

WASTE MANAGEMENT GUIDELINES

for Ports and Terminals

October 2014

OPERATIONAL TOOLS TO SECURE EFFICIENT WASTE HANDLING IN PORTS

These Guidelines provides a framework on how to prepare a Waste Management Manual for a specific port. Development of such a port-specific waste handling manual is conducted by (i) assessing the existing ship waste handling systems in ports/terminals (if any), and (ii) by initiating a series of discussions with the port management regarding important issues for the waste management and after agreement and final design of the waste handling system (iii) developing a Waste Management Manual, which shall include a description of the waste handling systems in the port, e.g. procedures for collection of ship waste, waste registration and payment for services.

The Manual has been partly prepared with a standard text and ready for “fill in information” in order to make it simple for the ports and terminals. Each port or terminal can edit the Manual and take out sections that are not relevant in order to keep it short and easy to work with.

It is recommended to involve the port management and all relevant stakeholders in the development of efficient waste management system. Such stakeholders could be for example, the harbormaster, shipping agents, waste operators, refineries, various terminals, municipalities, environmental authorities and other government agencies.

ACRONYMS AND ABBREVIATIONS

CR	Cargo Residues
DWT	Dead Weight
EC	European Council
EMSA	European Maritime Safety Agency
HFO	Heavy Fuel Oil
IMO	International Maritime Organization
IT	Information Technology
IWF	Indirect Waste fee
MDO	Marine Diesel Oil
MOE	MINISTRY OF ENVIRONMENT
MARPOL	International Convention for the Prevention of Pollution from Ships
OWS	Oily Water Separator
PWMP	Port Waste Management Plan
PWMM	Port Waste Management Manual
SGW	Ship Generated Waste
SDS	Safety Data Sheet
WMP	Waste Management Plan
WQP	Water Quality Procedure
WRF	Waste Registration Form
WHS	Waste handling system

DEFINITIONS

- **Cargo residues:** the remnants of any cargo material on board in cargo holds or tanks that remain after unloading procedures and cleaning operations are completed.
- **Dunnage:** loose materials used to support and protect cargo in a ship's hold.
- **Garbage:** all kinds of domestic and operational waste generated during the normal operation of the ship and liable to be disposed of continuously or periodically, except sewage.
- **Hazardous waste:** a controlled waste containing hazardous properties. This may include waste with explosive, flammable, oxidizing, irritant, harmful, toxic, carcinogenic or corrosive properties.
- **Passenger:** any person carried in a ship except a person employed or engaged in any capacity on board the ship on the business of the ship.
- **Port Waste Management Plan (PWMP):** is a plan describing how to implement the waste strategy decided by the port management
- **Port Waste Management Manual (PWMM):** is a manual produced by a port or terminal unifying their policy on waste reception facilities for vessels and outlining all aspects of waste handling from the facilities available at the location, all procedures, payment systems and waste registration requirements.
- **Oil:** petroleum in any form including crude oil, fuel oil, sludge, oil refuse and refined products.
- **Oily mixture:** a mixture with any oil component.
- **Operational wastes:** means all cargo associated waste and maintenance waste. For this purpose, cargo associated waste means all materials which have become waste as a result of use on board a ship for cargo stowage and handling and may include dunnage, shoring, pallets, lining and packing materials, plywood, cardboard, wire and steel strapping.
- **Owner:** the owner, charterer, manager or operator of the ship.
- **Ship generated waste:** all waste and residues that are generated during the service of a ship and which fall within the definitions of garbage, oil or oily mixtures, but do not include cargo residues.
- **Ship waste:** all waste, non-hazardous and hazardous, that has occurred during ship navigation, as well as the waste being transported by cargo vessels. In general, ship waste includes solid waste and liquid waste.
 - ⇒ *Solid waste:* solid municipal waste (from watercraft - this waste is similar in composition to domestic waste) and ship cargo residues (residues of any type of ship cargo in ship warehouses or tanks occurred after debarking, cleaning or washing of ship warehouses, deck or tanks, including the excess and spilled cargo during loading/discharging operations).
 - ⇒ *Liquid waste:* includes waste oils (waste lubricating oil that needs to be changed periodically to ensure the lubricating function of motors) and wastewaters. Wastewaters can be divided into oily and non-oily wastewaters. Oily wastewaters originate from engine rooms and machinery spaces, e.g. pump rooms.
- **Waste:** defined as substances or objects disposed, to be disposed or required to be disposed in accordance with the provisions of national legislation.

OBJECTIVE OF THE WASTE MANAGEMENT GUIDELINES

“To assist ports and terminals to establish a sustainable ship waste management system in their respective port”.

HOW TO USE THE WASTE MANAGEMENT GUIDELINES

Carry out the following activities:

1. Assess the existing waste handling system if any;
2. Have discussions within the port and preferably with other relevant stakeholders e.g. Environmental Authorities regarding the new waste handling system; and
3. Prepare the Waste Management Manual with all relevant information regarding the waste handling system.

DEVELOPMENT OF A WASTE MANAGEMENT MANUAL

The Waste Management Manual shall be prepared by the port. The Port will hold overall responsibility for the waste handling in the port (collection and treatment of waste and compliance with national regulations). If the operational waste handling is contracted (outsourced) to an external waste operator it is the obligation of the port to ensure, that the waste operator will comply with existing regulations, terms of reference and other important issues specified in his contract with the port.

