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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



Reference number ISO 16304:2013(E)

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Contents		Page
For	oreword	iv
Introduction		v
1	Scope	1
2	Normative references	
3	Terms and definitions	
4	Waste management strategy elements 4.1 General	
	4.2 Administrative and legal matters	
	4.3 Technology	
	4.4 Infrastructure and support services	
5	Design and operation of PRFs	
	5.1 General	
	5.2 Port characteristics	
	5.3 Types	
	5.4 Waste characteristics	
	5.5 Design capacity	6
	5.6 Waste handling capabilities	
	5.7 Participation in segregation, recycling or disposal pro	grams7
6	Port waste management plan (PWMP)	7
	6.1 Key elements in the development of a PWMP	8
	6.2 Legislation and regulatory considerations	
	6.3 Port structure and administration	
	6.4 Official responsibilities	
	6.5 Waste management Financial considerations	
	6.6 Cost recovery system — Financial considerations	
	6.8 Pre- and ongoing consultation	
	6.9 Dissemination of information related to the PRF	
	6.10 Additional documentation	
7	Publication and implementation	16
	7.1 Implementation	
	7.2 PWMP review	
	7.3 Periodic auditing	17
Ann	nnex A (normative) Examples of waste streams originating from	n ships18
Ann	nnex B (normative) Waste conversion factors	22
Bib	23	

### 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. www.iso.org/directives

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The committee responsible for this document is ISO/TC 8, *Ships and marine technology*, Subcommittee SC 2, *Marine environment protection*.

## Introduction

The development of adequate Port Reception Facilities (PRFs) for ship generated waste and cargo residues is a major element in the management of each of the shipboard waste streams covered by the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL) Annex 1 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 are encouraged to develop implementing legislation and should consider incorporating regional and intergovernmental legislation. However, due to operational, ownership, geographic, and legislative differences in ports, there is a large disparity in how operations are conducted. In order to overcome some of the major issues, IMO, through its Flag State Implementation (FSI) Subcommittee developed an action programme to tackle the inadequacy of port reception facilities.

This International Standard provides a method for addressing ship generated waste and cargo residues from when it is delivered from the ship to how it is managed ashore. The provision, operation and use of PRFs are inherently linked, so this International Standard addresses the design of the PRFs, and their operation and management. It is designed to be used by ports and terminals with existing PRFs which aim to refine their systems; it is also to be used by new ports and terminals that are developing 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 minimization has been integrated into this International Standard by incorporating the following basic principle:

• For waste generated aboard a vessel:

"Prevention before recycling before energy recovery before disposal"

• Once the waste is landed 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 organized and managed waste collection, especially with respect to health and safety onboard ships and at ports and terminals. It has been acknowledged at the IMO that standard methodologies for waste management both onboard ships and ashore at PRFs would harmonize practices and ensure a smooth delivery of ship generated waste to shore-side facilities.<sup>2)</sup> The parties to the Basel Convention also support the development of this International Standard and have requested the Secretariat to continue its cooperation with ISO with the objective of including the Basel Convention requirements of waste minimization and environmentally sound management in this International Standard.

ISO has published ISO 21070, which provides a methodology for ships to segregate their garbage, Thus, port facilities worldwide may therefore expect a certain level of segregated ship generated waste. However, ISO 21070 cannot work alone and needs to be complemented by a parallel International Standard for reception of the waste. This International Standard assists in the planning for the provision of an appropriate PRF.

Many ports and terminals have invested much in achieving ISO 14001 Environmental Management Systems accreditation. This International Standard is also meant to complement ISO 14001 by adding a port component which extends the principles of ISO 14001 to ships' waste management 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. This International Standard can be incorporated easily into

<sup>1)</sup> An example of intergovernmental legislation is "Directive 2000/59/EC of the European Parliament and of the Council of 27 November 2000 on port reception facilities for ship-generated waste and cargo residues". Regional arrangements between countries or ports to jointly provide facilities have also been agreed.

<sup>2)</sup> This has been reflected in the FSI Action Programme, Work Item 3.2 "Equipment/Technology – Standardize garbage segregation requirements and containment identification."

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other plans for achieving ISO 14001 accreditation, as an extension that focuses on PRFs. 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 International Standard.