

Options for sewage legislation compliance

Ships other than declared ships

September 2016

Creative Commons information

© State of Queensland (Department of Transport and Main Roads) 2016



<http://creativecommons.org/licences/by/4.0/>

This work is licensed under a Creative Commons Attribution 4.0 Licence. You are free to copy, communicate and adapt the work, as long as you attribute the authors.

The Queensland Government supports and encourages the dissemination and exchange of information. However, copyright protects this publication. The State of Queensland has no objection to this material being reproduced, made available online or electronically but only if it's recognised as the owner of the copyright and this material remains unaltered.



The Queensland Government is committed to providing accessible services to Queenslanders of all cultural and linguistic backgrounds. If you have difficulty understanding this publication and need a translator, please call the Translating and Interpreting Service (TIS National) on 13 14 50 and ask them to telephone the Queensland Department of Transport and Main Roads on 13 74 68.

Disclaimer: While every care has been taken in preparing this publication, the State of Queensland accepts no responsibility for decisions or actions taken as a result of any data, information, statement or advice, expressed or implied, contained within. To the best of our knowledge, the content was correct at the time of publishing.

Contents

Creative Commons information	i
Contents	ii
Ship-sourced sewage: Guidance on implementation	1
Vessel owner and operator responsibilities	2
Prohibited discharge waters	2
Smooth waters	2
Nil discharge requirements in smooth waters – untreated sewage	3
Nil discharge requirements in smooth waters – treated sewage	3
Hervey Bay and northern Moreton Bay waters	3
Nil discharge requirements in Hervey Bay or northern Moreton Bay waters — untreated sewage	3
Nil discharge requirements in Hervey Bay and northern Moreton Bay waters — treated sewage	4
Open waters	4
Nil discharge requirements in open waters — untreated sewage	4
Nil discharge requirements in open waters — treated sewage	5
Guide to Queensland coastal waters	5
Nautical Mile	5
Territorial Sea Baseline (TSB)	5
Coastal waters (three (3) nautical mile limit)	6
Treatment systems	8
Key sections of the Act and Regulation applicable to ships	8
Nil discharge waters – discharge restrictions for ships other than declared ships	9

Ship-sourced sewage: Guidance on implementation

Transport Operations (Marine Pollution) Act 1995 (the Act)

Transport Operations (Marine Pollution) Regulation 2008 (the Regulation)

Declared ships have a fixed toilet, and are:

- 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 1B, 1C, 1D, 1E, 4C, 4D or 4E ship; or
- other Queensland regulated ships regulated under the *Transport Operations (Marine Safety) Act 1994* and *Transport Operations (Marine Safety) Regulation 2016* designed to carry more than 12 passengers.

Ships other than declared ships are all other ships, and include:

- 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
- 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.

Key aspects:

- The Act and the Regulation apply to ship-sourced pollution.
- Sewage is defined as drainage and other wastes from any form of toilet or urinal.
- Sewage does not include grey water (waste water from showers and sinks) unless it has been mixed with drainage from medical premises (dispensary, sick bay and so on) or drainage from spaces containing living animals.
- In waters where discharge of sewage is permitted, it must first pass through a macerator. Macerated sewage is not treated sewage.
- Treated sewage is sewage that has passed through a certified sewage treatment system, so that the resulting effluent has reduced potential to negatively impact on the marine environment.
- A sewage treatment system is an installed system which is able to reduce the levels of sewage quality characteristics to within prescribed levels. There are three grades of treated sewage: A, B or C. Grade A sewage is the most highly processed, and produces the cleanest result.
- Onboard treatment systems provide a beneficial alternative to a basic holding tank on board a vessel. Vessels which have a sewage treatment system must also carry the system maintenance documentation, treatment system assessment documentation, system service manual and service records, in accordance with the Regulation.
- Untreated sewage is sewage that has not passed through a certified sewage treatment system, regardless of whether it has been macerated or not.
- The ship-sourced sewage legislation:
 - (a) specifies areas where the discharge of untreated and treated sewage is not permitted, or is restricted
 - (b) sets requirements for onboard sewage treatment systems
 - (c) sets sewage management requirements for certain types of vessels
 - (d) details the reporting requirements.