The port will update the Manual each time it is changed or amended and distribute the revised version to the relevant stakeholders in and outside the port.

WHO SHALL USE THE WASTE MANAGEMENT MANUAL

The Waste Management Manual contains all relevant information regarding ship waste handling necessary to carry out safe and efficient waste handling in the port.

The Manual shall therefore be distributed to all relevant stakeholders inside and outside the port e.g.

- Environmental Authorities;
- External waste operator(s);
- Relevant port staff;
- Harbour master;
- Shipping companies;
- Vessel operators; and
- Vessel staff.

1. INTRODUCTION

Waste management is the collection, transport, processing or disposal, managing and monitoring of waste materials. The term usually relates to materials produced by human activity, and the process is generally undertaken to reduce their effect on health, and the environment.

The most considerable purpose of waste management plans and reception facilities is to reduce and eliminate dumping wastes illegally into the sea environment. Many examples have already demonstrated that unsatisfactory waste handling and/or even illegal dumping takes place in many ports around the world due to inefficient waste management operations, lack of control, recovery systems and inefficient information flow. The International Convention for the Prevention of Pollution from Ships, MARPOL 73/78, and European Council Directive provide an international framework on management of ship and port wastes.

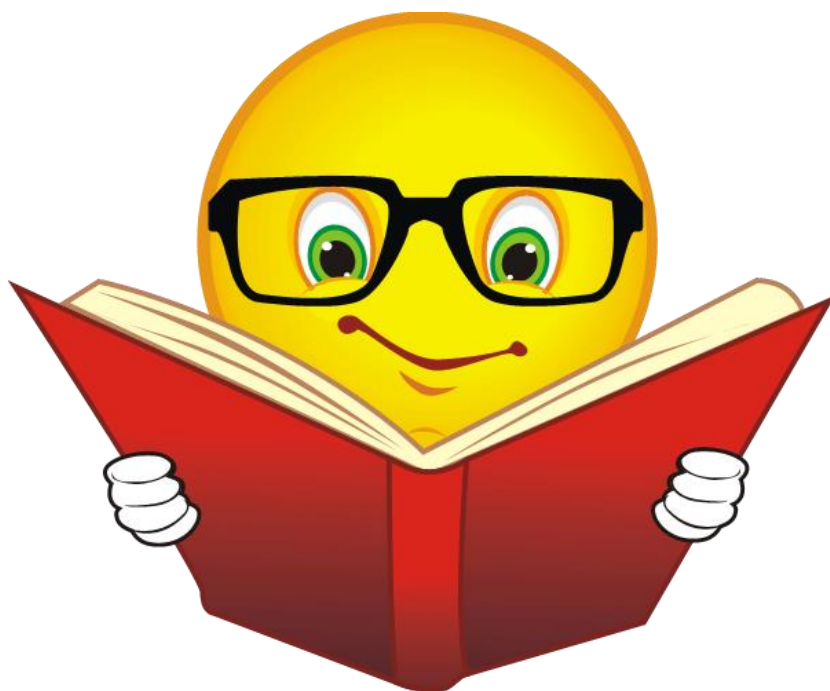
Waste management planning and its implementation is an important economic, environmental, technical and administrative issue for national and international agendas. As in the case of ports, port waste management planning and its implications form a rapidly growing subject of interest in the city management context. Because ports are sources of considerable volumes of valuable wastes, one of the main subjects of local authorities dealing with urban sustainable development matters is ship and port waste management.

National statutes, regulations and directives must also be aligned with regard to the strategies for the integrated sustainable waste management of ship and port wastes. A strategy, within the legal framework, should be designed to ensure measures providing financial and operational incentives and enabling economical and environmentally successful implementation of port waste management plans. However, many ports have not met related standards yet.

Ship and port waste management refers to the waste generated on board and by activities in the port area. The port waste management manual describes the waste streams, handling routines and provide clear instructions for the port users. Mainly, the ports are the responsible for developing and implementing their port waste management manuals and plans (PWMM and PWMP). The effectiveness of these depends on port management resources and procedures.



OPERATIONAL TOOLS TO
SECURE EFFICIENT WASTE
HANDLING IN PORTS



1. Assessment questionnaire

2. Important issues for discussion

3. Waste Management Manual

1. INTRODUCTION AND RATIONALE

These Waste Management Guidelines focuses on how to ensure that waste generated on board vessels is also collected by the port or delivered by the vessel crew to port reception facilities (PRF). The Guidelines provides practical and operational tools.

Experience from Europe shows that awareness about the necessity of waste collection in order to protect the environment is a major step forward, but also that additional measures are needed to ensure appropriate waste delivery. Recent studies from the European Maritime Safety Agency (EMSA) show, that if each individual port prepares their own specific Waste Management Manual on how to collect the waste from ships (now mandatory according to the EU Directive on Port Reception Facilities), a lot of attention about waste handling will be created. Such a Manual shall also include all necessary information for safe handling of the waste. For example, collection, treatment and final disposal procedures and will therefore make it easy for all involved stakeholders, e.g. vessel crew and waste operators to carry out a safe waste handling.

