

SLUDGE AND WASTE HANDLING IN MEDIUM SIZED PORTS WITHIN BALTIC SEA



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VALID REGULATIONS FOR VESSELS AND PORTS IN BALTIC SEA

Marpol 73/78

Vessels trafficking the Baltic Sea and the countries surrounding the Baltic Sea must follow MARPOL 73/78. MARPOL 73/78 is a system of marine environment protection based on UN recommendations adopted among other countries all over the world and by the countries surrounding the Baltic Sea, Finland, Sweden, Russia, Estonia, Latvia, Lithuania, Poland, Germany and Denmark.

MARPOL 73/78 defines the Baltic Sea as a "Special Area". The environmental recommendations and regulations inside a special area are strict.

Vessels are not allowed to discharge any oil or garbage in to the sea. Ports and terminals are obligated to service with reception facilities without cause any delays or extra costs for the vessels.

Helsinki Convention 1974

To protect the marine environment of the Baltic Sea area from pollution, every ship entering the area is urged to comply with the anti-pollution regulations of the HELSINKI CONVENTION. This applies to all ships, irrespective of whether or not they are flying the flag of a Contracting Party to the HELSINKI CONVENTION.

In accordance with MARPOL 73/78, under which the Baltic Sea area has been designated as a special area, far-reaching prohibitions and restrictions on any discharge into the sea of oil or oily mixtures, noxious liquid substances and garbage have been introduced by the Baltic Sea States. Any discharge of oil or oily mixtures into the Baltic Sea area is prohibited. Oil means petroleum in any form including crude oil, fuel oil, sludge, oil refuse and refined products. The prohibition applies not only to discharges from the cargo tanks of oil tankers but equally to discharges from the machinery spaces of any ship. Only if the oil content in the effluent does not exceed 15 parts per million can a discharge be permitted. The oil filtering equipment must be provided with arrangements that ensure that any discharge of oil or oily mixtures is automatically stopped when the oil content in the effluent exceeds 15 parts per million. Since 1 January 2002 also ships of less than 400 tons gross tonnage, flying the flag of a Baltic Sea State, should comply with adopted guidelines concerning holding tanks/oily water separating or filtering equipment.

Finland has prohibited the use of bilge water separators in her inland waterways and in the territorial waters, within the area 4 nautical miles from the nearest land.

Discharge of ships' wastes into port reception facilities

All ships, with some exceptions, are under an obligation to deliver waste to a port reception facility, before leaving the port, their ship-generated wastes and cargo residues that cannot be legally discharged under the global International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78), or under the HELSINKI CONVENTION.

Notification of the intended use of port reception facilities

To ensure the use and efficiency of the port reception facilities, an information sheet must be forwarded to the next port of call 24 hours in advance of the intended use of a port reception facility. The sheet must include the following information: the capacity of the waste storage tanks/bins on board; the amounts of wastes delivered at the last port of call; and the estimated amounts of wastes to be delivered at the next port of call. The notification can be also accomplished electronically via the Baltic Ports Waste Information System.

The “no-special-fee” system

According to the “no-special-fee” system, a fee covering the cost of reception, handling and final disposal of ship-generated wastes is levied on the ship irrespective of whether or not ship-generated wastes are actually delivered. The fee is included in the harbour fee or otherwise charged to the ship.

PORT OF KALMAR

The Port of Kalmar is a medium-sized port in the Baltic Sea located on the Swedish south-east coast with the island of Öland to the east.

The port handles vessels up to 10.000 tdw and various commodities such as timber products (sawn wood, timber, pulp etc), agricultural products (grain, corn, feed, fertilizers etc), petroleum products (gasoline, gas oil, various chemicals) and various bulk products (macadam, scrap, chip, calcium oxide etc total 900 000 mt/year.

Case

Port of Kalmar is like other ports within the Baltic Sea obligated to take delivery of sludge and waste from ships that handles cargoes in the port. The port is responsible to arrange and to accept sludge without extra costs (ordinary working hours only) or any delay. The vessels are often equipped with different couplings and have difficult to adopt their system to shore. Ships crew is often busy in work with cargo operation, provision of stores etc and is limited to take care of the sludge when the sludge truck arrives. Due to the ships crew is busy is it mostly the drivers in the sludge truck that connects the hose between ship to sludge truck. The connection should be placed on ships deck but is often placed in the engine room. In case of emergency, blackout would it be critical for an unfamiliar person to be inside the ships engine room.

To minimize the time and extra work for connect ship to sludge truck and the total time for delivering sludge have port of Kalmar implemented strict routines for the operation.

These strict routines have resulted to:

- Better cooperation between sludgetruck, ship and port
- Better understanding of all personnel involved in the operation
- Lower cost due to time saving
- Lower costs in fact that the company that runs the sludgetruck and take care of the sludge reduced the costs for the Port of Kalmar
- Safer work when ships crew handles all work onboard the vessel and drivers to sludgetruck and ports personnel handles all work on shore side
- The port give the vessel a good chance to deliver sludge in a safe way

SLUDGE HANDLING IN THE PORT OF KALMAR

Sludge handling

To fulfill the requirements of Marpol 73/78 and national regulations the port accepts vessels that match up to Marpol 73/78 to deliver sludge, free of charge.