- Nil discharge waters are specified based on the waterway type. These include:
 - (a) prohibited discharge waters
 - (b) smooth waters
 - (c) Hervey Bay waters and northern Moreton Bay waters
 - (d) open waters.

Detailed maps of nil discharge areas are available from the Maritime Safety Queensland website at www.msg.qld.gov.au.

Vessel owner and operator responsibilities

While in nil discharge waters, vessel owners must adopt any of the following measures to ensure that no sewage is discharged:

- always using onshore toilets when berthed alongside
- encouraging passengers to use onshore facilities before heading out
- containing sewage in a suitable sewage holding device
- having an understanding of the designated nil discharge areas within the area in which the vessel will be operating.

Prohibited discharge waters

All vessels are forbidden to discharge sewage in prohibited discharge waters.

Prohibited discharge waters are defined in the dictionary of the Regulation (schedule 9) as any of the following waters:

- a boat harbour
- a canal
- a marina
- a designated area.

Designated areas include the Noosa River and any of the following areas in state marine parks:

- the marine national park zone under the *Marine Parks (Moreton Bay) Zoning Plan 2008*
- a 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
- an area within the Great Barrier Reef Coast Marine Park mentioned in schedule 8 of the Regulation.

Smooth waters

Smooth waters, as defined in Regulation include all rivers, creeks, streams and lakes, and designated smooth water areas – for example, Pumicestone Passage, southern Moreton Bay, the Narrows and Hinchinbrook Channel. Smooth waters do not include:

- (a) prohibited discharge waters, and
- (b) waters within 0.5 of a nautical mile (nm) from land that are within partially smooth waters.

Nil discharge requirements in smooth waters – untreated sewage

All vessels are prohibited from discharging untreated sewage into smooth waters.

Nil discharge requirements in smooth waters – treated sewage

Three grades of treated sewage. The following nil discharge requirements apply regardless of the type of vessel or the number of persons on board.		
Grade C treated sewage No discharge within 926m (0.5nm) of any of the following: (a) a person in the water (b) aquaculture fisheries resources (c) a reef.	Grade B treated sewage No discharge within 700m of any of the following: (a) a person in the water (b) aquaculture fisheries resources (c) a reef.	Grade A treated sewage No restrictions other than nil discharge in prohibited discharge waters.
A maximum penalty of 850 penalty units applies for non-compliance.		

Hervey Bay and northern Moreton Bay waters

Hervey Bay waters are defined in the dictionary of the Regulation as the partially smooth waters of Hervey Bay, including the waters within 0.5nm of land, and excluding prohibited discharge waters.

Northern Moreton Bay waters are defined in the dictionary of the Regulation as the partially smooth waters of Moreton Bay, including the waters within 0.5nm of land, and excluding prohibited discharge waters.

Nil discharge requirements in Hervey Bay or northern Moreton Bay waters — untreated sewage

Three grades of treated sewage. The following nil discharge requirements apply regardless of the type of vessel or the number of persons on board.

Ships with one to 15 persons on board are prohibited from discharging untreated sewage within 1852m (1nm) of the following:

- (a) aquaculture fisheries resources
- (b) a reef
- (c) the mean low water mark of the mainland.

Ships with 16 or more persons on board are prohibited from discharging any untreated sewage whatsoever in Hervey Bay and northern Moreton Bay waters.

A maximum penalty of 850 penalty units applies for non-compliance.

Nil discharge requirements in Hervey Bay and northern Moreton Bay waters — treated sewage

Three grades of treated sewage. The following nil discharge requirements apply regardless of the type of vessel or the number of persons on board.		
Grade C treated sewage No discharge within 926m (0.5nm) of any of the following: (a) a person in the water (b) aquaculture fisheries resources (c) a reef.	Grade B treated sewage No discharge within 700m of any of the following: (a) a person in the water (b) aquaculture fisheries resources (c) a reef.	Grade A treated sewage No restrictions other than nil discharge in prohibited discharge waters.
A maximum penalty of 850 penalty units applies for non-compliance.		

Open waters

Open waters are defined in the dictionary of the Regulation as coastal waters, other than Hervey Bay waters, northern Moreton Bay waters, prohibited discharge waters and smooth waters. Open waters include all those waters beyond the previously listed waters.

