

# Guide for the prevention of ship-sourced pollution and for the safe transfer of bunkers in Queensland waters

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# 1. Prevention of ship-sourced pollution

## 1.1 Introduction

*The Transport Operations (Marine Pollution) Act 1995 (TOMPA)* and *Transport Operations (Marine Pollution) Regulation 2008* outline the requirements for ship-sourced pollution management in Queensland coastal waters. This legislation also implements the International Convention for the Prevention of Pollution from Ships (MARPOL).

The ship-sourced pollutants covered by this legislation are oil, noxious liquid substances (in bulk), packaged harmful substances, sewage and garbage.

For commercial ships in Queensland, the major ship-sourced pollutants, from an operational perspective, are:

- (1) oil and oily residues or mixtures (including diesel fuel, petrol and oil products)
- (2) chemicals and chemical residues
- (3) sewage
- (4) garbage (including food wastes, paper products, rags, glass, metal, bottles, crockery, fishing gear, nets, bait boxes, deck sweepings, paints, wood products and all plastics).

It is an offence to discharge pollutants (either deliberately or negligently) into Queensland coastal waters and severe penalties apply. All pollution incidents must, by law, be reported to Maritime Safety Queensland, as soon as practicable, to ensure the response will minimise the effects of the pollutant.

All ships operating in Queensland waters must carry the applicable pollution prevention documentation. Additionally, all ships more than 15 metres in length overall are required to have insurance for pollution clean-up, ship salvage and wreck removal.

A summary of the overall requirements for ship-sourced pollution management is provided in this document.

Further information is provided on the MSQ website at <http://msq.qld.gov.au/Marine-pollution.aspx>.

For complete details on the requirements for ship-sourced pollution management in Queensland; operators should refer to the *Transport Operations (Marine Pollution) Act 1995* and *Transport Operations (Marine Pollution) Regulation 2008*.

The National Standard for Commercial Vessels (NSCV) is the standard prescribed in the *Marine Safety (Domestic Commercial Vessel) National Law Act 2012*. It was developed as an upgrade and amendment to the Uniform Shipping Laws (USL) Code. NSCV Part E, formerly prescribed operational requirements for on board fuelling and oil pollution, bilge pumping, waste oil disposal, disposal of sewage and disposal of garbage procedures. Part E focuses primarily on safety of operations, leaving environmental standards now resting with state legislation.

## 1.2 Purpose

The purpose of this document is to provide guidance on preventing ship-sourced pollution, including information on requirements for the handling of oil, chemicals, sewage and garbage and to provide guidance on the safe transfer of bunkers in Queensland coastal waters.

It is intended that this document may be utilised to assist ship's masters, ship's agents, ship management companies, bunker barges and port development proponents to carry out their responsibilities with regard to preventing ship-sourced pollution.

This document primarily relates to the provisions of the *Transport Operations (Marine Pollution) Act 1995* and its supporting regulation, and should be read in conjunction with the *Port Procedures and Information for Shipping* manual for the relevant port and any *Standard for Construction Activities* that may be in force for the port.

## 1.3 Definitions

Terms, abbreviations and acronyms	Meaning
<b>Berth</b>	Any dock, pier, jetty, quay, wharf, marine terminal or similar structure, (whether floating or not) connected to the shore, at which a ship may tie up. It does not include floating plant, jack-up barge, or other similar structure not connected to the shore.
<b>Bunkering</b>	The act of taking in fuel on board a ship.
<b>Bunkers</b>	Fuel such as oil stored in tanks and used for running ship's machinery.
<b>Bunker barge/ship/vessel</b>	A self-propelled vessel or a self-propelled barge designed for the purpose of transferring bunkers. It does not include a dumb barge.
<b>Coastal waters</b>	The coastal waters of the State, and includes other waters within the limits of the State that are subject to the ebb and flow of the tide.
<b>Designated area</b>	Each of the following areas: <ul style="list-style-type: none"> <li>• the marine national park zone under the Marine Parks (Moreton Bay) Zoning Plan 2008</li> <li>• the Noosa River</li> <li>• the marine national park zone, under the Marine Parks (Great Sandy) Zoning Plan 2006, located near Burkitt's Reef, Hoffman's Rocks or Barolin Rock, adjacent to the Woongarra Coast</li> <li>• an area within the Great Barrier Reef Marine Park prescribed under a regulation.</li> </ul>
<b>Dumb barge</b>	A barge not fitted with propulsion machinery.
<b>Emergency</b>	Any circumstance which causes, or gives rise to a risk of, serious injury or damage to a person, property or the environment.
<b>Independent testing entity</b>	An entity that is accredited by NATA as competent to perform analyses and performs, in Australia, analyses.
<b>In test</b>	The certificates validating the compliance of the equipment with the relevant Australian Standard(s) are current.
<b>Marina</b>	A buoy mooring, jetty or pile mooring or combination of them where, for a fee or reward, a ship is, or may be, anchored, berthed or moored.
<b>MARPOL</b>	International Convention for the Prevention of Pollution from Ships
<b>Master</b>	A person having command or charge of the vessel.
<b>NATA</b>	The National Association of Testing Authorities, Australia (ABN 59 004 379 748)
<b>National Law</b>	<i>Marine Safety (Domestic Commercial Vessel) National Law Act 2012</i> (Cwlth)
<b>Oil Tanker</b>	A vessel intended primarily for the bulk carriage of cargo in liquid form (including oil, chemicals and liquefied gas), and listed in column 6 (Ship type) of Lloyd's Register of Ships, as a tanker.