Experience from Europe also shows that the design of a “waste fee system” is a very important parameter to have vessels to deliver their waste to port reception facilities. If a waste fee system based on payment of an “indirect fee” (payment of a waste fee regardless of delivery) is implemented in a port or terminal, there will be no economic incentive for discharging waste into the river, as the fee for waste collection in the port has already been paid. An indirect waste fee can be included in existing port dues (if any) or be a stand-alone fee. This, along with a clear description of procedures and increased awareness, seems to be an efficient way to have vessels discharge waste to the PRF.

Before a Waste Management Plan can be prepared for a port, it is important to have a clear picture of the existing situation regarding waste handling. It is recommended to carry out an assessment regarding the existing situation using the attached questionnaire. Some issues and questions might not relevant for all ports and can be left out of the assessment.

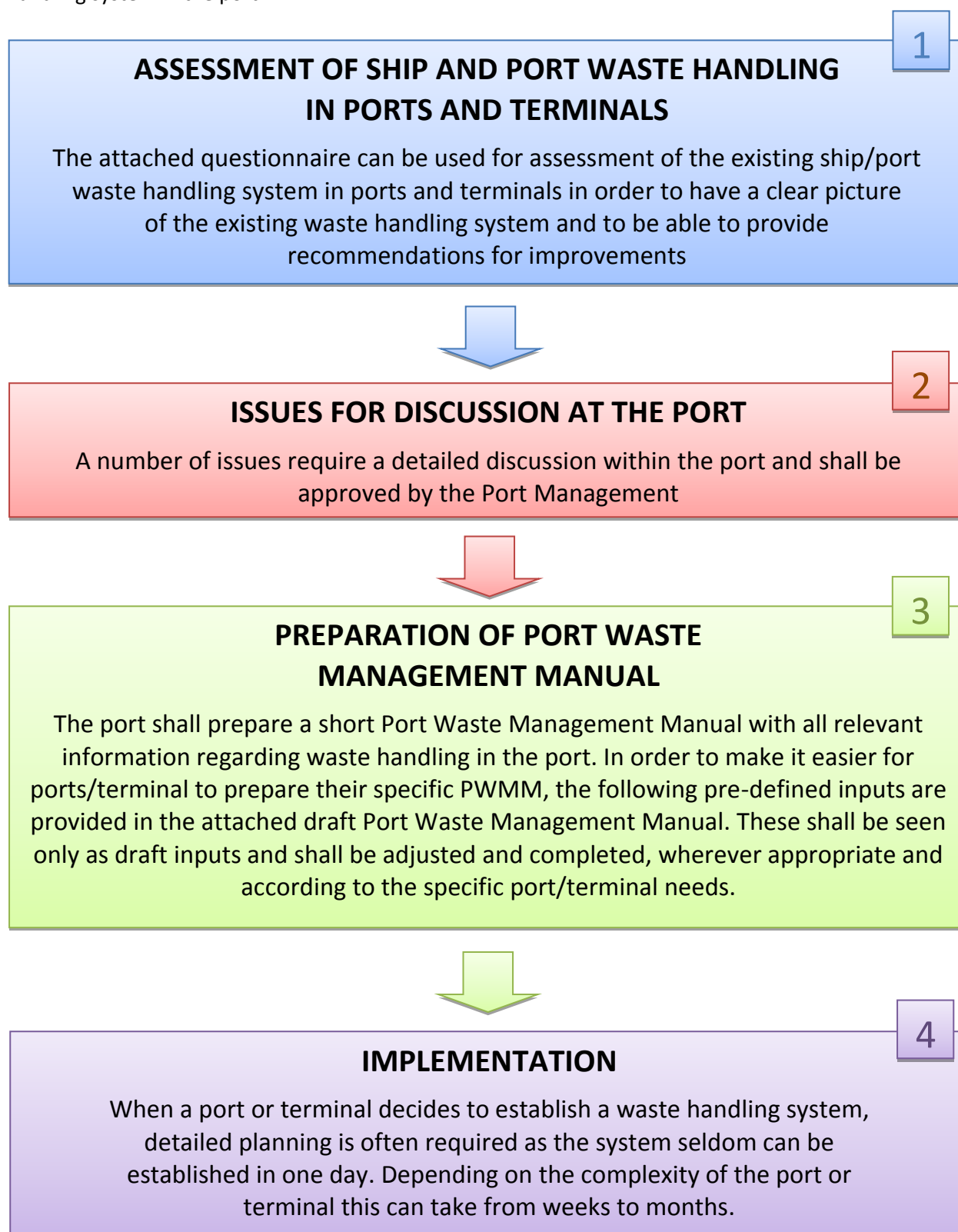
When the assessment has been carried out, it is much easier to prepare the Port Waste Management Manual, because the port now has all relevant facts and figures. A number of discussions within the port have to take place to agree on the new waste handling system and it is also important that the Manual is being prepared with full support from the Port Management. The format of the Manual can vary, but the attached format is based on waste manuals from a number of European ports. A standard text has been prepared as part of the Manual, so what needs to be done, is to enter the specific information for the port in question. If necessary, the standard text can also be changed.

It is however, very important that the person(s), who drafts the Waste Management Manual carefully reads the text and makes the necessary corrections.

When the Manual has been prepared and approved by the Port Management it shall be presented and distributed to relevant stakeholders.

