# **Waste Management Plan**

Port of Pori Ltd

10.11.2016

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## 1. Introduction

According to the Maritime Environmental Protection Act (1672/2009), it is the port authority's responsibility to draft a waste management plan, which must be checked after approval, if the quality, amount or waste management of the waste left in the harbour changes considerably. According to the environmental permit, the port must also submit notifications every three years if there are no changes in the waste management plan. This waste management plan describes the waste reception of vessels visiting the Port of Pori, as well as the waste reception and waste handling arrangements related to Port of Pori Ltd's own operations. This waste management plan has been compiled while taking into consideration the type of vessels visiting the harbour.

The companies operating in the port are responsible for their own waste management, mainly in accordance with the waste management plan compiled by the Waste Management Board of the Pori region.

## 2. Legislation

The primary principle of the legislation is to reduce the amount of waste created, and its harmfulness. However, if waste is created, it must primarily be prepared for reuse, or alternatively, recycled. If recycling is not possible, waste must be utilised in some other way, including recovery for energy. If such recovery is not possible, waste must be disposed of. The principle of vessel waste management is the transportation of waste to the shore, for further handling. Before arriving at the port, vessels are obliged to notify the port regarding any vessel waste and cargo waste they will be leaving on shore, and this waste must be left on shore before the vessel departs from the port. A fee must be charged for vessel waste, regardless of whether the vessel leaves waste at the port or not. However, the Finnish Transport Safety Agency Trafi may grant an exception for the obligation to leave waste at the port, in case the vessel is in regular traffic, and it has an agreement with a valid waste management company or port.

The following laws and regulations govern waste management arrangements in ports:

#### General waste management provisions

Waste Act (646/2011)

Government Decree on Waste (179/2012)

Environmental Protection Act (86/2000)

Environmental Protection Decree (169/2000)



Waste management provisions issued by the Waste Management Board of the Pori region (892/2015)

#### Waste management provisions for vessels and ports

Maritime Environmental Protection Act (1672/2009)

Government Decree on Maritime Environmental Protection (76/2010)

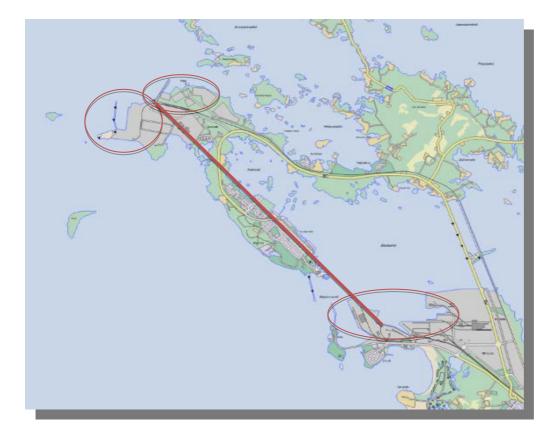
#### International food waste

Regulation (EC) No. 1069/2009 of the European Parliament and of the Council laying down health rules as regards animal by-products and derived products not intended for human consumption and repealing Regulation (EC) No. 1774/2002 (Animal by-products Regulation)

The Ministry of Agriculture and Forestry Decree (1193/2011) on certain animal by-products and the supervision of the handling of relevant products, and the use of certain by-products

# 3. Different harbour areas of the Port of Pori, general description

The Port of Pori is situated at the coast of Selkämeri, near the mouth of the Kokemäenjoki, about 20 kilometres west of Pori. The port includes three harbour areas: the Mäntyluoto harbour area, the Tahkoluoto deep-water harbour and the Tahkoluoto oil and chemical harbour, about 6 kilometres from Mäntyluoto.





## 4. Waste management plan

#### General

The Port of Pori is a general harbour with three harbour areas: the Mäntyluoto harbour area, the Tahkoluoto deepwater harbour and the Tahkoluoto oil and chemical harbour. At Mäntyluoto, maritime traffic mainly consists of bulk cargo, general cargo and containers, with small amounts of liquid bulk also included. The Tahkoluoto deep-water harbour is mainly visited by bulk carriers. The oil and chemical harbour is a loading and unloading point for liquid bulk.

In 2015, the following types of vessels visited the Port of Pori: general cargo ships 59%, tankers 11%, container vessels 10%, dry bulk carriers 8%, chemical tankers 6%, as well as other vessel types, amounting to a total of 6% of the traffic. Altogether 580 vessels visited the Port of Pori. The waste management plan applies to the majority of these vessels. As far as regular shipping is concerned, there is a container vessel that travels between Mäntyluoto and Hamburg, which has an exemption from the Finnish Transport Safety Agency Trafi regarding the obligation to leave waste at the port. There are also other vessels that occasionally visit the port, which have an exemption granted by Trafi regarding the obligation to leave waste at the port. These vessels leave their waste only in that harbour with which they have an agreement.

The port is open for traffic 24/7/365. Port operations mainly take place in morning and evening shifts: between 07:00 - 24:00 on weekdays, and between 07:00 - 15:30 on Saturdays. Port operations are carried out at other times if the loading or unloading of the vessel is continuous, for example like the unloading operations of oil tankers, which usually commence as soon as the vessel arrives. Any waste generated during the loading and unloading operations is collected at the operator's own waste collection points.

In accordance with the ISO14001 standard, any development suggestions, complaints, safety observations and other notifications related to waste management are handled in the port's resource planning system.

#### Vessel waste

According to the current regulations, any vessel arriving at a port on Finnish territory must leave all waste and cargo waste originating from the vessel in the waste reception devices situated at the port, if such waste cannot be discharged into the Baltic Sea in accordance with the MARPOL Convention and the 1992 Helsinki Convention.

In the harbour area, there are 3m<sup>3</sup> mixed waste containers near piers, as shown on the maps. The collection containers for hazardous substances and paper/cardboard (240L or 600L) are situated in marine containers acquired for this purpose, marked accordingly, with locations shown on the map. The containers have been marked

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according to the waste management plan issued by the Waste Management Board of the Pori region. More waste collection containers will be added as necessary, when the amount of waste at any point exceeds the designated capacity.

At least 24h before arriving at the port, the vessel must notify the shipping agent about their waste management requirement. The shipping agent will submit/forward the waste notification to the Portnet-system (maintained by the Finnish Transport Agency and Finnish Customs), as well as notifying the Port of Pori if the vessel has any exceptional requirements. These might be e.g. a considerable amount of heavy batteries, or half-used paint tins. If the vessel intends to leave oily waste at the port, the shipping agent will arrange a collection using the contact information given by the port. The oily waste of the port is collected by the port's contractual partner, who will deal with the waste accordingly. In order to ensure a safe transfer, at least the following measures must be adhered to during the handling of oily waste:

- If a truck must drive so that it enters the vessel's working area, and the vessel is in the middle of loading or unloading operations at the same time, the driver must contact the work supervisor and the vessel crew before positioning hoses and the car on the pier area (common workplace safety). Efficient communication prevents dangerous situations. There must be an agreed procedure for emergency situations.
- The hoses must be in good working condition, and sufficiently long.
- The nearest stormwater drain must be covered with an appropriate drain cover.
- During the pumping operation, the driver must remain near the car, and check the tightness of the connectors.
- The vehicle must have absorbents for handling any leaks.
- In case of a leak, the pumping must be halted immediately. If any oil has leaked onto the ground or in the sea, a notice must be made to the Emergency Response Centre, ph. 112, as well as to the Port Control +358(0)44-701 2623.

During a visit to the port, the vessel will leave waste they have previously notified the port about, at a waste collection point at the port, in accordance with the sorting instructions on the container. The vessel may give medical waste to the vessel's shipping agent or to the Port Control, who will take the medical waste to a collection point in the office of Mäntyluoto Oy Hacklin Ltd/Shipping services, in the medical waste container of the Port of Pori. This container is emptied at regular intervals by the port's waste management company.



Toilet wastewater must not be discharged into the sea. The port must be notified about the vessel leaving toilet wastewater at the port 24 hours before the intended time. This waste will be collected by the port's contractual waste management partner.

If a vessel's crew is having problems sorting the waste, or if they notice a deficiency, or if they have an improvement suggestion, the crew can contact the Port Control of the Port of Pori Ltd, either directly or through their shipping agent, and the Port Control will provide guidance and assistance for solving the issue or taking it forward.

Port of Pori Ltd's contractual waste management partner records the amount and types of waste it collects in an annual report, which it will deliver to Port of Pori Ltd. Port of Pori Ltd will notify the licensing authority through an electronic system about the amount and types of waste, always by the end of February in the following year.

The primary principle of the regulations aims for the reduction in the amount of generated waste, and in harmfulness. However, if waste is created, it must primarily be prepared for reuse, or alternatively, recycled. With regard to vessel waste, the primary method is to take the waste on shore for further handling. The Port of Pori itself does not utilise or pre-treat waste.

### Types of waste without a designated reception system at the Port of Pori

For the types of waste listed below, on the vessel's request, either the Port of Pori or the vessel's shipping agent will order collection and handling from a company providing reception services for the waste in question. Because every case is different, the Port of Pori has not set a fixed price for these. The expenses arising from the services will be charged to the vessel. Any expenses incurred by the Port of Pori will be added to the service costs in accordance with the valid rates. For example, these include personnel costs. Information about the contents of these types of waste must be submitted to the Port of Pori at the time of ordering a collection.

These types are:

- Ballast water
- Washing water for tanks and cargo holds
- Exhaust gas cleaning waste
- Waste generated by cargo in the IMDG, ADR and RID category
- Cargo residues



#### Waste from Port of Pori Ltd's own operations

The Port of Pori's own operations include harbour crane operations and maintenance, vessel attachment and detachment, selling and delivering drinking water to vessels, selling and delivering temporary electricity to vessels and operators in the area, overall maintenance, electrical maintenance, and administrative work.

These operations result in different types of waste:

Used oil, solid oily waste, (cotton waste, containers, filters, etc.), used hydraulics oil, various metal parts, sand separator discharge, oil separator discharge, fluorescent tubes, energy saving light bulbs, rechargeable batteries, batteries, solid used Vaseline, paint and solvent waste, wood waste, paper and cardboard, privacy paper waste, different SER types, sand used for sanding, and rail tracks no longer in use.

Waste generated by the port's own operations are sorted according to the sorting guidelines compiled by the port. The port has waste collection points for its own operations near the maintenance rooms at Mäntyluoto and Tahkoluoto, as well as in the port building for the administration. The waste management of the Crane Office, situated at Mäntyluoto, relies on the waste management of the housing company, as well as mixed waste, paper and cardboard waste is concerned.

Privacy paper waste is taken to the privacy paper waste container at the administration's premises, which is emptied when necessary by the contractual partner, according to the Saferec collection service guidelines. Metal waste is collected on their designated pallets, and taken to be processed by Kuusakoski Oy and Stena Recycling Oy. Separators are emptied by the contractual waste management company, and as far as Mäntyluoto is concerned, taken to Fortum Waste Solutions Oy for further processing. At Tahkoluoto, all of the waste material from the separators is either returned to the customer or delivered to Fortum Waste Solutions Oy for further processing. Sand used for sanding is cleaned from debris, and used for filling in the ground inside the port area. Rail tracks no longer in use are assembled and taken to be disposed of properly.



## **Payment system**

According to the Maritime Environmental Protection Act, a fee is charged for every time a vessel visits a port, for the reception of any oily waste, solid waste and toilet wastewater originating from the vessel, regardless of whether the vessel leaves waste at the port or not (the so-called "no special fee" system).

The rates charged by Port of Pori Ltd are based on the net volume of the vessel. "No special fee" contains the normal amount of waste generated by the vessel moving from one port to another. A normal amount refers to a tank car without a trailer, for example.

Those vessels with a separate agreement on waste reception and notification constitute an exception in the payment system. These vessels will leave their waste at a designated port, and do not pay the vessel waste fee at the Port of Pori. Such exemptions are granted and managed by the Finnish Transport Safety Agency Trafi. The Port of Pori must be notified separately regarding such an exemption.

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## **Contact information**

#### **Port Authority**

Porin Satama Oy

Merisatamantie 4, 28880 Pori

E-mail: info(a)portofpori.fi

Business ID: FI26473535

#### Persons responsible for waste management

Manager, Port Services:	Pekka Friman
Phone: +358(0)44 701 2633	e-mail: pekka.friman(a)portofpori.fi
Foreman, IT, Environmental Coordinator:	Juha-Pekka Tall
Phone: +358(0)44 701 2621	e-mail: juha-pekka.tall(a)portofpori.fi
Port Control (24h)	
Phone: +358(0)44 701 2623	e-mail: valvojat.satama(a)portofpori.fi
Oily waste collections:	
E-mail: oil(a)fortum.com	

#### Toilet wastewater collection, notification 24 hours in advance

Notification to the Port Control, contact information above



#### Developing waste management

If the crew of a vessel notices any deficiencies in leaving waste at the port, or any room for improvement regarding the Port of Pori's reception equipment, they can contact the Port Control of the Port of Pori, using the contact information on the container. Alternatively, they can notify their vessel's shipping agent, who can convey the information from the vessel to the port, if so required.

The port's contractual waste management company is obliged to notify the port of any deficiencies, hazardous situations or development suggestion.

The port monitors the amount of waste at the reception points, and ensures that the reception capacity is sufficient.

### Waste delivery procedure description

The Port of Pori's contractual waste management company will transport the waste collected from the port in 2016 as follows:

WASTE TYPE	PROCESSING/NB.	RECIPIENT	END PRODUCT
PAPER/CARDBOARD	sorting	CORENSO Oy, Pori	coreboard
		Suomen keräystuote,	recycled paper
		Selluvillateollisuus	insulation
		etc. Reuse companies	reuse
ENERGY WASTE/WOOD			
WASTE		Power plants	heat, electricity
	crushing, quality	Adven Oy, Kauttua power	
	cont. at Aittaluoto's	plant Porin	
	sorting station.	Prosessivoima	
METAL		Kuusakoski Oy, Mäntyluoto	Reused raw material
			Manufacturing glass
GLASS PACKAGING		Rinki Oy, Tuottajavastuu	products
BIOWASTE	rotting	Envor Group, Forssa	biogas
			soil for landscaping
BIO 2 OF ANIMAL ORIGIN	rotting	Envor Group, Forssa	biogas
collected with packaging			soil for landscaping
MIXED WASTE	burning	Ekokem Oy, Riihimäki	heat, electricity
INTERNATIONAL BIO-			
WASTE	burning	Ekokem Oy, Riihimäki	heat, electricity
GREASE TRAP SLUDGE		Gasum Biotehdas Honkajoki	biogas
			heat, recycled materi-
HAZARDOUS WASTE		Ekokem Oy, Riihimäki	als
			raw materials metal
BATTERIES		Tuottajavastuu	etc.
STORMWATER DRAIN		Ekokem Oy, Mäntyluoto	

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SAND		
OIL SEPARATOR WASTE	Ekokem Oy, Mäntyluoto	

#### Reporting and amounts from the recent years

Port of Pori Ltd's contractual waste management companies report the quantity of different types of waste they have received to the Port of Pori. Port of Pori Ltd reports these through an electronic service used by the authorities. The amount of waste received at Mäntyluoto by the Port of Pori in 2015 was as follows:

The type and amount of waste received at Tahkoluoto in 2015:

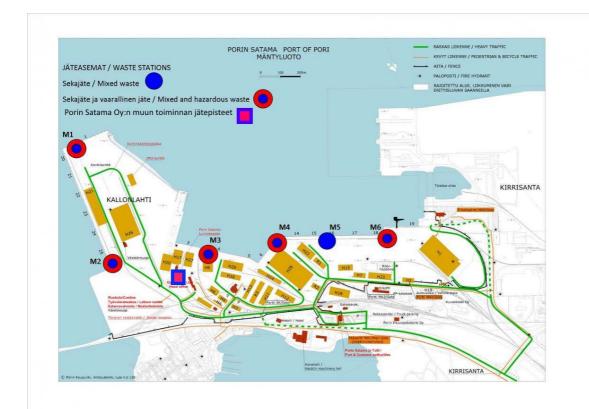
Waste type	Amount, tonnes
<i>"</i>	
Mixed waste	28.5
Paper and cardboard	0.55
Glass	0.05
	_
Waste type	Amount, tonnes
Mixed waste	120

	Waste type	Amount, tonnes
	Mixed waste	120
	Paper and cardboard	2.76
	Glass	0.25
-	Metal	0.5
-	Fluorescent tubes	0.03
	Special waste	1.2
	Used lubricant	0.16
-	Lead battery waste	0.04
-	Solid paint waste	0.85
-	Mixed SE waste	0.06
-	Oily solid paste	1.03
-	Septic tank sludge	75.00
PORT OF POR	Ship oils, reception	921.26
Merisatamanti		FI26473535
FI-28880 Pori, F	Medical waste www.portofpori.fi UN L	o <sub>0.06</sub> r code: FIPOR



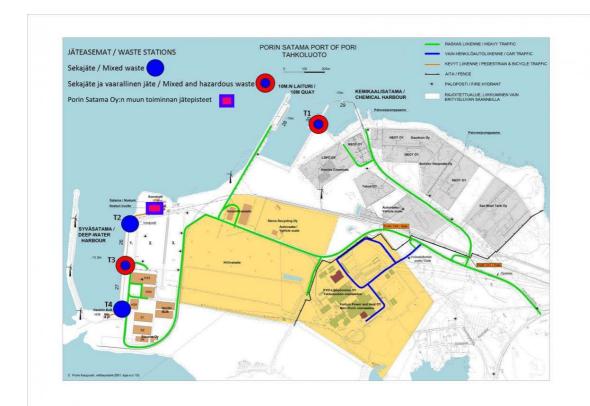
Metal	0.01
Ship oils, reception	357.28





Waste reception points at Mäntyluoto harbour





Waste reception points at the Tahkoluoto deep-water harbour and the Tahkoluoto oil and chemical harbour