Terms, abbreviations and acronyms	Meaning
<b>Prescribed ship (for sewage only)</b>	<p>A ship that is engaged in an international voyage with a:</p> <ul style="list-style-type: none"> <li>• gross tonnage of at least 400; or</li> <li>• gross tonnage of less than 400 and certified to carry more than 15 people.</li> </ul> <p>Note: See Annex IV to MARPOL, chapter 1, regulation 2.</p>
<b>Save-all</b>	<p>A receptacle or enclosure around air vent heads of oil tanks or around machinery such as a windlass or winch, to contain minor leakages.</p>
<b>Service Records</b>	<p>Records for a treatment system, containing the following particulars about the maintenance or assessment of the treatment system.</p> <ul style="list-style-type: none"> <li>• For maintenance of the treatment system: <ul style="list-style-type: none"> <li>– the name of the authorised service provider that conducted the maintenance; and</li> <li>– the date the maintenance was carried out and any significant maintenance required to the treatment system.</li> </ul> </li> <li>• For an assessment of the treatment system: <ul style="list-style-type: none"> <li>– the name of the independent testing entity that conducted the assessment; and</li> <li>– the date and results of the assessment.</li> </ul> </li> </ul>
<b>Sewage treatment system</b>	<p>A system, installed on a ship, for treating sewage that:</p> <ul style="list-style-type: none"> <li>• is able to reduce the levels of sewage quality characteristics in sewage to not more than the levels for treated sewage; and</li> <li>• conforms with the standard prescribed under a regulation.</li> </ul> <p><b>Note:</b> A sewage treatment system that has an International Maritime Organization (IMO) type approval and the relevant supporting documentation is deemed to comply with the Queensland requirements for a <b>Grade A</b> sewage treatment system.</p>
<b>Ship (for oil record book only)</b>	<ul style="list-style-type: none"> <li>• A trading ship proceeding en route on an intrastate voyage: <ul style="list-style-type: none"> <li>– a ship, other than a Commonwealth ship under the <i>Commonwealth Navigation Act 2012</i> or a fishing vessel, that is used for or in connection with any business or commercial activity; and includes a ship that is used wholly or principally for: <ul style="list-style-type: none"> <li>▪ the carriage of passengers or cargo for hire or reward; or</li> <li>▪ the provision of services to ships or shipping whether for reward or otherwise.</li> </ul> </li> </ul> </li> <li>• An Australian fishing vessel proceeding en route on a voyage other than an overseas voyage: <ul style="list-style-type: none"> <li>– a vessel that is registered or entitled to be registered in Australia or in relation to which an instrument under the <i>Fisheries Management Act 1991</i> (Cwlth), section 4(2) is in force.</li> </ul> </li> <li>• A pleasure vessel: <ul style="list-style-type: none"> <li>– a vessel used wholly for recreational or sporting activities and not for hire or reward.</li> </ul> </li> </ul>
<b>Slops</b>	<p>A mixture of oil and water resulting from the cleaning of tanks on board an oil tanker.</p>
<b>Sludge</b>	<p>Oily residue and or liquid waste taken from engine room and/or other bilge areas on a ship.</p>
<b>SOPEP</b>	<p>Shipboard Oil Pollution Emergency Plan</p>

Terms, abbreviations and acronyms	Meaning
<b>System documentation</b>	Documentation from the treatment system’s manufacturer or supplier that states: <ul style="list-style-type: none"> <li>• the treatment system’s performance specifications under normal operating conditions; and</li> <li>• the following information about the independent testing entity that performed the analyses of the sewage after it has been treated in the treatment system: <ul style="list-style-type: none"> <li>– the name and address of the entity; and</li> <li>– the date and the results of the entity’s assessment; or</li> <li>– documentation equivalent to the documentation for the treatment system’s performance specifications under normal operating conditions.</li> </ul> </li> </ul>
<b>System service manual</b>	A manual for a treatment system that states the following particulars for the treatment system: <ul style="list-style-type: none"> <li>• operating instructions</li> <li>• maintenance schedules and requirements</li> <li>• authorised service providers.</li> </ul>
<b>Transfer operations</b>	The transfer between a ship and a barge or other ship; or between the shore and a barge or ship, including all activities preparatory and incidental to the transfer, of the following: <ul style="list-style-type: none"> <li>• flammable and combustible fuel for main propulsion and auxiliary operations</li> <li>• lubricating and hydraulic oil for machinery waste oils, sludge and residues</li> <li>• slops and tank washings</li> <li>• grey water and sewage.</li> </ul>
<b>Ullage</b>	The height of space in the bunker tank above the fuel contained therein.
<b>Vessel</b>	A Ship, as defined under the TOMPA and a Domestic Commercial Vessel, as defined under the “National Law”.
<b>Vessel Traffic Service (VTS)</b>	Marine traffic monitoring system operating within Queensland ports. VTS may utilise radar, CCTV, AIS (automatic identification system) and VHF to monitor and VHF to communicate with vessels within a pilotage area.