KEY STEPS LEADING TO THE PREPARATION OF A PORT WASTE MANAGEMENT MANUAL

Key steps in the preparation of a Port Waste Management Manual and in ensuring a sustainable waste handling system in the port:



STEP 1 - ASSESSMENT OF EXISTING SHIP- AND PORT WASTE MANAGEMENT SYSTEM

QUESTIONNAIRE FOR THE ASSESSMENT:

ASSESSMENT BY:.....
DATE:
PORT/TERMINAL:.....
PERSONS MET (name, department, and function):.....
.....
.....

Please fill in according to your best knowledge in cooperation with port/terminal managers and staff responsible for handling ship generated waste, port waste and cargo residues).

This assessment will be used in the preparation of Port Waste Management Manuals and Plans towards full compliance with national legislations and to ensure a modern and competitive port/terminal for waste handling.

PLEASE NOTE:

- All figures for liquid waste shall be quoted **in liter or m³**;
- Garbage shall be quoted in preferably **kilo or m³**;
- Figures should include all waste collected **from ships** within the port/terminal (**all terminals within the port including any shipyard**), **both ship generated and cargo residues as well as port generated waste**;
- Waste generated from other industrial activities within the port/terminal area shall be included here, but registered separately;
- Information regarding cargo residues shall most likely be obtained from terminal operators; and
- Regarding definition of waste types: **We refer to definitions applied by MARPOL 73/78.**

1. Ship Waste and Port Waste - Actual Delivered

SHIP WASTE	Year 20XX
Oily waste (bilge, sludge and other liquid oily waste), liter or m ³	
Solid oily waste (sludge), kilo or m ³	
Solid waste (domestic/household waste),garbage, kilo or m ³	
Other waste (please specify), m ³	
PORT WASTE	Year 20XX
Oily waste, liter or m ³	
Solid waste, kilo or m ³	
Hazardous Waste, kilo or m ³	
Other waste (please specify)	

2. Port/Terminal Operations and Traffic

Please state the approx. number of calls in 20XX:

Vessel type	No. of calls in Year 20XX	Expected no. of calls 20YY
Seagoing vessel (bulk, container)		
Ferries/passenger ships, cruise ships		
Tanker vessel		
Chemical/product tanker vessel		
Inland waterway vessel		
Other		

Please confirm type of port/terminal operations:

Type	Yes (Y) or No (N)
Dry cargo bulk terminal	
Container terminal	
Chemicals	
Ferry/cruise/passenger terminal	
Oil/products (loading/unloading)	
Other – specify	

3. Waste Reception Facilities Available in Port/Terminal for each Port Waste Type

Who provides the OWNERSHIP of reception facilities (port/private)?

Facilities	Waste type	Private external operators	Port	NA
Collection	Oily waste			
	Garbage			
	Other waste			
Treatment	Oily waste			
	Garbage			
	Other waste			
Final disposal	Oily waste			
	Garbage			
	Other waste			

Who provides OPERATION of these facilities (operation-port/private)?

Facilities	Waste type	Private external operators	Port	NA
Collection	Oily waste			
	Garbage			
	Other waste			
Treatment	Oily waste			
	Garbage			
	Other waste			
Final disposal	Oily waste			
	Garbage			
	Other waste			

Means of collection:

Please indicate/confirm waste collection method for the following waste types

Waste type	Barge	Truck	Direct pumping	Other
Oily waste				
Garbage				
Other waste (specify)				

Treatment/final disposal(Please indicate location of treatment sites)

	Yes (Y) or No (N)	Who is in charge of operation?
Facilities inside the port/terminal		
Oily waste		
Garbage		
Others – specify		
Facilities outside the port		
Oily waste		
Garbage		
Others – specify		

4. Waste Registration (WR) Procedure

Questions	Answers
Does the port/terminal have a waste registration system/form	
Who receives the waste registration form from calling ships	
Is waste registration mandatory for all calling ships?	
What is the purpose of the registration form (if in place)? (please tick one or more options):	
<ul style="list-style-type: none"> - Preparation of delivery - Monitoring - Invoicing - Statistics - Other 	
Is any receipt issued after ship waste collection?	

5. Type of Waste accepted from Ships by the Port/Terminal

Please confirm types of waste **accepted** by the port

Type	Yes (Y) or No (N)
Oily waste	
Solid waste/Garbage	
Other liquid waste (specify)	
Other waste (please specify)	

6. Payment System in Port/Terminal (Cost Recovery/Waste Fee)

PAYMENT System.

Describe the system in place if any, regarding:

- Free of charge;
- What is paid for (waste types/volume)?;
- Who pays who?;
- Included in any port/terminal dues or paid separately?;
- Any limitation in type of waste accepted/volume?; and
- Other relevant info.

7. Monitoring and Inspection

Please investigate if there are any systems in place for monitoring and inspection of calling ships regarding ship waste collection.

If there are (maybe national authorities) please indicate who the responsible authority is.

