboard trash bin. Use a container with a lid.
- Bring all litter generated during the voyage back ashore.
- Properly dispose of all marine litter on-shore, and use receptacle bins.
- Educate people about the importance of reducing the marine litter and good waste management system on vessels.

Accommodation Facilities

- Provide bulk dispensers and eliminate the use of individual bottles and other containers.
- Return laundered clothes to guests in reusable cloth bags/baskets thereby reducing plastic bags.
- Offer rarely used items such as sewing kits by request only.
- Instruct housekeepers not to replace half-used rolls of toilet paper/tissue boxes and leave replacements for guests to use when required.
- Reuse partially used items from guestrooms, or donate to charities.
- Extend the lifespan of equipment by having it maintained regularly.

Food and Beverage Services

- Use durable, high-quality and reusable products such as linen, tableware, cups, etc. rather than plastic/foam material.
- Use dispensers for straws and toothpicks and avoid purchasing individually wrapped items.
- Reuse linen for aprons and kitchen towels.
- Use cloth roll towels or hand dryers instead of paper products.
- Offer guests the option to order half-portions of food.