## 2. Oil and chemicals

### 2.1 Introduction

It is an offence to discharge oil or chemicals (either deliberately or negligently) into Queensland coastal waters. Under the *Transport Operations (Marine Pollution) Act 1995*, severe penalties apply. Oil and chemicals that are generally carried aboard ships can include:

- petrol
- gear box oil
- motor oil
- two-stroke oil
- diesel
- hydraulic oil
- cooling system additives
- cleaning agents
- degreasers
- acid and paints.

A high proportion of the ship-sourced oil and chemical pollution that enters the water comes from refuelling, vessel maintenance and bilge discharges. Operators must ensure that they use and dispose of all on board oil and chemicals correctly and safely.

Keeping bilges clean helps to reduce oil and chemical pollution. Use absorbents to mop up excess oil or fuel, wash bilges with biodegradable degreasers or detergents and dispose of any cleaning residue ashore.

If oil does spill into the water, use absorbent pads to mop it up or boom to contain the spill and let the Regional Harbour Master, marina manager or port authority know so that it can be cleaned up as soon as possible.

**Note:** Do not use dispersants or other cleaning chemicals on oil in the water because they can increase the toxic effects of oil spills.

Information on the ship-sourced oil and chemical pollution requirements for Queensland can be found on the MSQ website at <http://msq.qld.gov.au/Marine-pollution/Oil-chemical-pollution.aspx>

### 2.2 Queensland requirements

There are several specific oil and chemical requirements that operators must adhere to:

- (1) Having a shipboard oil pollution emergency plan (SOPEP) on board for all ships that are:
  - (a) more than 35 metres in length overall; or
  - (b) more than 24 metres in length overall carrying oil as cargo or a vehicle that is carrying more than 400 litres of oil as cargo
- (2) The SOPEP must be in the approved form, in the English language and include the following particulars:
  - (a) a detailed description of the action to be taken by persons on board to minimise or control any discharge of oil from the ship resulting from the reportable incident

- (b) the procedure to be followed by the ship's master, or someone else having charge of the ship, in notifying a reportable incident that is a discharge or probable discharge of oil involving the ship
  - (c) a list of the entities to be notified by persons on board if the reportable incident happens
  - (d) the procedure to be followed for coordinating with entities notified about the reportable incident
  - (e) the name of the person on board through whom all communications about the reportable incident are to be made
- (3) Having an Oil Record Book on board for the following ships:
- (a) oil tankers of 150 gross tonnage or more
  - (b) other than oil tankers, of 150 gross tonnage or more that carry oil in portable tanks with a capacity of 400 litres or more
  - (c) other than oil tankers, of 400 gross tonnage or more.

The oil record book must comply with the requirements for an 'oil record book' under the *Protection of the Sea (Prevention of Pollution from Ships) Act 1983*. Entries must be made by the ship's master for all recordable operations or recordable events.

- (i) **Recordable operations** include the disposal of oil residues that are sludge and the discharge overboard or another disposal of bilge water that has accumulated in any machinery space.
- (ii) Recordable events include:
  - (a) a discharge into coastal waters of a noxious liquid substance necessary for the purpose of securing the safety of a ship or saving life at sea
  - (b) a discharge into coastal waters of a noxious liquid substance resulting from damage to a ship or its equipment
  - (c) a discharge into coastal waters of a noxious liquid substance, approved by an authorised officer, to combat specific pollution incidents to minimise the damage from pollution
  - (d) a discharge exempted under section 22 or 27 of the *Transport Operations (Marine Pollution) Regulation 2008*.

## 2.3 SOPEP requirements

### 2.3.1 Spill response procedures

Spill response procedures outlined in the SOPEP should include:

- (1) method of raising the alarm
- (2) responsibilities of personnel on board
- (3) action to minimise or control the spill
- (4) method of cleaning up the spill
- (5) equipment to be used in controlling and cleaning up the spill
- (6) method of informing appropriate personnel and agencies of the spill and subsequent action taken

## 2.3.2 Ship oil spill response equipment

All ships should maintain on board sufficient oil spill response equipment to respond effectively to the most likely types of spills that could occur during normal operations. An adequate number of personnel to assist in deployment of emergency equipment must also be available.

Oil spill dispersants **cannot** be used without prior approval from the relevant Regional Harbour Master.

The use of dispersants within the Great Barrier Reef Marine Park must be approved by an officer prescribed within the *Great Barrier Reef Marine Park Regulations 1983*.

## 2.4 Reporting

Under the *Transport Operations (Marine Pollution) Act 1995*, the master of a ship must report a discharge or probable discharge of any pollutant without delay to the Regional Harbour Master. Pollutants are defined as harmful substances and include oils, chemicals, sewage and garbage. Even minor instances of marine pollution must be reported.