Please provide a short description of the procedures:

8. Please attach the Organization chart of the Waste Handling Unit, if any.

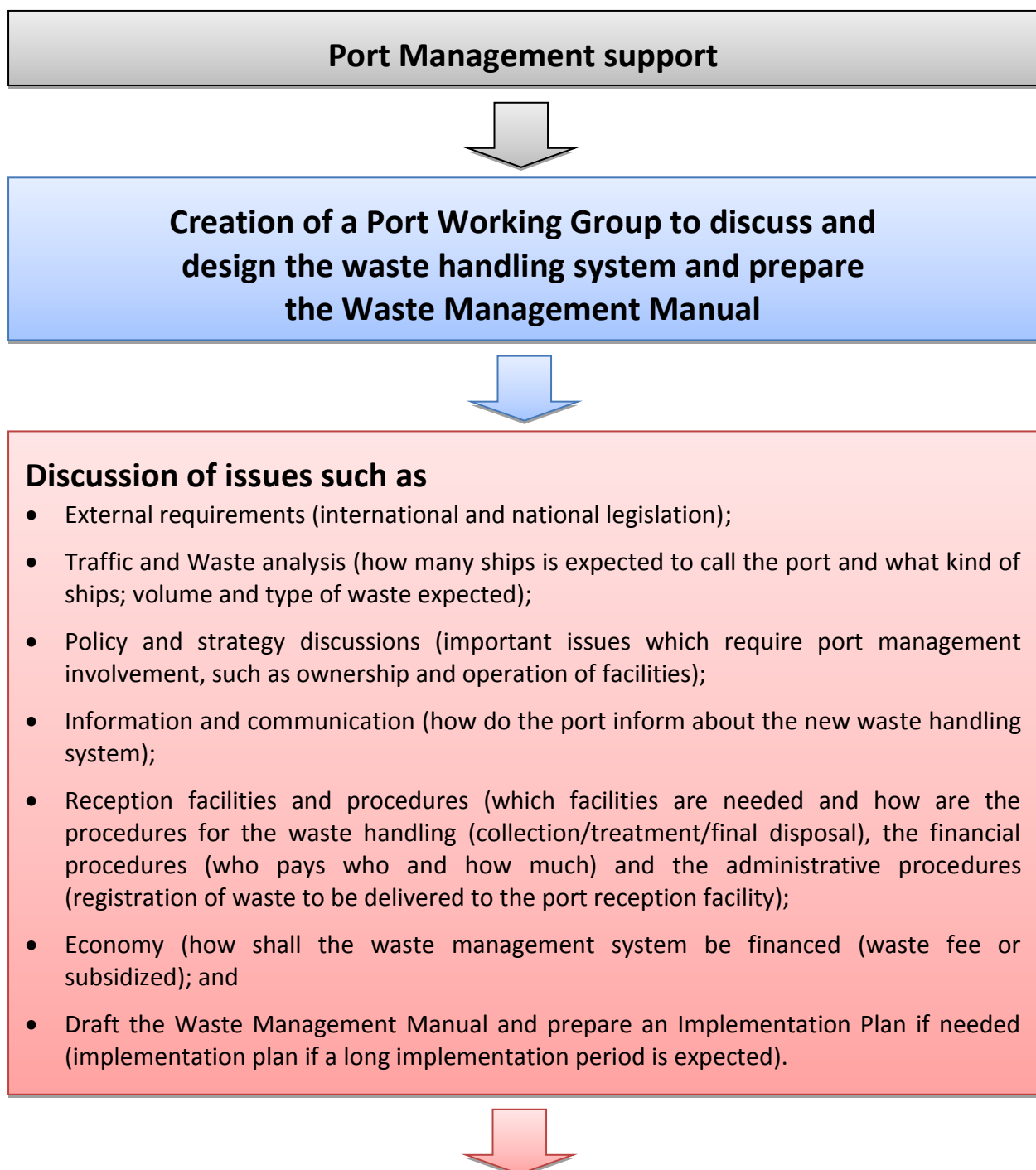
9. Please list the name of national legislations, regulations of municipality or current port/terminal regulations for the handling of ship-generated waste.

No.	Legislation /regulations
1	
2	
3	
4	
5	
6	
7	
8	

10. Other comments

2. STEP 2 - ISSUES FOR DISCUSSION WITHIN THE PORT

Individual ports will have different approaches on how to prepare their respective Waste Management Manual. Below is therefore listed some of the most important subjects that need clarification and discussion, before the Waste Management Manual can be prepared.



Have approval from Port Management



Draft relevant documents/contracts



Prepare the final Waste Management Manual



**Prepare Implementation Plan if needed
(long implementation period/equipment/construction)**



Distribute to relevant stakeholder, prepare information meetings regarding the new system and put the WMM on the port web site

3. STEP 3 - THE WASTE MANAGEMENT MANUAL

As explained earlier in these Guidelines, the purpose of preparing the Waste Management Manual (WMM) is to provide all relevant information to everyone involved in waste management in the port or terminal.

A WMM will be different for each port or terminal with different information, but the structure (format) can be the same for all ports and terminals.

Therefore, a predefined structure/format for a WMM is presented below. The purpose is to make it easy for each individual port or terminal to prepare their own specific WMM.

In the predefined format presented below, the port or terminal shall **read, adjust and enter** the relevant information regarding waste handling in their respective port into the WMM.

In the predefined format, there are **yellow highlights**, where the port or terminal shall pay specific attention.

The WMM shall describe all procedures related to handling of ship waste, cargo residues and port waste in the port/terminal.

The PWMM shall be precise, short and to the point.

So:

1. Make your assessment of the existing waste handling system in your port or terminal.
2. Carry out relevant internal port discussions
3. Use the pre-prepared Waste Management Manual below. Adjust and fill in the relevant information for your port or terminal. You can then print it out and you have your Waste Management Manual.
4. Distribute it to relevant stakeholders involved in waste management in your port or terminal.