Nil discharge requirements in open waters — untreated sewage

Ships with one to 15 persons on board are prohibited from discharging untreated sewage:

- (d) within 926m (0.5nm) of a wharf or jetty (other than a jetty that is a marina)
- (e) within 1852m (1nm) of aquaculture fisheries resources (such as an oyster lease or fish farm).

Ships with seven to 15 persons on board – restrictions apply as above, plus no discharge permitted within 1852m (1nm) of any of the following:

- a reef
- the mean low water mark of an island or the mainland.

Ships with 16 or more persons on board are prohibited from discharging any untreated sewage whatsoever in open waters.

A maximum penalty of 850 penalty units applies for non-compliance.

Nil discharge requirements in open waters — treated sewage

Three grades of treated sewage. The following nil discharge requirements apply regardless of the type of vessel or the number of persons on board.		
Grade C treated sewage No discharge within 926m (0.5nm) of any of the following: (a) a person in the water (b) aquaculture fisheries resources (c) a reef.	Grade B treated sewage No discharge within 700m of any of the following: (a) a person in the water (b) aquaculture fisheries resources (c) a reef.	Grade A treated sewage No restrictions other than nil discharge in prohibited discharge waters.
A maximum penalty of 850 penalty units applies for non-compliance.		

Guide to Queensland coastal waters

The following maritime boundary definitions are based on material sourced from Geoscience Australia (2016) ¹.

Nautical Mile

A nautical mile (nm) is a unit of distance equal to 1852m. This value was adopted by the International Hydrographic Conference in 1929 and has subsequently been adopted by the International Bureau of Weights and Measures.

It is also the unit adopted for the purposes of Australian Maritime Legislation. Refer to Schedule 1.(1) of the *Seas and Submerged Lands Act 1973* as published in the Commonwealth of Australia Gazette No.S29, 9 February 1983.

The length of the nautical mile is very close to the mean value of the length of 1 minute of latitude, which varies from approximately 1843m at the equator to 1861.6m at the pole.

Territorial Sea Baseline (TSB)

The term Territorial Sea Baseline (TSB) refers to the line from which the seaward limits of Australia's Maritime Zones are measured. These include the breadth of the territorial sea; the seaward limits of the contiguous zone, the exclusive economic zone and, in some cases, the continental shelf.

The territorial sea baseline may be of various types depending upon the shape of the coastline in any given locality:

- The **Normal baseline** corresponds with the low water line along the coast, including the coasts of islands. Under the Convention, normal baseline can be drawn around low tide elevations which are defined as naturally formed areas of land surrounded by and above water at low tide but submerged at high tide, provided they are wholly or partly within 12nm of the coast. For Australian purposes, normal baseline corresponds to the level of [Lowest Astronomical Tide \(LAT\)](#).

¹

Geoscience Australia. (2016). *Maritime Boundary Definitions*. Retrieved from <http://www.ga.gov.au/scientific-topics/marine/jurisdiction/maritime-boundary-definitions>

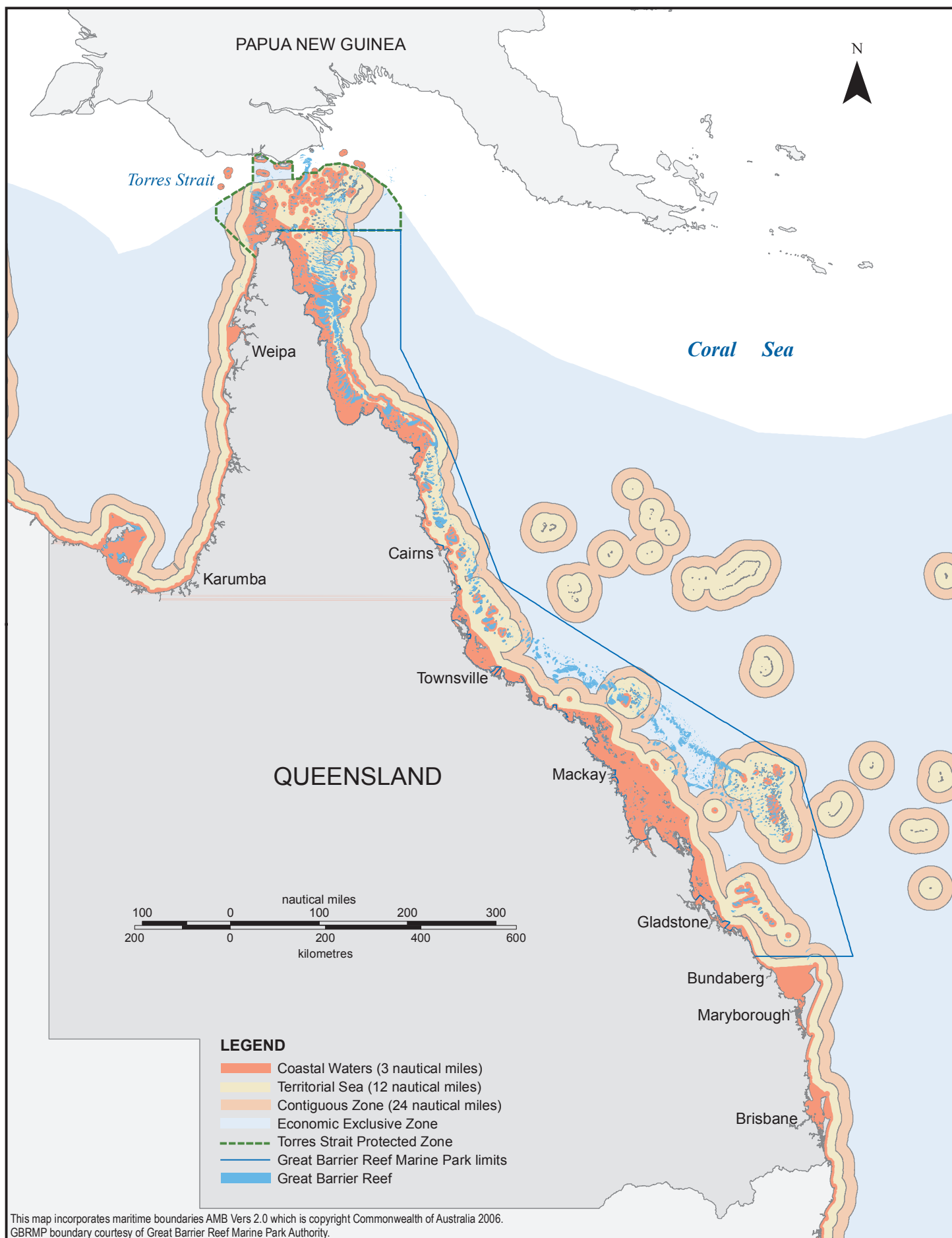
- **Straight baselines** are a system of straight lines joining specified or discrete points on the low-water line, usually known as straight baseline end points. These may be used in localities where the coastline is deeply indented and cut into, or where there is a fringe of islands along the coast in its immediate vicinity.
- **Bay or river closing lines** are straight lines drawn between the respective low-water marks of the natural entrance points of bays or rivers.

Waters on the landward side of the baseline are internal waters for the purposes of international law.

Coastal waters (three (3) nautical mile limit)

Coastal Waters is a belt of water between the limits of the Australian states and the Northern Territory and a line 3M seaward of the territorial sea baseline*. Jurisdiction over the water column and the subjacent seabed is vested in the adjacent state or territory as if the area formed part of that state or territory. This, and other arrangements for the management of offshore resources such as fisheries and petroleum, are defined by the Offshore Constitutional Settlement (OCS). The principal legislation implementing the *OCS (Coastal Water (State Powers) Act 1980*, *Coastal Waters (State Title) Act 1980*, *Coastal Waters (Northern Territory Powers) Act 1980* and the *Coastal Waters (Northern Territory Title) Act 1980* entered into force in January 1982 and February 1983.

* The TSB used to determine Coastal Waters does not include low tide elevations greater than 3M from the coastline or islands.



Map: S8mi-21

Horizontal datum: GDA94
Projection: Mercator (world)

Prepared 31 August 2016
Maritime Safety Queensland

MARITIME BOUNDARIES

QUEENSLAND

© The State of Queensland 2016
(Transport and Main Roads)
Licence available to view at
<http://creativecommons.org/licenses/by-nc-nd/3.0/au>



Treatment systems

Requirements for onboard sewage treatment systems are as follows:

- section 51B of the Act requires the owner and master to ensure that the treatment system is maintained in proper working order
- section 56 of the Regulation requires those vessels with a treatment system on board to also keep the treatment system documentation and system service manual for the treatment system on board. The details to be kept as part of the treatment system documentation and system service manual are provided in section 54 of the Regulation
- schedule 7 of the Regulation details the grades for treated sewage.

Key sections of the Act and Regulation applicable to ships

Ships other than declared ships		
<p>Waterway types (defined in schedule 9 dictionary of the Regulation)</p> <ul style="list-style-type: none"> • prohibited discharge waters • smooth waters • Hervey Bay waters • northern Moreton Bay waters • open waters 		
Untreated sewage	Treated sewage	Onboard sewage measures and practices
<ul style="list-style-type: none"> • Section 47 of the Act, plus section 44 and schedule 4 of the Regulation — nil discharge waters. 	<ul style="list-style-type: none"> • Section 48 of the Act, plus section 45 and schedule 5 of the Regulation — nil discharge waters. • Section 56 (2) of the Regulation — treatment system documentation and system service manual to be kept on board. • Section 57 and schedule 7 of the Regulation — grades of treated sewage. • Section 58 of the Regulation — standard for treatment system. • Section 51B of the Act — requirement to ensure treatment system is in proper working order. 	<ul style="list-style-type: none"> • Section 53 of the Regulation — vessels to be fitted with a macerator for discharge beyond specified nil discharge waters.

Nil discharge waters – discharge restrictions for ships other than declared ships

Type of waterway → Sensitive area ↓	Prohibited discharge waters	Smooth waters	Hervey Bay waters	Northern Moreton Bay waters	Open waters
Person in the water	Treated and untreated (nil)	Grade A (0m) Grade B (700m) Grade C (926m) Untreated (nil)	Grade A (0m) Grade B (700m) Grade C (926m) Untreated (nil)***	Grade A (0m) Grade B (700m) Grade C (926m) Untreated (nil)***	Grade A (0m) Grade B (700m) Grade C (926m) Untreated (nil)***
Aquaculture fisheries resource	Treated and untreated (nil)	Grade A (0m) Grade B (700m) Grade C (926m) Untreated (nil)	Grade A (0m) Grade B (700m) Grade C (926m) Untreated (1852m) & (nil)***	Grade A (0m) Grade B (700m) Grade C (926m) Untreated (1852m) & (nil)***	Grade A (0m) Grade B (700m) Grade C (926m) Untreated (1852m) & (nil)***
Reef	Treated and untreated (nil)	Grade A (0m) Grade B (700m) Grade C (926m) Untreated (nil)	Grade A (0m) Grade B (700m) Grade C (926m) Untreated (1852m) & (nil)***	Grade A (0m) Grade B (700m) Grade C (926m) Untreated (1852m) & (nil)***	Grade A (0m) Grade B (700m) Grade C (926m) Untreated (no restrict)* & (1852m)** & (nil)***
Mean low water mark of mainland	Treated and untreated (nil)	Treated (no restrict.) Untreated (nil)	Treated (no restrict.) Untreated (1852m) & (nil)***	Treated (no restrict.) Untreated (1852m) & (nil)***	Treated (no restrict.) Untreated (no restrict)* & (1852m)** & (nil)***
Mean low water mark of island	Treated and untreated (nil)	Treated (no restrict.) Untreated (nil)	Treated (no restrict.) Untreated (nil)***	Treated (no restrict.) Untreated (nil)***	Treated (no restrict.) Untreated (no restrict)* & (1852m)** & (nil)***
Wharf or jetty (other than jetty that is a marina)	Treated and untreated (nil)	Treated (no restrict.) Untreated (nil)	Treated (no restrict.) Untreated (nil)***	Treated (no restrict.) Untreated (nil)***	Treated (no restrict.) Untreated (926m) & (nil)***

926m = 0.5nm

1852m = 1nm


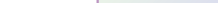
*1–6 persons on board

**7–15 persons on board

***16 or more persons on board

Guide to sewage nil discharge areas for ships (other than declared ships)

Refer to the *Transport Operations (Marine Pollution) Act 1995* and *Transport Operations (Marine Pollution) Regulation 2008* for full details (available from www.msq.qld.gov.au).

Start  **Is your ship a declared ship?** (A declared ship is a commercially registered Class 1B, 1C, 1D, 1E or 1F passenger carrying vessel with a **fixed toilet**.)  Refer to flow chart for **declared ships**

