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**Ships and marine technology —  
Marine environment protection —  
Arrangement and management of port  
waste reception facilities**

*Navires et technologie maritime — Protection de l'environnement  
marin — Disposition et gestion des installations portuaires de collecte  
des déchets*



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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 8, *Ships and marine technology*, Subcommittee SC 2, *Marine environment protection*.

This second edition cancels and replaces the first edition (ISO 16304:2013), which has been technically revised.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

## Introduction

The development of adequate port reception facilities (PRFs) for ship generated waste and cargo residues is a major factor in the management of each of the shipboard waste streams covered by the International Convention for the Prevention of Pollution from Ships (MARPOL) Annexes I to VI, as amended, excluding Annex III (packaged dangerous goods). MARPOL requires that Party States ensure the provision of adequate reception facilities in ports to receive these wastes. Parties to MARPOL should have developed implementing legislation to provide for PRFs. Regional and intergovernmental legislation has also been developed. However, due to operational, ownership, geographic, and legislative differences in ports, there is a large disparity in how operations are conducted. To overcome some of the major issues, the International Maritime Organization (IMO), through its implementation of IMO Instruments (III) Subcommittee (formerly the subcommittee on Flag State Implementation) developed an action programme to tackle the inadequacy of PRFs.

To obtain the most efficient management of waste and to reduce the time and resource burden in segregating and handling waste in the ports, the concept of waste minimisation has been integrated into this document by incorporating the following principles:

- For waste generated aboard a ship:

**“Prevention before recycling before energy recovery before disposal”**

- Once the waste is offloaded ashore:

**“Avoidance before reduction, before reuse, before recycling, before incineration with energy recovery, before disposal”**

Ship owners and operators, cargo owners, and port and terminal owners and operators, along with governments are aware of the importance of well-organised and managed waste collection, especially with respect to health and safety on board ships and at ports and terminals. It has been acknowledged at the IMO that standardized methodologies for waste management both on board ships and ashore at PRFs would harmonize practices and ensure a smooth delivery of ship generated waste and cargo residues to shore-side facilities. ISO 21070 provides a methodology for ships to segregate their garbage, thus, port reception facilities worldwide may expect a certain level of ship segregated waste and cargo residues. However, ISO 21070 cannot work alone and needs to be complemented by a parallel International Standard for the reception of ship generated waste. This document assists in the planning for the provision of adequate PRFs.

This document is also meant to complement ISO 14001 by adding a component that extends its principles to management of ships' waste in ports. It provides a specific methodology that any port, harbour, terminal, or marina can apply to the planning, development and operation of its PRF. The document can be incorporated easily into other plans for achieving ISO 14001 accreditation, as an extension that focuses on PRF. Conversely, the processes put in place during the preparations for ISO 14001 accreditation will assist in meeting the development of a holistic Port Waste Management Plan (PWMP) under this document.

# **Ships and marine technology — Marine environment protection — Arrangement and management of port waste reception facilities**

## **1 Scope**

This document provides a method for addressing ship generated waste and cargo residues from when they are offloaded from the ship, to how they are managed ashore. The provision, operation and use of port reception facilities (PRFs) are inherently linked, so this document addresses the design of PRFs, and their operation and management. This document is designed to be used by ports and terminals with existing PRFs which aim to refine their systems; it can also be used by new ports and terminals that are developing PRFs.

Parties to MARPOL are obligated as Port States to ensure that port reception facilities (PRFs) adequate to meet the needs of the ships using them without causing undue delay are provided at their ports and terminals. MARPOL does not seek to regulate the management of ship generated waste and cargo residues at ports and terminals beyond the reception facility requirement. However, ports and terminals may need to consider national, regional and local regulations. While these regulations can exceed the scope of MARPOL, the IMO recognises the need to manage ship generated waste and cargo residues at ports and terminals as part of an environmentally sound management approach for avoiding, minimising, and eliminating pollution from ships.

In consideration of above, this document applies to the management of ship generated waste and cargo residues regulated by MARPOL that are discharged at ports and terminals. It also covers principles and issues that should be considered in the development of a PWMP, its implementation and PRF operations. The operation of any PRF is governed by the principles and procedures included in the PWMP. The procedures to operate the PRF and the development of a PWMP are closely linked and therefore are integrated into this document.

This document addresses the principles and issues that should be considered in:

- The development of a port waste management strategy;
- The design and operation of PRF;
- PWMP development, implementation and compliance; and
- PRF management and accountability.

This document has been designed to be used by ports and terminals of any size. It does not give specifics on the size or location of a PRF in each port, but provides a list of principles to be considered and applied to any size of type of port or terminal (e.g. marina, fishing port, container terminal, oil terminal, roll on/roll off terminal, cruise terminal, ferry terminal, bulk or general cargo terminal, ship repair or recycling facility, and offshore terminal). Inland ports and marinas and those ports that have entered regional arrangements for the provision of a PRF can also use this document.

## **2 Normative references**

There are no normative references in this document.

## **3 Terms and definitions**

For the purposes of this document, the following terms and definitions apply.