THE WASTE MANAGEMENT MANUAL

For port/terminal: _____

CONTENTS

- Section 1:** Introduction, abbreviations, definitions and important notes
- Section 2:** Contact information of all organizations involved the port or terminal waste management system and distribution list
- Section 3:** Overall description of the waste flow, payment system, documentation and data registration
- Section 4:** Waste types accepted at the port
- Section 5:** Mandatory waste registration
- Section 6:** Description of the roles and responsibilities for the involved persons/organizations
- Section 7:** Description of the Service Charges
- Section 8:** Standard forms

Prepared by: _____

Name and position

Date: _____

Date

Distributed to: _____

Names and organisations

SECTION 1: Add and revise:

INTRODUCTION, ABBREVIATIONS, DEFINITIONS AND IMPORTANT NOTES

Introduction

In order to comply with National Legislation and International commitments, the [redacted] Port or terminal has prepared a Waste Management Manual (WMM), which describes in details all aspects of the waste handling system in the port or terminal area. Waste includes ships waste, cargo residues but can also include waste from the port or terminal.

This manual applies to all vessels and its crew calling at the port or terminal, all organizations and service providers, which are involved in the port waste handling system.

The [redacted] port or terminal is the main coordinator of the waste handling system and the carrying out of enforcement functions for compliance with the requirements of the system.

As required, the port or terminal prepares relevant changes and updates these in the WMM, Furthermore, the port ensures their placement on the port web site (if available) or ensures sufficient communication to relevant stakeholders.

Important Notes

- In accordance with National as well as Port Regulations, the disposal of ship-generated wastes and cargo residues to reception facilities is mandatory, if the next port of call is unknown or the volume of the ship's storage capacity is not sufficient for accumulation of the waste during the voyage to the next port of call.
- The "WASTE REGISTRATION FORM" (WRF) shall be filled in by the ship master at arrival and submitted to the Port responsible person. For a more detailed description please refer to Section 5.
- There are some limitations in the volume of waste accepted under the Service Charge (Section 7).
- Disposal of waste from a ship is available seven days a week between 7 am and 7 pm.
- This Manual concerns the territory and water area of the [redacted] Port.

ABBREVIATIONS

CR	Cargo Residues
EC	European Council
IMO	International Maritime Organisation
MARPOL	International Convention for the Prevention of Pollution from Ships
PWMP	Port Waste Management Plan
PWMM	Port Waste Management Manual
SGW	Ship Generated Waste
WMP	Waste Management Plan
WRF	Waste Registration Form
WHS	Waste handling system

DEFINITIONS AND EXPLANATIONS

"Bilge water" means the oily water accumulated mainly in the bilge well of a ship's machinery space.

"Cargo residues" shall mean the remnants of any cargo material on board in cargo holds or tanks, which remain after unloading procedures and cleaning operations are completed.

"Collection of waste" - activities associated with the receiving/disposal, accumulation and placement of waste in designated areas or objects, including sorting of waste for recycling or final disposal.

"Garbage" - waste stored on board in garbage bins or plastic bags e.g. plastic, glass, paper, aluminum cans, ash, food waste, etc.

"Hazardous waste" - any harmful substances, which have such physical, chemical, biological or other dangerous properties, which create or may create a substantial risk to the environment and human health.

"Liquid oily waste" - any fluid mixture containing oil residues with water and mechanical impurities, which were formed during the operation of the vessel. Such as: bilge water, waste lubricating oil, oil residues from the fuel purification, water from the slop tanks, etc.

"Penalty fee (fine)" – payment applied for all categories of ships if the irregularities of WMM are identified.

"Port Waste" - waste generated inside the port area due to various kind of port operations

"Port reception facilities" - any facility, which is fixed, floating or mobile and capable of receiving ship-generated waste or cargo residues that can accumulate in vessels during their operation,

"Recycling of waste" - use of waste as secondary material or energy resources.

"Indirect service charge" - a special service charge e.g. part of any existing port due, which shall finance the total cost of ship waste handling (collection, treatment and final disposal). The service charge is paid regardless of waste delivery (indirect).

"Sewage" black and grey water

"Solid oily waste" - any non-fluid oily wastes, which were formed during the operation of the vessel or oil spills (oil sludge from the cleaning of fuel and oil tanks, oily rags, sand, sawdust, oil and fuel filters, etc.).

"Ship-generated waste" - all waste, including sewage, and residues other than cargo residues, which are generated during the service of a ship and fall under the scope of Annexes I, IV and V of MARPOL 73/78;

"Waste operator" - a company or organisation, which performs waste collection and other sanitary services in accordance with the existing agreements with the Port.

SECTION 2: Add and revise:

CONTACT INFORMATION

The following table shows the Port, Companies (e.g. waste operators) and Shipping lines/agents, which are involved in the Waste Management Systems.

