

Distribution:

Uusimaa ELY Centre

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Replaces

FORTUM POWER AND HEAT OY'S INKOO PORT WASTE MANAGEMENT PLAN

1 BACKGROUND

In accordance with Chapter 9, Section 3 of the Act on Environmental Protection in Maritime Transport, the port operator must draw up a waste management plan in order to organise the management of ship-generated waste. A marina may prepare a common waste management plan with another marina.

The reception, collection, storage, treatment and recovery of ship-generated waste must be planned with consideration to the type and size of the port and of the vessels calling at the port. Typical amount of vessels visiting at Fortum Power and Heat Oy's Inkoo port during last years has been between 60 - 100 ships annually.

This waste management plan applies to the waste management of Fortum Power and Heat Oy's Inkoo port.

2 **LEGISLATION**

Acts guiding the port's waste management and the organisation of it:

- Environmental Protection Act (527/2014)
- Environmental Protection Decree (713/2014)
- Waste Act (646/2011)
- Government Decree on Waste (179/2012)
- Act on Environmental Protection in Maritime Transport (1672/2009)
- Government Decree on Environmental Protection for Seafaring (76/2010)



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1672/2009, Chapter 10, Section 2:

"In order to cover waste reception and management expenses, the port operator shall charge a fee from every ship that calls at the port, regardless of whether or not the ship delivers any waste in the port. The fee shall cover the expenses of managing the following ship-generated waste:

- 1) oily waste;
- 2) garbage, excluding cargo residue(s); and
- 3) sewage.

In order to cover waste reception and management expenses, the port operator shall also charge a fee from those ships that call at the port and deliver cargo residues to the port reception facilities."

1672/2009, Chapter 10, Section 4:

"The Finnish Transport Safety Agency may, upon written application, grant exemptions from the mandatory delivery of ship-generated waste and cargo residues, set out in section 1, and the obligation to provide notification of ship-generated waste and cargo residues, set out in section 3, to ships engaged in regular service, meaning that they operate on a schedule or a pre-confirmed route, between designated ports and that they call at one designated Finnish port located along the route at least once every two weeks."

"Exemptions may be granted on the condition that the ship has concluded a waste management agreement with a qualified waste management company or port."

3 DEFINITIONS

Waste is any substance or object which the holder has discarded, or intends or is required to discard.

Ship-generated waste is waste originating from the ordinary operating of a vessel, including oily waste from the engine room, sewage, solid waste, and cargo waste, including cargo residue left in the vessel during the loading or unloading of cargo, support lumber, pallets, tie-down and packaging materials, plywood, cardboard, paper, steel wire and steel bands.

Cargo residue is material remnants of any cargo material on board in cargo holds that must be removed from the vessel when the unloading procedures are completed. In this waste management plan, residue that has fallen onto the dock or in the handling areas is also considered as cargo residue.

Municipal waste is waste generated by households as well as comparable waste in terms of its properties, composition and volume that is generated by industrial, service or other activities, excluding, however, hazardous waste and sewage. Municipal waste



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includes, e.g., household waste, office waste, small industry waste, general sanitation waste, and some construction waste.

International catering waste is food waste generated during the consumption or preparation of food on board a vessel arriving from non-EU countries. The wrappers, plastics and packaging around prepared food are considered international catering waste.

Hazardous waste is waste with chemical or other properties that may cause especially hazardous or adverse impacts to health or the environment.

Special waste refers to waste whose collection, transportation or handling requires special measures, such as the immediate covering of the waste in landfills, but which is not hazardous waste. Special waste includes, e.g. biowaste and sewage. Also international catering waste is included in this category.

Waste collection is the collecting, sorting or mixing of waste for transportation or utilisation or processing.

4 COORDINATION OF IN-PORT WASTE MANAGEMENT

4.1 Responsible for implementation of the waste management plan

Thomas Bergman Inkoo Shipping Satamatie 454, 10210 Inkoo tel. +358 50 33 79780, thomas.bergman@inkooshipping.fi

4.2 Responsible for waste management and the condition of the reception facilities

Jörgen Qvarnström Inkoo Shipping, Satamatie 454, 10210 Inkoo tel. +358 400 658 248, jorgen.qvarnstrom@inkooshipping.fi

4.3 Responsible for waste record book

Jörgen Qvarnström, contact information above

4.4 Ship-generated waste notifications

Jörgen Qvarnström, contact information above, shipping agents



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4.5 Supervision and responsibility

It is the port's responsibility to arrange for the waste collection from vessels and the proper, possible interim, storage in the port area, as well as to make agreements with properly permitted transportation and waste management companies.

The port is responsible for the waste generated in its own operations and for the proper handling of it. The port maintains a record of the waste received and the waste generated in its own operations as well as the forwarding of it while taking into consideration the obligations related to the handling and forwarding of hazardous waste and special waste. The port's responsibility for waste ends when a properly permitted waste management company/transportation company has received the waste.

4.6 Vessel notification procedure and mandatory delivery of waste

Vessels are obligated to notify the port of their intention to leave waste at the port 24 h prior to port entry, or, if the travel time from the previous port is less than 24 h, immediately after departing the previous port.

If the vessel's port of call is known less than 24 hours before arrival, the notification shall be given as soon as the port of call is known. Notification of vessel waste does not apply to recreational craft that can take a maximum of 12 passengers nor to fishing boats.

Mandatory delivery of waste

According to provisions, all vessels calling at Finnish ports shall, before departure, deliver to port reception facilities their ship-generated waste and cargo residues that, under the MARPOL Convention and the 1992 Helsinki Convention, must not be discharged into the Baltic Sea.

The provision on mandatory delivery of waste applies to the following types of waste:

- oily waste from machinery and cargo spaces
- bilge water, unless the vessel is fitted with a bilge water separating equipment or if the vessel is navigating exclusively in an area where bilge water separators must not be used
- cargo residues from chemical tankers of category X or Y and for which tank prewash is required
- solid waste, with the exception of food waste
- untreated sewage, if the vessel is navigating exclusively in Finnish waters

However, the provision on mandatory delivery of waste does not apply to:



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- bilge water in the bilge water holding tank, if the vessel is fitted with a bilge water separator
- cargo residues from chemical tankers of category X or Y and for which tank prewash is not required
- untreated sewage, if the vessel is navigating outside Finnish waters
- food waste, if the vessel is navigating outside Finnish waters

Reduced quantities of waste carried in the vessel's slop tanks need not, however, be delivered to reception facilities. In the case of oily waste from the engine room, for example, "reduced quantities" may be interpreted as 25 per cent of the total capacity of the slop tanks or 5 m³, whichever is the greater. If the total capacity of the vessel's slop tanks is less than 5 m³, the tanks need not be emptied until they are almost full. The vessel shall, however, always have sufficient capacity for waste generated during the following voyage.

Ship-generated waste notifications must be made through PortNet. Based on the information received from the ship, a ship owner's agent will make the notification. The vessel reports the amounts to the ship owner's agent, tel. 0207 631 500, fax 0207 631 501, e-mail: inkooshp@inkooshipping.fi.

4.7 Waste collection equipment, collection and sorting

The waste management equipment needed to implement vessel waste management is provided by a properly permitted waste management company (or companies), which is responsible for the condition of the equipment, the number of them, the markings, and the collection frequency. Possible shortcomings must be reported to the party responsible for the waste management and the condition of the reception facilities.

Vessels and those operating in the port area must collect the waste they generate to the appropriate collection equipment. All Fortum's port area waste management stations are presented on the accompanying map in Appendix 2, and the waste management stations in Inkoo Shipping's port area for vessels calling at Fortum's port are in Appendix 3. The waste station intended for ship-generated waste is equipped with instructions in Finnish, Swedish and English. Waste is separated in accordance with the waste management instructions in Appendix 1.

The oily waste of vessels (bilge water, etc.) is not stored in the port area; rather, direct transport to a hazardous waste plant is ordered for it.

Vessel sewage is also transported directly by tanker truck to a sewage treatment plant.

Likewise, other hazardous waste or special waste are not stored in the port area; instead, direct transport to a hazardous waste plant is ordered for it. The exception to this is the storage (in Fortum or Inkoo Shipping port areas) of solid oily waste, small amounts waste oil (canisters), paints, and batteries in the proper containers provided



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by a waste management company. Hazardous waste containers are marked with the appropriate warning labels.

Dedicated waste receptacles have been reserved for office waste, mixed waste or oily waste generated from the company's own operations; these receptacles are located in close proximity to where the main volume of the waste is generated.

Sanitary water from the office and social building is collected in a sealed cesspit from which it is transported to a treatment plant.

4.8 Documents, waybills

A transport document is not compiled for the collection of ordinary waste; rather, the reporting and the determination of the waste amount are based on the collected waste categories and the volumes reported on the waste management company bill.

A movement document is always compiled for hazardous waste. Movement documents are maintained for a minimum of three years.

4.9 Reporting

By the end of February of every year the port reports on the waste generated in port operations and on ship-generated waste. The reporting is made in the environmental administration's electronic system. The report is also submitted to the Uusimaa ELY Centre and Inkoo municipality's environmental committee.

4.10 Information for vessels

Vessels arriving in port receive information bulletins about the port's waste management system, as outlined in Appendix 3. The same bulletins are submitted in advance to vessels or to the shipping companies by shipping agents. The shipping agent also informs the vessels of the location of the waste stations and provides a map if needed.

5 WASTE MANAGEMENT FEES

The port charges all vessels a waste management fee unless the vessel has received a fee waiver from the Finnish Maritime Administration.

The fee is charged separately for solid waste, oily waste and grey water. The fees are based on the vessel's net tonnage. The current waste management fees are provided to shipping companies upon request.



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6 WASTE GENERATED IN PORT OPERATIONS OR SHIP-GENERATED WASTE, GENERAL OUTLINE

Waste is classified in accordance with Appendix 4 of the Government Decree on Waste 179/2012.

6.1 Recyclable waste

6.1.1 Energy waste

Class: 20 03 01, mixed municipal waste (2.33 ton, 2016)

Properties: Waste unsuitable for paper or cardboard recycling

due to degree of soiling or to some other characteristic, wood and burnable packaging,

plastic (not PVC), textiles, tarps

Generation origin and method:

Vessels, incoming goods packaging, wood, paper, construction material and other waste generated in conjunction with office work and stevedoring

Sorting instructions: Burnable waste, cardboard, soiled paper, wood, plastic

(not PVC)

Collection containers: 6-m³ orange waste receptacle,

Sign: "ENERGIAJÄTE, ENERGIAVFALL, ENERGY

WASTE"

6.1.2 Paper and cardboard

Class: 20 01 01, paper and cardboard

Properties: Clean and dry office paper

Generation origin and method:

Paper waste generated at the port office

Sorting instructions: Copy paper, newspapers and periodicals,

advertisements and brochures, coloured paper, recycled

paper and envelopes

Collection containers: Waste from port operations is collected into a 0.24-m³

green receptacle located at the port office (Appendix 2).

6.1.3 **Metal**

Class: 20 01 40, metal (7.0 ton, 2016)

Properties: Meta

Generation origin and method:





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Vessels, port's own operations

Sorting instructions: Scrap iron, scrap steel, steel wires and bands, metal piping,

metal cans and containers, and metal parts

Collection containers: 7-m³ grey roll-off dumpster

Sign: "KERÄYSMETALLI, METALL, METAL"

6.2 Landfill waste

Mixed municipal waste 200301 mixed municipal waste (5.13 ton, 2016)

Properties: Can include the following waste components: mixed office

and production waste, cleaning waste, biowaste, other

unsorted mixed waste

Generation origin and method:

Port area, vessels

Sorting instructions: All unsorted waste, no hazardous waste, no recyclable

waste, and no special waste

Collection method: Ship-generated waste is placed into a 6-m³ grey mixed-

waste container (Appendix 2)

Sign: "KAATOPAIKKAJÄTE, SOPTIPPSAVFALL,

LANDFILL WASTE"

Waste from port operations is collected into a 0.66-m³ grey collection receptacle located at the port office (Appendix

2).

6.2.1 Storm drain sludge

Class: 20 03 06, waste from cleaning storm drains (7.0 ton,

2016)

Properties: Bottom sludge from storm drains that is suitable for

landfill

Generation origin and method:

Port area's storm drain system

Sorting instructions: Emptying of drains with a suction truck twice a year

Collection method: Emptying by suction truck by the waste management

company



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6.3 Special waste

6.3.1 International catering waste

Class:

20 01 08, biodegradable kitchen and canteen waste

Properties:

Food waste generated during the consumption or

preparation of food, including the wrappers, plastics and packaging around prepared food, on board a vessel arriving

from non-EU countries

Generation origin and method:

Vessels arriving from non-EU countries

Sorting instructions:

International catering waste must be kept separate from all

other waste

Collection containers: Vessels are obligated to notify the port of their intention to leave waste at the port. Fortum Power and Heat Oy's port uses Inkoo Shipping's (adjacent port) waste container for the collection of international

catering waste.

6.3.2 Vessel sewage

Class:

20 03 04 septic tank sludge

Properties:

Vessel's "grey water"

Generation origin and method:

Vessel's toilets and lavatories

Collecting arrangements:

Vessels that want to leave sewage must provide the port with advance notification; the port receives the sewage into tanker trucks to be transported to the municipal wastewater

treatment plant.

6.4 Hazardous waste

6.4.1 Bilge water, and other oils

Class:

13 04 02, bilge oils from jetty sewers (117.1 ton, 2016)

13 02 08, other engine, gear and lubricating oils





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Characteristics:

Hazardous waste

Generation origin and method:

Ship-generated waste

Sorting instructions:

Pumped into a tanker truck, which transports the waste to a hazardous waste treatment plant; a moving document must

be compiled

Collection method:

Collected into a tanker truck based on vessel's advance

notification

6.4.2 Solid oily waste

Class:

16 07 08, waste containing oil

Properties:

Hazardous waste

Generation origin and method:

Ship-generated waste or waste generated by the port's

engine maintenance

Sorting instructions:

Solid oily waste is collected into the designated containers

Collection containers:

Ship-generated waste is collected into a 0.66-m³ red

receptacle; the receptacles are affixed with warning signs

(Appendix 2)

Waste from port operations is collected into two 0.24-m³ red receptacles. The receptacles are located at the port

office (Appendix 2).

The waste management company empties the receptacles

upon notification.

6.4.3 Waste oil, clear

Class:

13 02 08, other engine, gear and lubricating oils

Properties:

Hazardous waste, recyclable

Generation origin and method:

Waste generated by the port's engine maintenance

Sorting instructions:

Collected into a designated container

Collection containers:

1000-litre steel container emptied by the waste

management company upon notification. The container is

located in the port area at the coal work machine

maintenance (Appendix 2).



Waste management plan

Katri Nyberg

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6.4.4 Waste oil, black

Class:

13 02 05, mineral-based non-chlorinated engine, gear and

lubricating oils

Properties:

Hazardous waste

Generation origin and method:

Waste generated by the port's engine maintenance, ship-

generated waste

Sorting instructions:

Collected into a designated container

Collection containers:

Small amounts of oil from vessels are taken by canister to

the container located in conjunction with Inkoo Shipping's

repair shop (Appendix 3).

Waste generated by port operations is collected into a 1000-litre steel container, which is emptied by the waste management company upon notification. The container is

located in the port area in the coal work machine

maintenance hall (Appendix 2).

6.4.5 Sludge from oil separator holds

Class:

13 05 02, Sludge from oil separators (8.71 ton, 2016)

Properties:

Hazardous waste

Generation origin and method:

Waste sludge from the oil separator hold of the port's

engine hall

Sorting instructions:

Collected with a suction truck

Collection method:

Collected with waste management company's suction

truck and transported directly to a hazardous waste

treatment plant.

6.4.6 Paint and solvent waste

Class:

14 06 03, other solvents and solvent mixtures

20 01 27, paint, inks, adhesives and resins containing

dangerous substances

Properties:

Hazardous waste

Generation origin and method:

Ship-generated waste



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Sorting instructions:

Paint and solvent wastes are collected separately and transported to a hazardous waste treatment plant.

Collection containers:

Paints and solvents in their own containers are collected in dedicated receptacles at Inkoo Shipping's port (Appendix 3). The receptacle is emptied by the waste management

company upon notification.

6.4.7 Lead batteries

Class:

16 06 01, lead batteries

Properties:

Hazardous waste

Generation origin and method:

Vessels (occasionally)

Sorting instructions:

Transported directly to a hazardous waste treatment plant

Collection containers:

Not collected separately

6.4.8 Battery waste

Class:

20 01 34, batteries

Properties:

Hazardous waste

Generation origin and method:

Ship-generated waste, waste generated by port operations

Sorting instructions:

Batteries removed from use

Collection containers:

A dedicated receptacle for battery collection. Emptied by the waste management company upon notification. The receptacle is located at Inkoo Shipping's port (Appendix

3).

7 TRANSPORTATION OF WASTE FROM THE PORT, UTILISATION/HANDLING

Properly permitted waste management companies are responsible for waste collection. The port's responsibility for the waste ends when the waste management company has picked up the waste. The waste management company is responsible for transportation and delivery of the waste for the appropriate treatment or final disposal.

Recyclable waste

Recyclable waste is transported for recycling, either for reuse or for use as an energy raw material.



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Landfill waste

Landfill waste is transported to the waste treatment facility that has the proper handling permit. Special waste

Special waste

Special waste is transported to a waste treatment facility that has the proper handling permit.

Hazardous waste

Hazardous waste is transported to an approved hazardous waste treatment facility. Oily waste from vessels (bilge water, etc.) is, in general, picked up by Fortum Recycling and Waste Solutions.

8 WASTE MANAGEMENT EQUIPMENT

| Number of collection equipment | Waste collected | Container capacity | Container colour | Material | Location | Markings | Note |
|--------------------------------|------------------|-----------------------|---------------------|----------|---|---------------------|--------------------|
| 1 ea | Energy waste | 6 m ³ | Orange | Metal | Vessel waste reception station | Energy waste | |
| 1 ea | Metal | 7 m³ | Grey | Metal | Vessel waste reception station | Metal | |
| 1 ea | Landfill waste | 6 m³ | Grey | Metal | Vessel waste reception | Landfill waste | |
| 1 ea | Mixed waste | 0.66 m3 | Grey | Plastic | Port office | Mixed waste | |
| 1 ea | Solid oily waste | 0.6 m ³ | Red | Plastic | Vessel waste reception station Maintenance hall | Solid oily waste | Hazardous waste |
| 2 ea | Solid oily waste | 0.24 | Red | Plastic | Port office | Solid oily waste | Hazardous waste |
| 1 ea | Waste paper | 0.24 | Green | Plastic | Port office | Waste paper | |



Waste management plan

Katri Nyberg

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APPENDICES

Appendix 1 Sorting instructions

Appendix 2 Location of waste sorting stations in Fortum's port area

Appendix 3 Location of waste sorting stations in Inkoo Shipping's port area

Jätehuoltosuunnitelma Liite 1

22.5.2017

LAJITTEOHJEET / SORTERINGSANVISNINGAR / SORTINGS INSTRUCTIONS -FORTUM'S PORT OF INKOO



KYLLÄ

- pakkausmuovi (ei PVC)
 ilkainen paperi ja pahvi
 puupakkaukset

- muovi (el PVC)
 styroksi
 paperipyyhkeet
 vaatteet ja tekstiliit

- biolätteet

- biojatteet
 kyliästetty puu
 metalli, lasi, keramiikka
 kivi, hiekka, maa-aines
 PVC-muovi ≙
 vaaralliset jätteet

- hygleniatuotteet (siteet, vaipat, laastarit)
 slivousjätteet
 tupakantumpit ja tuhka

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KAATO-PAIKKAJÄTE

· kierrätykseen kelpaamaton jäte

- biojätteet
- · vaaralliset jätteet

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- autonrenkaat
- sähkö- ja elektroniikkaromu
- · kierrätykseen kelpaava jäte

L&T



- · pelti- ja metalliromu
- sälfyketöikit ja metailipurkit
- · metalliastiat
- kaapeliromu
- · tyhjät ja sivellinkuivat maalipurkit
- metall huonekalut

- ongelmajäte
 sähkö- ja elektroniikkaromu
- seosmateriaalit
- · maaliset tynnyrit tai astiat
- eristeiset ilmastointiputket

It a compatity of a self-wave





JA

- · plast (el PVC)
- atyrox
- * amutalgt papper, papp och kartong
 * träförpackningar
- pappershandduker
 idåder och textiller

- bioavfall
- impregnerat trä
 metall, glas, keramik
- sten, sand, jordämnen
- · PVC-plast &
- ferligt avfall
- hyglenprodukter (bindor, blöjor, pläster)
- rengöringsavfall · cigarettfimpar och aska

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JA

· osorterat blandavfall

- bioavfali
- farligt avfall
- · el- och elektronikskrot
- · återvinningsavfall (papper, papp, glas, energiavfall osv.)
- bildäck

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JA

- · plåt- och metaliskrot
- konservburkar och metallburkar
- metallkärl
- kabelskrot
- · tomma och stryktorra målburkar
- metallmöbler

- · farligt avfall
- · ei- och elektronikskrot
- blandmaterial
- tunnor eller kärl som innehåller målfärg
- · Isolerade fläktrör

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YES

- plastics (not PVC)
- polystyrene
 dirty paper, cardboard and carton
 wooden packagings:

NO

- biowaste

paper towels
 textiles and clothes

- Impregnated wood
 metal, glass, ceramics
 stone, sand, soil
 PVC-plastics &
- hazardous waste
- hygiene products (sanitary towels, napples, adhesive
- bandages)
 cleaning waste
 cigarette stubs and ash w.lesella-tikanoja.fi



MIXED WASTE

YES

unsorted mixed waste

NO

- blowaste
- hazardous waste
- · waste from electric and
- electronic equipment (WEEE) recyclable waste (paper, cardboard, glass, energy
- waste etc.) · car tyres

www.issella-tikenole.fl





YES

- tin and metal waste
- · tins and metal cans
- · metal ware
- cables
- · empty and brush-dry paint cans
- · metal furniture

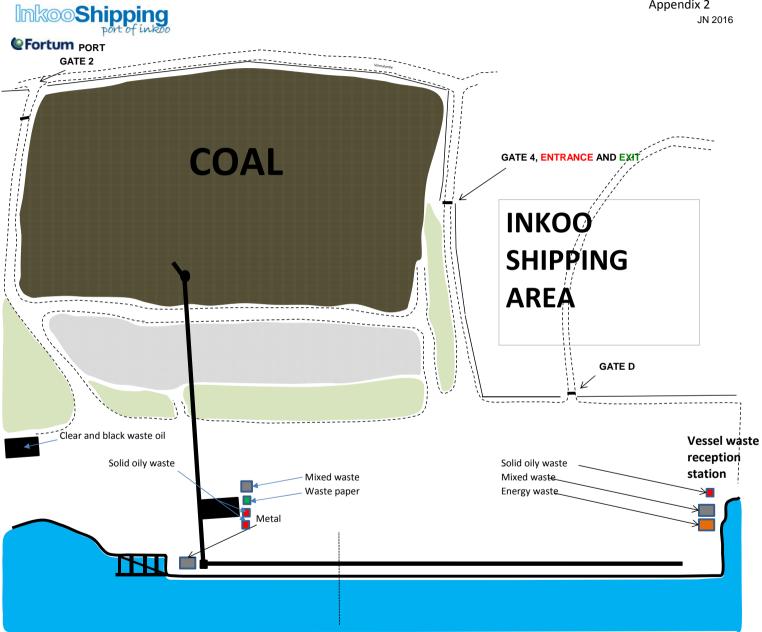
- hazardous waste
- waste from electric and electronic equipment (WEEE)

· Insulated ventilation pipes

paint-stained barrels and containers

- mixed materials
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Waste management stations in Inkoo Shipping's port area for vessels calling at Fortum's port