Routines for sludge handling

The routines for sludge handling in the Port of Kalmar are as follows:

1. Ship or ships agents must 24 hours before arrival via fax, +46-480-451458, or e-mail kalmar.hamn@kalmar.se complete "Declaration of waste from machinery spaces" see picture 1.
2. The responsible person at the port will order a sludge truck that will receive the sludge. See picture 2.
3. The responsible person at the port will confirm the requisition with fax or e-mail to the ship or ships agent time for sludge truck alongside. See picture 3
4. One hour before the sludge truck arrives alongside the port sets out sludge-hose cart. See picture 4.
5. The ship's crew must connect the hose shipside connection to the ship, see picture 5a, the sludge hose is fitted with 2 ½" quickcoupling (camlock), and the shore side of the hose should be placed on the berth. See picture 5b and 5c. The sludge-wagon cart is equipped with a variety of connections. See picture 5d.
6. When the sludge truck arrives is it easy for the drivers to connect the ship to the sludge truck and ship starts pumping according to the drivers directives. See picture 6. The sludgetruck will stay alongside the vessel until its full (9,0m³) or maximum one hour.
7. When sludge is delivered sludge truck disconnects and delivers the sludge at reception facilities. See picture 7.
8. Ships crew disconnects the hose from ship and restores all equipment (hose, connections) at the sludge-hose cart. See picture 8.

Note: If the vessel request to deliver sludge weekdays 15:00-07:00, Saturday, Sunday or holiday or if the vessel request to deliver more than one full truck (9,0m³) the vessel will be charged for extra costs.

The hose-cart wagon is equipped with:

- 20 meters (65 feet) hose with 2 1/2 " quick lock (camlock) coupling
- 4 meters hose for manual suction (suction from trough)
- Reducer 2 ½" coupling to 10" international standard manifold coupling
- Reducer 2 ½" coupling to 6" manifold coupling
- Reducer 2 ½" coupling to 3" coupling
- 2 x 25 ltrs oil pollution absorbent
- 1 broom

KALMAR HAMN

DEKLARATION AV MASKINRUMSAVFALL DECLARATION OF WASRE FROM MACHINERY SPACES

Fartygets namn

Name of ship

Fartygets hemort

Home port of ship

Mäklare

Ship's agent

1. Hur stor kvantitet maskinrumsavfall önskas lämnas?

What amount is to be discharged?

m³

2. När önskas avlämningen ske?

When is the discharge to take place?

Datum/Date:

Klockslag/Hour

3. Är maskinrumsavfallet pumpbart?

Can the waste be pumped?

Ja/Yes Nej/No

4. Har rengöringsmedel tillförts avfallet?

Is any cleaning agent added to the waste?

Ja/Yes Nej/No

Om Ja, vilket/If Yes, what?

5. Finns andra tillsatsmedel i avfallet

Is any other additive added to the waste?

Ja/Yes Nej/No

Om Ja, vilket/If Yes, what?

6. Understiger flampunkten +60°C

Is flashpoint below +60°C

Ja/Yes Nej/No

Om Ja, vad är den/If Yes, what is it?

7. Avlämnas avfallet i fat?

Will the waste be delivered in barrels?

Ja/Yes Nej/No

Om, Ja antal/If Yes, number?

Märkning/Marking

8. Finns internationell koppling/fläns?

Is flange according to international standard?

Ja/Yes Nej/N

Om Nej, dimension/If No, dimension?

Utförande?/Type?

9. Ingår beståndsdel klassificerad som farligt gods i avfallet?

Is compound classified as dangerous cargo included in the waste?

Ja/Yes Nej/N

Om Ja, vilket?/If Yes, which?

10. Vad är avstånd mellan koppling och kaj?

What is the distance between on board connection and berth

m

11. Vem ombord är ansvarig för avlämningen?

Who on board is responsible for the discharge?

Namn/Name

Befattning/Rank

Deklarationen mottagen/Declaration received

Kalmar datum/Date

Datum/Date

Master/Chief Engineer

KALMAR HAMN

Postadress:

Box 810

391 28 Kalmar

Gatuadress:

Tullhuset

Ölandsgatan 30

Telefon:

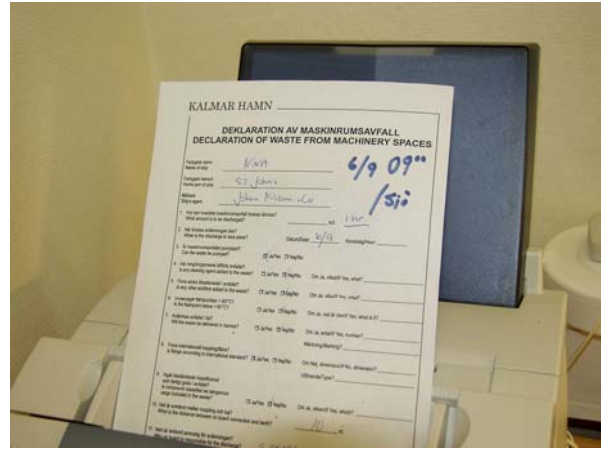
0480-45 14 50

Telefax:

0480-45 14 58



Picture 2: Sludgetruck



Picture 3: Port confirms requisition



Picture 4: Sludge-hosecart



Picture 5a: Connection onboard



Picture 5b: Ship side connection 2 1/2" quickcoupling (camlock)

Note: To avoid oilspill must the lock be in correct position



Picture 5c: Shore side coupling to be placed at berth for connection to sludgetruck

Note: To avoid oilspill must the lock be in correct position



Picture 5d: Alternative couplings for ship



Picture 6: Connection hose to sludgetruck



Picture 7: Sludge reception facilities



Picture 8: Sludge-hosecart restored condition

References:

Marpol 73/78

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