PORT OR TERMINAL DEPARTMENTS CONTACT INFORMATION

COMPANIES AND WASTE OPERATORS CONTACT INFORMATION

SHIPPING LINES/AGENTS CONTACT INFORMATION

SECTION 3: Add and revise:

SHORT DESCRIPTIONS (MAX 10 LINES) OF THE:

- **WASTE HANDLING SYSTEM;**
 - **PAYMENT SYSTEM; AND**
 - **WASTE REGISTRATION SYSTEM.**
-

Waste Handling (recommendations can also be found in Part 1)

Collection of:

Oily waste: Pumped from vessel slop tank to buffer tank within the port area, to special waste collection vessel or into drums, which are then taken to port area.

Garbage: Segregated and packed in bags and taken to defined port area.

Other waste: Collected according to port regulations and specifications.

Treatment of:

Oily waste: Describe according to waste operator method of treatment.

Garbage: Collected and taken to municipality land fill.

Other waste: Describe according to waste operator method of treatment.

Payment system (Ship waste only):

Who pays who? An indirect Service Charge shall be paid by **all** vessels calling the port or terminal regardless of waste delivery, to the port or terminal management, who will compensate the waste operator. Included in the Service Charge is unlimited discharge of garbage and oily waste. Exempted from the indirect service charge are tugboats and smaller vessels (less than 50 ton).

Waste Registration (see section 8), (Ship waste only):

Who fill in the waste registration form (WRF) and who receives it? The waste registration shall follow the requirements outlined by the Inland Waterway Transport Department. The ship master of the vessel shall fill in the WRF and deliver it to the port or terminal management latest at arrival. The port or terminal management will distribute to waste operator and other relevant authorities

SECTION 4: Add and revise:**WASTE TYPES FROM VESSELS AND TANKERS ACCEPTED BY THE PORT**

The port accepts the following waste types from ships:

WASTE TYPE	ACCEPTED BY THE PORT
OILY WASTE	
Oily waste water (bilge and slop)	Yes
Lubricants	Yes
Other oily waste e.g. sludge and rags (excl. cargo residues)	Yes
GARBAGE	
Plastic	Yes
Metal	Yes
Glass	Yes
Food waste	Yes
Wood	Yes
Packaging	Yes
Other non-hazardous waste	Yes
CARGO RESIDUES	
Oily cargo residues	Yes
Noxious Liquid substances *	Yes, but shall be discharged to the chemical terminals
Other cargo residues **	Yes
HAZARDOUS WASTE	No, or only according to special agreement

*Pre-wash and other liquid noxious substances shall be taken by the chemical terminal to which the ship unloads

**Other cargo residues can be liquid residues other than oily cargo residues

SECTION 5: Add and revise:

MANDATORY WASTE REGISTRATION (SHIP WASTE ONLY)

Ship Waste Registration:

- A. The filling in of the Waste Registration Form is mandatory for all calling ships falling under the below specifications:
- General cargo ships, container ships, bulk cargo ships, oil tankers and LPG/LNG tankers with over 150 tons capacity
 - Passenger ships (tourist or pleasure boats) with over 50 persons/seats
 - Fishing ships with engine over 150 horse power
 - Dredging ships (sand and rock), salvage ships and poling ships with engine over 150 horse power
 - Tugboats / Pushing boats with engine over 150 horse power
 - Ferry boats and mobile floating barges with over 50 persons/seats
- B. The Ship Master shall fill in the Waste Registration Form (WRF) at latest upon arrival at the port (Section 8).
- C. The Ship Master is responsible for the accuracy of the information provided in the WRF.
- D. The Ship Master shall keep a copy of the WRF until next port of call.

The Waste Registration Form (WRF) proposed in Section 8 can be used

SECTION 6: Add and revise:

DESCRIPTION OF THE ROLES AND RESPONSIBILITIES OF THE INVOLVED PERSONS/ORGANIZATIONS IN THE WASTE HANDLING SYSTEM IN THE PORT

TASKS AND RESPONSIBILITIES OF THE PORT OR TERMINAL

(Ship waste and port waste)

The Port shall:

- Receive WRF from the ship master, analyse the data and inform waste operators about the kind of service required for each particular ship.
- Organise all waste collections together with the waste operator to ensure that the ship can comply with national regulations.
- Prepare and put into force all contracts with private waste operators if these are involved.
- Coordinate the activities of all the relevant departments in the port.
- Update the Waste Management Manual (WMM).
- Determine the Service Charge for each ship according with the requirements stipulated in Section 7.
- Include all the expenses of the Port related to waste management into the final invoice and produce it for the ship master or ship agent.
- Reimburse the private waste operators for services provided if used.

TASKS AND RESPONSIBILITIES OF SHIP MASTER

(Ship waste)

Ship Master shall:

- Follow all the international and national regulations on environmental safety and inform the Port about any problems or cases of non-compliance.
- Fill in and forward the Waste Registration Form to the responsible person in the port at arrival.
- Discharge ship's waste in compliance with port and environmental regulations.
- Ensure that segregation of Garbage is done according to port request.
- Plan waste discharge between 7.00 a.m. to 7.00 p.m., without causing delay for the waste operator.
- Cooperate with any inspection department (provide access to ship documentation etc.)

Ship Master is responsible for information providing timely and accurate information in WRF as well as for compliance with the international and national regulations on environmental safety during ship stays in the Port.

TASKS OF THE WASTE OPERATORS - PORT OR PRIVATE

(Ship waste and port waste)

The Waste Operator shall:

- Receive the WRF, plan for waste collection and collect the waste from the ship according to the standards set by the port.
- Keep the WRF for a year in order to prepare annual statics.
- Ensure that the waste discharge is in compliance with port and environmental regulations
- Inform the Port about any problems and situations of non-compliance.
- Register all types and volume of waste collected.

