



GREAT YARMOUTH PORT COMPANY

Bunker and Oil Transfers

Guidance and Requirements for Ships

Code of Practice

Version 3 (November 2014)

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Background

This Code of Practice has been developed to ensure that oil transfer operations are conducted in a safe manner to reduce and minimise risks to personnel and the environment and applies to all parties involved with an oil transfers to or from ships within the Port of Great Yarmouth. The code should be applied on all vessels as a minimum standard for all oil transfers within the Port, including ship bunkers, drilling oils, waste oils and other oils or polluting liquids used on vessels. (Separate international requirements apply to tankers carrying large quantities of bulk oils).

The Code is applicable anywhere within the jurisdiction of the Port for any transfers, be they to or from a ship, to a shore facility or road tanker, or between two vessels.

Ship to ship oil transfers are not permitted in the River Port and ship to ship transfers in the Outer Harbour are only permitted during daylight hours by Approved Suppliers (details available from the Harbour Office). Ships' Masters should plan the bunkering operation to ensure that it is completed before sunset.

Bunkering during cargo operations should be avoided wherever possible. Where this is not possible then a specific Risk Assessment shall be carried out by the vessel. This assessment should not be limited to but shall consider:

- a. the need to provide a safe working area,
- b. protection of hoses/pipes from damage,
- c. possible conflicts between the vehicles and plant moving in close proximity to the bunker operation,
- d. safe and accessible working areas on the vessel for the bunker operation,
- e. that the movement of the vessel, due to cargo operations, may affect the bunker process and cause overflows.

Responsibilities

This Code does not relieve any person of the requirement to comply with any other statutory Act, Order or Regulation that may apply to their vessel or operation.

Bunker suppliers, vessels owners and ship Masters should follow the principles of the Bunkering Operations guidance procedures as laid out in the International Safety Guide for Oil Tankers and Terminals (ISGOTT) Part 4, Management of the Tanker and Terminal Interface, Chapter 25 and as amended from time to time.

The ship and bunker provider must exchange a Bunkering Safety Check List which shall include as a minimum those procedures detailed in the Great Yarmouth Port Bunker Safety Check List (see www.eastportuk.co.uk).

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Vessels within the seaward jurisdictional limits of the Port are not permitted to bunker either underway or at anchor.

Vessel Responsibilities:- The ship's Master is responsible for the ship bunkering operation and must appoint an appropriately qualified person to oversee the bunker operation (Responsible Person) and there shall also be a Duty Deck Officer available or in attendance during the bunker operation. Vessels carrying out bunker operations (regardless of the flashpoint of the bunkers) should display the shapes and signals as detailed in Regulation 8 of the Dangerous Substances in Harbour Areas Regulations 1987.

Bunker Provider Responsibilities:- Shore facilities, barges and road tanker operators will be responsible for complying and adhering to the appropriate practices and procedures laid down for their operations. The bunker provider must appoint a suitably qualified person (Bunker Supervisor) to liaise with the Responsible Person on the ship. In the event that the Responsible Person cannot identify or establish the Bunker Supervisor, then bunker operations should not commence or if they are under way they should cease immediately.

Procedures

Ship's Masters must:

- a) follow the reporting procedures as laid down in Appendix 1 to this document,
- b) ensure the Responsible Person on the ship is in attendance at all times during the transfer process and has the appropriate assistance to aid a safe and effective oil transfer.
- c) ensure that the Responsible Person has established and then continues to maintain communication with the on duty Deck Officer.
- d) confirm that the vessel is securely moored with suitably tensioned moorings, ready for the oil transfer operation and ensure that moorings are tended throughout the transfer operation.
- e) ensure that (except for vents designed to prevent excess pressure or vacuum within a cargo space) all openings from oil storage spaces are kept closed during oil transfers.
- f) agree in writing on the handling procedures, including the maximum loading or unloading rates taking into account the arrangement, capacity and maximum allowable pressure of the receiving tank/s; cargo lines, hoses and shore pipelines, the arrangement and capacity of the vapour venting system (if fitted), the possible pressure increase due to an emergency shut-down, the possible accumulation of electrostatic charge and the presence of responsible persons during start-up operations on board ship and ashore.
- g) agree in writing the action to be taken and the signals to be used in the event of an emergency during transfer operations.
- h) if an incident occurs during the handling which necessitates a repair to the piping system or connections; ensure such handling is stopped and not resumed until adequate safety measures have been taken with the approval of the Harbour Master's Office and, where appropriate, the Berth Operator.

(Note: a number of the items listed above may be dealt with in the ship-shore checklist)

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The ship's Responsible Person must:

- a) ensure that the correct quantity of bunkers has been ordered and agree the quantity with the onshore Bunker Supervisor.
- b) nominate the tanks to be loaded and ensure that there is sufficient capacity in the tanks to accommodate the bunkers stemmed.
- c) decide on the fill level for each tank both in terms of ullage and % capacity.
- d) agree a load rate for startup, bulk filling and a reduced rate whenever there is a possibility of the tank being unable to cope with the fill rate and always a reduced rate if the tank has reached 90% of normal capacity.
- e) frequently check that the agreed back-pressures and loading or unloading rates are not exceeded.
- f) take appropriate preventative measures to ensure that all relevant equipment (e.g. pipelines, loading arms, flexible pipes, etc.) are not damaged and continually check for signs of leakage.
- g) establish emergency stop procedures and signals with the Bunker Supervisor.
- h) In conjunction with the Bunker Supervisor complete and sign a ship/shore checklist and keep the list available for inspection.
- i) establish and maintain satisfactory communication with the Bunker Supervisor before commencing bunker operations.
- j) ensure that no tank is overfilled and warn the Bunker Supervisor whenever any tank has reached 90% capacity and/or when any topping off operation has commenced.
- k) after completion of the operation, ensure that the hoses and pipes have been drained of liquids, the pressure relieved, the piping vented and the ship's manifold blanked off.

Hoses and Pipes

The Responsible Person shall ensure that the following checks/procedures are carried out:

- a) The hoses in use are certified and legibly marked showing the type of hose, specified maximum working pressure and the month/year of manufacture
- b) Before and during bunker operations check hoses to ensure they are:
 - i. in good condition and adequate for the proposed transfer,
 - ii. adequately supported and suspended, with no sharp angles, flats or kinks,
 - iii. of adequate length and sufficient to allow for movement of the ship.
- c) Ensure there are no hose joins either
 - a. within 1 metre of the ship side
 - b. in the gap between ship and shore
 - c. within 1 metre of the quay edge,
- d) Any hose joins shall be made using the appropriate gaskets and every bolt hole in each flange connection shall be utilised with appropriately tightened bolts. (Where quick release couplings or proprietary couplings are used they shall be appropriate for the operation, so as to avoid any possibility of leakage and they shall be fastened as per the manufacturer's instructions,
- e) At no time during the bunker operation shall any part of the filling system be over pressurised and care must be exercised not to cause a pressure shock in the lines by closing or opening valves in an inappropriate manner.
- f) There are adequate procedures for the disconnection of the pipe in the event of an emergency.

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Oil Spill Containment and Prevention

In order to prevent and/or contain any spill:

- a) Any changes to the bunkering plan or bunkering sequence should be agreed in writing by all parties to the operation.
- b) The Bunker Supervisor in charge of supplying the bunkers shall remain at the bunker station throughout the bunker operation and he or another person shall always be in attendance at or near to the emergency stop location.
- c) An emergency overflow tank should (if possible) be nominated and the valve for that tank should be identified and marked.
- d) The bunker connection on the vessel shall be contained within an oil tight bund.
- e) Any scuppers/drains that could be vulnerable in the event of a spill shall be sealed and/or plugged.
- f) Where there is any doubt as to the effectiveness of the bunker bund or the scupper seals to retain an oil spill on the vessel, then appropriate numbers and types of sorbent booms and mats shall be deployed around the vessel to intercept any possible spill before the oil reaches the scuppers.
- g) The ship's oil spill response equipment shall be readily available for deployment.
- h) The vessel shall have sufficient numbers of crew available in order to deploy spill equipment carried on board and crew shall have been exercised in spill containment and understand the requirements of the ship's own Ship Oil Pollution Emergency Plan (SOPEP).
- i) On completion of bunkering, the hoses must be fully drained before disconnection takes place.
- j) When disconnection of hoses is taking place a drip pan of appropriate size shall be deployed below any disconnection point that is not banded.
- k) Disconnected hoses shall be blanked before lowering or removing the hose from the ship.
- l) Ship filling points shall be blanked immediately they are no longer required,
- m) Any spilt oil or oil contained in bunds or drip pans shall be mopped up and all oil contaminated material shall be disposed of through the appropriate segregated waste management system.

Possible Causes of a Spill

In addition to normal precautions Ship's Master should be aware of the following:

- a) Fuels loaded at a high rate may foam or have air entrapped within the oil, this may result in oil or an oil mist being ejected through the vent pipe.
- b) The loading rate should be appropriate to:
 - i. the size of the tank,
 - ii. the available capacity in the tank,
 - iii. the size of the fill pipe, and
 - iv. the size and position of the air vent pipe/s.
- c) Ships Officers must be aware that a ship's list or trim can affect the ability of air vents to adequately vent a tank. This is particularly relevant where the tanks are being filled to near capacity, as air locks may form in the higher end of a tank remote from the air vent pipe, this is particularly relevant where the air vent is sited in a lower part of the tank (be that by design or as a result of list or heel).
- d) Ballasting of tanks or filling of fresh water tanks should be avoided during bunker operations. If this is not possible, then every precaution should be taken to ensure that ballast or fresh water does not overflow onto deck. In the event of a ballast/fresh water

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overflow, the bunker operation must cease immediately until the deck has been cleared of all water and the scuppers/drains rechecked for tightness.

- e) Ullage gauges should be checked for accuracy before and during the loading process and a secondary means of ullaging carried out during the bunker operation.

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APPENDIX 1

OIL TRANSFERS – COMMUNICATIONS POLICY

This policy applies to all vessels in the Port of Great Yarmouth.

All transfers of oils (including liquid waste) shall be reported to Port Marine Services (Yarmouth Radio) on VHF Channel 12. The information required shall include the following:

- Name of Vessel
- Berth or location in the port.
- Mode of transfer (pipeline, road transport, ship to ship, other)
- Commodity being transferred (Fuel oil, Gas oil, waste oil, dirty water, etc.)
- Quantity in Litres
- Time of start of transfer
- Time of completion of transfer

In the event of an incident resulting in an oil spill, the facts of the spill must be reported immediately to Port Marine Services (Yarmouth Radio). Vessels must take all necessary action to prevent oil entering the water.

Contact Numbers:

Port Marine Services: +44 (0) 1493 335511 marineservices@eastportuk.co.uk

Harbour Office: +44 (0) 1493 335501 harbouroffice@eastportuk.co.uk

Pilots: +44 (0) 1493 335515