The local Vessel Traffic Service Centre is the means by which the relevant Regional Harbour Master should be advised of any pollution incident and can be contacted by VHF on the channels indicated in the table below. The primary VHF communication channel for VTS is Channel 16.

Notification via VHF is to be followed by the completion of a POLREP (Pollution Report) form, available on the Maritime Safety Queensland website at <http://www.msq.qld.gov.au/Marine-pollution/Oil-chemical-pollution.aspx>

### 2.4.1 Vessel Traffic Service (VTS)

Port	VTS Call Sign	VHF Channel	Port	VTS Call Sign	VHF Channel
Abbot Point	Abbot Point VTS	13 and 16	Lucinda	Lucinda VTS	16
Brisbane	Brisbane VTS	12 and 16	Mackay	Mackay VTS	14 and 16
Bundaberg	Bundaberg Harbour Control	13 and 16	Port Alma	Gladstone VTS	13 and 16
Cairns	Cairns VTS	12 and 16	Thursday Island	Thursday Island Port Control	12 and 16
Cape Flattery & Cooktown	Cape Flattery Port Control	13	Townsville	Townsville VTS	12 and 16
Gladstone	Gladstone VTS	13,15 & 16	Weipa	Weipa VTS	12 and 16
Hay Point	Hay Point VTS	14 and 16	Whitsundays	Mackay VTS	14 and 16
Karumba	Karumba Harbour	16			

## 3. Safe transfer of bunkers

### 3.1 Introduction

To ensure the transfer of bunkers in Queensland waters is completed in a manner that is safe and does not result in the discharge of pollution, adequate planning and preparation must be undertaken. In addition, certain limitations exist on the timing of transfer operations and the areas where this may occur along the Queensland coast. To ensure a safe standard of operation is maintained, the following considerations should be taken into account when planning for bunkering.

#### 3.1.1 Approvals

A permit is required for any commercial fuel transfer operations that occur within the Great Barrier Reef Marine Park. Zoning rules apply throughout the Marine Park, with each zone having different rules for the activities that are allowed in the area. An application must be made to the Great Barrier Reef Marine Park Authority for the issue of a permit. The application should include sufficient information for clear understanding of the intended activity. Information on this process can be found on the Great Barrier Reef Marine Park Authority website: <http://www.gbrmpa.gov.au/zoning-permits-and-plans/permits/when-do-you-need-a-marine-parks-permit>

In ports with increased commercial construction activity the Regional Harbour Master may request an operational plan to be provided, outlining proposed bunkering arrangements. **The relevant Regional Harbour Master should be consulted to assist in developing bunkering arrangements that will minimize the risk of a discharge.**

#### 3.1.2 Night transfer operations

The *Transport Operations (Marine Pollution) Act 1995* (TOMPA) places restrictions on transfers of oil or fuel between ships, between sunset and sunrise. The restrictions apply to ships more than 15 metres in length overall. In exceptional circumstances night transfer operations may be undertaken, subject to written approval from an Authorised Officer via the relevant Regional Harbour Master's office and provided that the transfer operations take place in accordance with the conditions stated in the approval.

#### 3.1.3 Double hull requirement

All oil tankers, including bunker barges that carry heavy fuel oil must be of double hull design. This requirement under MARPOL, is given force through the *Protection of the Sea (Prevention of Pollution from Ships) Act 1983* which is administered by the Australian Maritime Safety Authority.

### 3.2 Planning for bunkering operations

The following aspects of the operations must be planned and communicated to all parties involved, including the relevant Regional Harbour Master, not less than 24 hours prior to commencing bunkering.

Transfer of bunkers between ships at anchor may be undertaken provided:

- (1) the ship with greater length overall is anchored
- (2) both ships maintain their propulsion machinery ready for immediate departure.

Transfer of bunkers between ships moored alongside may be undertaken provided:

- (1) the bunker barge is securely moored to the ship using approved mooring points
- (2) both vessels are securely moored with respect to interaction from passing vessels
- (3) the deck watch maintains moorings.

For all bunkering operations:

- (1) weather conditions are appropriate and moorings are adequate for anticipated weather throughout the operation; any weather limitations must be identified
- (2) moorings are adequate for predicted tidal conditions (height and current) and are tended (both ships) throughout the operation; any tide or current limitations must be identified
- (3) means of access ship to ship is maintained, whether at anchor or alongside
- (4) individual responsibilities of personnel involved in monitoring the transfer are clearly understood
- (5) all transfer apparatus to be used, including equipment, tanks and pipeline systems, should be checked to be in good working order
- (6) briefing with the fuel supplier should include the method of communication, pump rates and emergency stop procedures.

## **3.3 Transferring procedures**

### **3.3.1 Preparation by ships receiving bunkers**

Ships receiving bunkers should ensure the following preparations are completed:

- (1) plug scuppers to prevent spills from entering the water
- (2) check ullage and confirm volume to be supplied
- (3) check tanks, pipe system and pumps are set up and confirm any ship internal transfer processes
- (4) organise blank flanges where necessary
- (5) clean drip trays and save-alls
- (6) ensure emergency spill equipment is ready to contain and clean up any accidental spill
- (7) ensure no ignition sources are within 25 metres of any bunker flange and/or vent pipes associated with the transfer operation
- (8) ensure a visual watch is maintained throughout the entire transfer operation
- (9) ensure all areas remain clean and spill free
- (10) the bunker hoses are well supported and are of sufficient length to allow for movement of the ship
- (11) any cargo handling in progress will not hinder bunker transfer operations.

### **3.3.2 Preparation by ships delivering bunkers**

Ships delivering bunkers should ensure the following preparations are completed:

- (1) the bunker hoses are in good condition and are "in test" in accordance with the appropriate Australian standard, and the test certificate is available on request
- (2) the bunker hoses are well supported and are of sufficient length of allow for movement of the ship
- (3) the bunker connection has a good seal
- (4) there is a well tightened bolt in every bolthole of the bunker pipe connection flange
- (5) any hose spanning the water must be of a continuous length containing no joins or connections.

## 3.4 Responsibilities for ship and bunker supplier

Prior to commencement of bunkering:

- (1) a bunker checklist must be completed (see **Appendix A** – example checklist)
- (2) spill and emergency management procedures must be agreed upon.

Once bunkering has commenced:

- (1) no smoking, naked flame or hot work is permitted
- (2) a constant visual watch is maintained throughout the entire transfer operation, especially during start up and topping off
- (3) weather and sea conditions must be constantly monitored and moorings appropriately tended
- (4) sufficient absorbent spill material is available on site to deal with any accidental spillage
- (5) action must be taken to stop or contain any spill and the relevant port authority is immediately notified
- (6) visual check of waters around ships to identify any spills.

## 3.5 Communication arrangements

During transfer operations there should be regular communication maintained between the ship and supplier. Once the method of communication is initially established, the following information should be exchanged:

- (1) confirm transfer starting and stopping procedures
- (2) confirm transfer rates, pressures and quantities
- (3) confirm emergency stop procedures
- (4) confirm method of raising the alarm in the event of an emergency.

## 3.6 Emergency procedures

Procedures for handling all emergencies may vary but should include as a minimum:

- (1) method of raising the alarm
- (2) responsibilities of key personnel
- (3) action taken by employees to ensure their own safety and the safety of those around them
- (4) action taken by employees to minimise the damage to property and environment
- (5) method of cleaning up a spill
- (6) method of informing Port Managers, government agencies, owners, charterers and their agents.

All ships involved in bunker transfers should maintain on board sufficient oil spill response equipment to respond effectively to the potential size of spill that could occur during bunkering operations. An adequate number of personnel to assist in deployment of emergency equipment must also be available during the bunker transfer.

## 3.7 Reporting

All instances of marine pollution must be reported:

- (1) immediately to the Regional Harbour Master via the local VTS centre (as outlined in section 2.4); and
- (2) this notification must be followed by the completion and submission of a POLREP form.

## 4. Sewage

### 4.1 Introduction

It is an offence to discharge sewage (either deliberately or negligently) into nil discharge waters. Under the *Transport Operations (Marine Pollution) Act 1995* severe penalties apply.

Nil discharge requirements are based on the type of **ship**, the type of **sewage** and the type of **water**, as outlined below:

- (1) type of **ship**:
  - (a) declared ship (has a fixed toilet, and is either a domestic commercial vessel with a certificate of operation issued, or taken to be issued, under the *Marine Safety (Domestic Commercial Vessel) National Law Act 2012* stating it is a class 1B, 1C, 1D, 1E, 4C, 4D or 4E ship; or an other Queensland regulated ship regulated under the *Transport Operations (Marine Safety) Act 1994* and *Transport Operations (Marine Safety) Regulation 2016* designed to carry more than 12 passengers)
  - (b) ship other than a declared ship (all other ships, including all recreational ships, domestic commercial vessels with a certificate of operation issued, or taken to be issued, under the *Marine Safety (Domestic Commercial Vessel) National Law Act 2012* stating it is a class 2 or 3, and other Queensland regulated ships regulated under the *Transport Operations (Marine Safety) Act 1994* and *Transport Operations (Marine Safety) Regulation 2016* designed to carry up to 12 passengers)
  - (c) prescribed ship.
- (2) type of **sewage**:
  - (a) treated sewage (sewage that has been treated in a treatment system, three levels – Grade A, Grade B, Grade C)
  - (b) untreated sewage (sewage that has not been treated in a treatment system).
- (3) type of **water**:
  - (a) prohibited discharge waters (boat harbours, canals, marinas and designated areas)
  - (b) smooth waters (designated smooth waters, for example, the waters of rivers, creeks, streams and lakes, excluding waters within 'partially smooth waters' that are within half a nautical mile from land and prohibited discharge waters)
  - (c) Hervey Bay waters (the waters of Hervey Bay, other than prohibited discharge waters)
  - (d) northern Moreton Bay waters (the waters of Moreton Bay, other than prohibited discharge waters)
  - (e) open waters (Queensland coastal waters, other than prohibited discharge waters, smooth waters, Hervey Bay waters and northern Moreton Bay waters).

### 4.2 Untreated sewage

The **nil discharge waters for untreated sewage** (that is, the waters where the discharge of untreated sewage is prohibited) are as follows:

- (1) All prohibited discharge waters
- (2) All smooth waters
- (3) Northern Moreton Bay and Hervey Bay waters, as follows:
  - (a) For **all** declared ships and ships other than declared ships with 16 or more persons on board:

- (i) total nil discharge
- (b) For ships (other than declared ships) with 1–15 persons on board:
  - (i) nil discharge within 1 nautical mile (1852 metres) of aquaculture fisheries resources, (for example oyster leases or fish farms) a reef or the mean low water mark of the mainland
- (4) Open waters, is as follows:
  - (a) For ships with 1–6 persons on board:
    - (i) nil discharge within half a nautical mile (926 metres) of a wharf or jetty (other than a jetty that is a marina)
    - (ii) nil discharge within one nautical mile (1852 metres) of aquaculture fisheries resources (for example, oyster leases or fish farms)
  - (b) For ships with 7–15 persons on board, **as above** plus:
    - (i) nil discharge within 1 nautical mile (1852 metres) of a reef or the mean low water mark of an island or the mainland
  - (c) For ships with 16 or more persons on board:
    - (i) total nil discharge.

**Note:**

- This means that all ships with 16 or more persons on board are prohibited from discharging untreated sewage anywhere in Queensland coastal waters.
- Additionally, discharging sewage from on board sewage holding tanks that has been collected during times when there were 16 or more persons on board into Queensland coastal waters once the numbers of persons on board has fallen below 16 is an unlawful practice with severe penalties.

## 4.3 Treated sewage

The nil discharge waters for treated sewage (that is, the waters where the discharge of treated sewage is prohibited) are as follows:

- (1) All prohibited discharge waters
- (2) Waters outside prohibited discharge waters, as follows:
  - (a) Grade C treated sewage: nil discharge within half a nautical mile (926 metres) of a person in the water, aquaculture fisheries resources (for example, oyster leases, fish farms or a reef)
  - (b) Grade B treated sewage: nil discharge within 700 metres of a person in the water, aquaculture fisheries resources (for example, oyster leases, fish farms, or a reef)
  - (c) Grade A treated sewage: no further restrictions once outside prohibited discharge waters.

## 4.4 Queensland requirements

There are also several specific sewage requirements that operators must adhere to, including:

- (1) All ships must be fitted with a **macerator** that **cannot be bypassed**
- (2) All declared ships must:
  - (a) be fitted with a sewage holding device (Note: The owner or master of a declared ship must not operate the declared ship in nil discharge waters for treated sewage or untreated sewage from a declared ship, unless the declared ship is fitted with a sewage holding device and each fixed toilet on the declared ship is connected to a sewage holding device.)

- (b) carry a sewage disposal record book
    - (i) entries in the sewage disposal record book are to be made:
      - (a) every time sewage in the ship's sewage holding device is discharged into a disposal facility
      - (b) by the ship's master or other person in control of the discharge.
    - (ii) entries in a sewage disposal record book must:
      - (a) state the date, time, place and volume, in litres, of each discharge
      - (b) be made in the English language
      - (c) be signed by the ship's master or other person in control of the discharge.
  - (c) have a shipboard sewage management plan that must:
    - (i) be written in the English language and state the following particulars:
      - (a) name, registration number and class of ship to which the plan applies
      - (b) size and type of the ship
      - (c) how the plan provides for the management of shipboard sewage and prevents the unlawful discharge of sewage from the ship
      - (d) waters, if any, where the ship may lawfully discharge sewage
      - (e) equipment the ship is fitted with for holding or treating sewage
      - (f) operating and maintenance instructions for the equipment
      - (g) how the equipment is operated to prevent the unlawful discharge of sewage into the waters where the ship is operating
      - (h) how the equipment is maintained and checked to ensure the equipment is in proper working order.
- (3) All ships fitted with a **sewage treatment system** must:
- (a) keep the sewage treatment system in proper working order
  - (b) ensure that the sewage treatment system conforms to the following minimum standard:
    - (i) include system documentation
    - (ii) include a comprehensive and durable system service manual
    - (iii) have a durable label attached to it, stating the manufacturer's name and address and the type and model number of the treatment system
    - (iv) be installed in accordance with the manufacturer's instructions
    - (v) be fitted with an indicator to indicate if the treatment system is malfunctioning
    - (vi) if sewage entering the treatment system is not macerated before it enters the treatment system—be fitted with a macerator before the treatment system's main treatment process starts to treat the sewage
  - (c) ensure that the sewage treatment system is:
    - (i) maintained, at least, at the intervals and in the way required by the treatment system service manual
    - (ii) assessed by analysing the sewage after it has been treated in the treatment system, as outlined below:
      - (a) the assessment must be performed by an independent testing entity at the following intervals after the treatment system is fitted to the ship:

- (I) for a declared ship, at least annually for the first two years and afterwards, at least every two years
- (II) for a ship other than a declared ship, at least once in the first five years and afterwards, at least every two years
- (b) the assessment must show that the levels of sewage quality characteristics remaining in the sewage after it has been treated in the treatment system are not more than the levels for the relevant grade of treated sewage for the treatment system

**Note:** Operators of ships fitted with a sewage treatment system should obtain a copy of the '*Procedural guidelines for owners and masters of ships fitted with sewage treatment systems – requirements for the ongoing assessment of treatment system performance*', available on the MSQ website at <http://www.msq.qld.gov.au/Marine-pollution/Sewage/Sewage-assessment.aspx>

- (iii) keep the system documentation and system service manual on board and readily available for inspection at all reasonable times
- (iv) keep written service records for the treatment system and ensure they are kept on board and readily available for inspection at all reasonable times.

## 4.5 Sewage documents on MSQ website

There are several documents available on the MSQ website that may be beneficial to operators, including:

- (1) Sewage fact sheets:
  - (a) Fact sheet 1: Sewage discharge restrictions (for ships other than 'declared ships')
  - (b) Fact sheet 2: Sewage discharge restrictions (for 'declared ships')
- (2) Options for sewage compliance:
  - (a) Options for sewage legislation compliance — declared ships
  - (b) Options for sewage legislation compliance — ships other than declared ships
- (3) Sewage discharge maps for various locations covering:
  - (a) Treated sewage discharges from declared ships
  - (b) Untreated sewage discharges from declared ships
  - (c) Treated sewage discharges from ships other than declared ships
  - (d) Untreated sewage discharges from ships other than declared ships
- (4) Sewage treatment system testing guidelines:
  - (a) Procedural guidelines for owners and masters of ships fitted with sewage treatment systems – requirements for the ongoing assessment of treatment system performance.

Information on the ship-sourced sewage requirements for Queensland can be found on the MSQ website at <http://www.msq.qld.gov.au/Marine-pollution/Sewage.aspx>

## 5. Garbage

It is an offence to discharge garbage (either deliberately or negligently) into Queensland coastal waters. Under the *Transport Operations (Marine Pollution) Act 1995* severe penalties apply.

Items of garbage generally found on board ships include:

- food waste
- paper products
- rags
- glass
- metal
- fishing gear
- deck sweepings
- all plastics.

Operators can prevent garbage entering the water by:

- ensuring that nothing is thrown overboard
- having secure garbage bins/bags to store garbage on board until you return to shore
- retrieving garbage if it does enter the water.

**Note:** If shore facilities are not adequate for the disposal of your garbage, let the marina operator or port authority know.

### 5.1 Queensland requirements

There are several specific garbage requirements that operators must adhere to, including:

- (1) all ships that are at least 12 metres in length overall must display a placard about garbage disposal that notifies the ship's crew and passengers of the prohibitions and requirements for the disposal of garbage
- (2) to all ships that are at least 35 metres in length overall or that are designed to sleep at least 15 persons must have a shipboard waste management plan on board; and the ship must be fitted with any equipment that may be required to implement the plan.

New international regulations requiring vessels and fixed or floating platforms to carry a garbage management plan came into effect on 1 January 2013. These requirements are part of MARPOL, which is in force in 151 countries and is applied in Australia by Commonwealth and state/territory legislation.

- if you are the shipowner/operator of a commercial or recreational vessel that is over 100 tonnes gross weight, or the vessel is certified to carry 15 or more passengers, or operate a fixed or floating platform, you are now required to carry on board a garbage management plan in accordance with the regulation.

Information on the ship-sourced garbage requirements for Queensland can be found on the MSQ website at: <http://msq.qld.gov.au/Marine-pollution/Garbage-pollution.aspx>

## 6. Insurance

All ships over 15 metres in length overall, (for example 15.01 metres) are required to have insurance sufficient to pay for potential pollution clean-up, salvage and wreck removal.

The insurance policy must meet the following requirements:

- all recreational ships more than 15 metres but less than 35 metres in length overall must have an insurance policy that provides:
  - \$250,000 AUD for pollution clean-up costs
  - \$10 million AUD for salvage and wreck removal
- all commercial ships more than 15 metres but less than 35 metres in length overall must have an insurance policy that provides:
  - \$500,000 AUD for pollution clean-up costs
  - \$10 million AUD for salvage and wreck removal
- all ships 35 metres or more in length overall must have a policy that provides A\$10 million for pollution clean-up costs, salvage and wreck removal.

A current certificate of insurance must be carried on board and be available for inspection. Penalties apply for non-compliance.

Ships visiting Queensland coastal waters are also required to comply with the legislation. Temporary insurance cover may be necessary if existing insurance coverage does not meet the above requirements.

Information regarding ship insurance requirements can be found on the MSQ website at <http://msq.qld.gov.au/Marine-pollution/Ship-insurance.aspx>

## 7. Pollution prevention documentation

Ships operating in Queensland waters are required to carry documentation in relation to various aspects of pollution prevention. Failure to carry the required documentation is an offence. Penalties apply for non-compliance. The documents mentioned in this guide include:

- Shipboard Oil Pollution Emergency Plan (SOPEP)
- Oil Record Book
- Shipboard Sewage Management Plan
- Sewage Disposal Record Book
- Sewage Treatment System Documentation, System Service Manual and Service Records
- Placard about garbage disposal requirements
- Shipboard waste management plan (garbage).

The specific documentation requirements are described in the following documents available on <http://msq.qld.gov.au/Marine-pollution/Pollution-prevention-documents-required-by-ships.aspx>

- Pollution prevention for ships, required documents
- Pollution prevention documents, other than MARPOL documents, required for ships in Queensland waters.

# Appendix A - Bunker transfer checklist

Bunker transfer checklist			
Name of ship		Berth	
Start date/time		Finish date/time	
Product		Quantity	
Checklist			Yes/ No
1	Is the ship securely moored?		
2	Is there safe access between ships or ship/shore?		
3	Is the ship ready to move under its own power?		
4	Is there an effective and dedicated bunker watch in attendance on board?		
5	Means of communication between ship and supplier: <input type="checkbox"/> hand held radios <input type="checkbox"/> staff at manifolds <input type="checkbox"/> other		
6	Has emergency shut down procedure been agreed?		
7	Has the bunker tank and pipe system to be used on the ship been identified, tank ullage taken and volume to be received confirmed with the supplier?		
8	Has information on firefighting & emergency procedures been exchanged?		
9	Is oil response equipment on hand and ready for use, with sufficient absorbent material available to deal with any accidental spill?		
10	Are all scuppers and other deck openings securely plugged or sealed?		
11	Is there an empty, plugged save-all or drip tray under the manifold connection?		
12	Are unused bunker connections closed, flanged and secured?		
13	Are bunker hoses: Of sufficient length to <input type="checkbox"/> in test <input type="checkbox"/> in good condition <input type="checkbox"/> properly rigged <input type="checkbox"/> allow for ship movement		
14	Are all connections <input type="checkbox"/> bolted <input type="checkbox"/> fitted with secure camlocks <input type="checkbox"/> both		
15	Are hoses spanning the water continuous with no connections?		
16	Are "No Smoking/No Naked Flame" regulations being observed, including signage?		
17	Are sufficient personnel on board & ashore to deal with an emergency?		

**Addition remarks:**

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Emergency contacts in event of spill	
VTS VHF Ch: 16 Tel:	
Port Authority Tel:	
The items in this checklist have been verified and the entries made are correct to the best of our knowledge.	
Ship Name & Rank:	Signature:  Date:
Barge/shore operations Name & rank:	Signature:  Date:

## Appendix B - Conventions and legislation

### International conventions and relevant commonwealth legislation and statutes

International Regulations for Preventing Collisions at Sea (COLREGS)

International Convention for the Prevention of Pollution from Ships (MARPOL)

International Convention on Civil Liability for Oil Pollution Damage 1992 (the Civil Liability Convention)

International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage 1992

The International Convention on Civil Liability for Bunker Oil Pollution Damage 2001

Convention for the Protection of the World Cultural and Natural Heritage, 1972 (the World Heritage Convention)

United Nations Convention on the Law of the Sea, 1982 (UNCLOS)

Protection of the Sea (Prevention of Pollution from Ships) Act 1983

Navigation Act 2012 (Chapter 4)

Protection of the Sea (Prevention of Pollution from Ships) (Orders) Regulations

Marine Orders, Part 91 (Marine Pollution Prevention - Oil)

Marine Orders, Part 93 (Marine Pollution Prevention - Noxious Liquid Substances)

Marine Orders Part 94 (Marine Pollution Prevention - Harmful Substances in Packaged Forms)

Marine Orders Part 95 (Marine Pollution Prevention – Garbage)

Marine Orders Part 96 (Marine Pollution Prevention – Sewage)

Environment Protection and Biodiversity Conservation Act 1999

Protection of the Sea (Civil Liability) Act 1981

Protection of the Sea (Civil Liability) Regulations (S.R. No 222 of 1983)

Protection of the Sea (Civil Liability) (Registration of Foreign Judgements) Regulations (S.R. No 221 of 1983)

Protection of the Sea (Oil Pollution Compensation Fund) Act 1993

Protection of the Sea (Oil Pollution Compensation Fund - Customs) Act 1993

Protection of the Sea (Oil Pollution Compensation Fund - Excise) Act 1993

Protection of the Sea (Oil Pollution Compensation Fund - General) Act 1993

Protection of the Sea (Oil Pollution Compensation Fund) Regulations

International Convention on Oil Pollution Preparedness, Response and Co-operation 1990 (OPRC 90)

Protection of the Sea (Civil Liability for Bunker Oil Pollution Damage) Act 2008

Great Barrier Reef Marine Park Act 1975

Great Barrier Reef Marine Park Regulations 1983

Environment Protection (Sea Dumping) Act 1981

The 25-Year Strategic Plan for the Great Barrier Reef World Heritage Area Maritime Transport and Offshore Facilities Security Act 2003

## Queensland Legislation

Transport Operations (Marine Safety) Act 1994

Transport Operations (Marine Safety) Regulation 2004

Transport Operations (Marine Pollution) Act 1995

Transport Operations (Marine Pollution) Regulation 2008

Coastal Protection and Management Act 1995

Environmental Protection Act 1994

Fisheries Act 1994 Marine Parks Act 2004

Nature Conservation Act 1992

Sustainable Planning Act 2009