Waste taken from the ship becomes the property of the waste operator immediately after having received it.

The Waste Operator shall (port waste):

- Collect waste from the port area according to specifications provided by the port.

The waste operators are fully responsible for waste management in compliance with legislation and regulation currently in force. If **private waste operators** are used, and their services for waste collection are not provided according to these regulations, the Port has the right to terminate the contract and/or impose a fine.

TASKS AND RESPONSIBILITIES OF INSPECTION AUTHORITIES

(Ship waste and port waste)

Inspection Authorities can be for example “Port State Control”, “Harbor Master” or “Environmental Authorities”.

Inspection Authorities shall:

- Register arrival and departure of ships.
- Inspect ship documents and the ship environmental protection equipment.
- Control whether the ship follows the requirements of the Port Waste Management Manual, and take all the necessary steps of corrective actions.
- Inform ship-owners and next port of call about any problems identified on board the ship and waste volume left on board after the ship has left the port.
- Inspect the port area and the waste handling within the port.

SECTION 7: Add and revise:

DESCRIPTION OF THE PAYMENT SYSTEM (SERVICE CHARGES)

(Ship waste only)

Below is described the proposed Service Charge system (payment for waste collection services) for collection and treatment of ship waste.

Please note that **this system only deals with the payment from ships** for the waste collection (delivery of ship waste to the reception facilities in the port) and **not** for what has been generated within the port area (port waste).

PAYMENT PRINCIPLE:

The proposed payment system is based on “the polluter pays principle”, meaning that the waste generator must pay for the collection, treatment and final disposal of the waste, i.e. the ships.

The payment system is mostly based on the “indirect fee principle”, meaning that all ships in principle pays a Service Charge based on ship, size e.g. GT (Gross Tonnage) when mooring in the port regardless of any waste delivery.

Some ship categories shall be exempted from paying e.g. port tugboats and smaller port vessels e.g. below 150 tonnes.

Service Charge system design:

All ships (except those exempted) calling at the port shall pay a Service Charge (indirect fee) based on ship size (GT).

Under this charge the ship can discharge certain volume of:

- Oily waste (sludge and bilges)
- Garbage

Ship size category	Up to 150 ton	150 ton and up
Oily waste m ³	Unlimited	Unlimited
Solid waste (household/domestic waste (garbage), kilo	Unlimited	Unlimited

For the calculation of the indirect Service Charge it is important that the **total yearly cost** of the waste handling system equals the **total Service Charge revenue collected**.

Indirect Service Charge	Ship size, Up to 150 ton	150 ton – up, USD/GT
USD/Ton	0	Xxx

If the ships want to deliver **wastes** other than those accepted under the indirect Service Charge, e.g. for cargo residues such as wash water, ballast water, cargo sludge, hazardous waste and chemical residues, these discharges will be charged according to the following table:

Waste type	Special charge for delivery of other wastes not accepted under the indirect Service Charge
Oily cargo residues e.g. dirty ballast/Wash water	USD/m ³
Prewash liquid noxious substances	Always to chemical terminal
Other cargo associated waste	After special agreement
Batteries	USD/kg
Fluorescent lamps	USD/pc
Medical waste	USD/kg
Other hazardous waste	After special agreement

FINES

Fines are applied for all categories of ships, if the following irregularities are identified:

Irregularity	Fines (Penalty Charges)
Delivery of waste outside the normal working hours (all days between 7 am and 7 pm)	USD/event
Lack of segregation of Garbage according to port regulations	USD/event
Delay of waste operator of more than 1 hour -the ship is not ready to discharge waste	USD/event

NOTE:

- All payments shall be collected by the port.
- The port will reimburse any private operator used.
- If the port decides to use external private operators, annual agreement with these operators shall be prepared on pricing. Annual adjustment of the above “pricelist” and indirect Service Charge.

SECTION 8: Add and revise:

STANDARD FORMS

Waste Registration Form:

The filling in of the WRF is mandatory for all ships, except pleasure vessels, ferries, tugboats and smaller ships (up to 150 tonnes).

KINGDOM OF CAMBODIA

NATION RELIGION KING

WASTE REGISTRATION FORM (WRF)

To be delivered to the Port or terminal

Date: Name of Port, Terminal or Anchoring Place:

Information about vessel or tanker and waste delivery			
Name of vessel or tanker	Kind of ship	Gross tonnage	
Vessel length	Ship registration N°	Issued by	
Name of captain		Phone N°	
Name of ship's agent in charge (If any)		Phone N°	
Date and time for delivering waste			
Type of waste to be delivered			
Garbage waste	Amount in kg	Hazardous waste	Amount in m ³
Plastic, glass and metal waste		Oily waste/slop	
Food waste		Lubricants	
Wood waste		Solid oily waste	
Paper waste		Oily sludge	
Others (Specify)		Others	
Total amount		Total amount	
Cargo Residues - Please specify	Amount in m ³	Hazardous waste	Amount in kg/m ³
		Used batteries	
		Others (Specify)	
Total amount		Total amount	

Submitted, Date:

Received, Date:

Signature of Captain:

Signature, Port or Terminal: