

Port Procedures and Information for Shipping

Port of Brisbane

October 2024



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Table of amendments

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Revision Date	Page number or section	Summary of Changes	Approved by
July 2009	-	First Issue	Regional Harbour Master
May 2015	-	Second Issue	Regional Harbour Master
October 2022	Various	Including extreme weather event response, formatting	Regional Harbour Master
December 2022	Sections 1.6.2, 3.3.3, 3.4, 11.3, 11.5.1	Contact Information Updated	Regional Harbour Master
March 2023	Entire document	Amending broken links and correcting outdated corporate forms. Correction of numbering.	Regional Harbour Master
August 2023	Various	Definition of Tug & Tow lengths, including for Pilot Assignment, operational wind limits, VTS contact details, additional Current meters, engine immobilisation, fumigation, revised distance tables.	Regional Harbour Master
August 2024	Various	Update to mapping and key aids to navigation, alignment of operational warping with mooring, clarity for pilotage requirements for tug and barge operations, inclusion of amended pilotage routes and pilot boarding arrangements, tug escort above Pelican Banks including through Gateway Bridge.	Regional Harbour Master
September 2024	Section 8.2	Remove information from Tug Allocation	Regional Harbour Master
October 2024	Various	Updated broken links and maps	Regional Harbour Master

1. Introduction

1.1 General

Welcome to the Port of Brisbane, the principal multi-modal port in Queensland.

Shipping legislation in Queensland is controlled by Maritime Safety Queensland (MSQ), a state government agency attached to the Department of Transport and Main Roads.

The state of Queensland is divided up into five regions which are controlled by a Regional Harbour Master (RHM), all officers of Maritime Safety Queensland who report to the General Manager and under the <u>Transport Operations (Marine Safety) Act 1994</u>, are responsible for:

- improving maritime safety for shipping and small craft through regulation and education;
- minimising vessel sourced waste and providing response to marine pollution;
- providing essential maritime services such as pilotage, vessel traffic service and aids to navigation; and
- encouraging and supporting innovation in the maritime industry.

The limit of Queensland coastal waters is defined by a line three nautical miles seaward of the territorial sea baseline. The arrangements outlined in these procedures apply to the geographical areas gazetted as pilotage areas in Queensland. Pilotage areas have been gazetted around designated ports and maritime areas to ensure the safe and efficient movement of shipping. These areas encompass the approaches, main shipping channels and waters of the port.

Collectively, the Regional Harbour Master and the Port of Brisbane Pty Ltd (PBPL) have responsibility for managing the safe and efficient operation of the port.

1.2 Port description

Brisbane is the state capital of Queensland, and its Port is Queensland's largest general cargo port and the fastest growing container port in Australia. The Port occupies the lower reaches of the Brisbane River with channels extending north through the Moreton Bay Marine Park. There are currently twenty-eight berths including nine dedicated container berths in the port.

Imports include crude, refined oil, fertilisers, chemicals, motor vehicles, cement clinker and gypsum, paper, building products and machinery.

Exports include coal, refined petroleum products, grain and woodchips; mineral sand, scrap metal, tallow, live cattle, beef, dairy products and timber.

Cruise ships facilities are at the Brisbane International Cruise Terminal. Naval vessels are also frequent visitors.

1.3 Purpose

This document defines the standard procedures to be followed in the pilotage area of the port; it contains information and guidelines to assist ship's masters, owners, and agents of vessels arriving at and traversing the area. It provides details of the services and the regulations and procedures to be observed.

Nothing in this publication is intended to relieve any vessel, owner, operator, charterer, master, or person directing the movement of a vessel from the consequences of any failure to comply with any applicable law or regulation or of any neglect of precaution which may be required by the ordinary practice of seamanship, or by the special circumstances of the case.

Information contained in this publication is based on information available as at the latest date in the document control sheet at the start of this manual. Although every care has been taken to ensure that this information is correct, no warranty, expressed or implied, is given in regard to the accuracy of all printed contents. The publisher shall not be responsible for any loss or damage resulting from or caused by any inaccuracy produced herein.

Information on external agencies (customs, quarantine, port authority rules, and REEFREP and so on) is provided as an example only.

Readers are strongly recommended to consult their respective websites for current information.

The latest version of this publication is available on the Maritime Safety Queensland website.

Any significant updates to the content of these procedures will be promulgated on this site. The Port of Brisbane Pty Ltd website should be consulted for the latest information on port rules, available services and notices.

Should errors or omissions in this publication be noted, it would be appreciated if advice of these could be forwarded to the Regional Harbour Master.

1.4 Datum

All water depths refer to the 'lowest astronomical tide' height (LAT). All positions in this manual are in WGS84.

All directions are referenced to True North.

1.5 Definitions

1.5.1 AMSA – Australian Maritime Safety Authority

The <u>Australian Maritime Safety Authority</u> is the commonwealth authority charged with enhancing efficiency in the delivery of safety and other services to the Australian maritime industry.

1.5.2 Australian Standard – AS 3846 – 2005

AS 3846 refers to the Australian requirements for the transport and handling of dangerous goods in port areas.

1.5.3 Commencement (Movement)

This is defined as follows:

- Arrival Pilot embarkation or when an exempt master passes the NW Fairway.
- Removal Last line or anchor aweigh time.

• Departure – Last line or anchor aweigh time.

1.5.4 Completion (Movement)

This is defined as follows:

- Arrival First line or anchored down time
- Removal First line or anchored time
- Departure Pilot disembark time or when an exempt master passes the NW Fairway

1.5.5 Deadweight tonnage (DWT)

The cargo carrying capacity of a ship measured in metric tonnes.

1.5.6 Duty Harbour Master

The person authorised to give direction under the relevant provisions of the Transport Operations (Marine Safety Act 1994). First point of contact available 24/7 to support VTS during emergent events.

1.5.7 Estimated time of arrival (ETA)

Estimated time of arrival is the expected time of arrival at a designated place. This is defined as first line at the berth or anchor down in the anchorage.

1.5.8 Estimated time of departure (ETD)

Estimated time of departure refers to the scheduled sailing time and is the expected time of the last line or anchor aweigh.

1.5.9 Extreme Weather Event

Extreme Weather Event is defined as a weather event that has the potential to affect safe operation of vessels and result in injuries, damage to vessels, damage to infrastructure or disrupt movement scheduling.

For Southeast Queensland this includes, but not limited to, severe thunderstorms, river flooding, east coast lows the effects of a cyclone offshore or other natural weather hazards. These can occur at any time but occur more frequently between October and May each year.

1.5.10 Highest astronomical tide (HAT)/lowest astronomical tide (LAT)

These are the highest and lowest levels that can be predicted to occur under average meteorological conditions and any combination of astronomical conditions. These levels may not be reached every year. Highest astronomical tide or lowest astronomical tide are not the extreme levels that can be reached, as storm surges can cause considerably higher or lower levels to occur.

Lowest astronomical tide is the port datum to which all soundings and heights are referred to for all channel and berth surveys in the port.

1.5.11 International Chamber of Shipping (ICS)

A voluntary organisation of national shipowners' associations whose interests cover all aspects of marine affairs but are particularly active in the field of marine safety, ship design, construction, pollution prevention and maritime law. The International Chamber of Shipping has consultative status with such organisations as the IMO.

1.5.12 International Maritime Dangerous Goods Code (IMDG Code)

The codes are published by the IMO for the safe carriage, packing, handling, classing and transporting of dangerous goods.

1.5.13 International Maritime Organization (IMO)

The world organisation charged with enhancing efficiency in the delivery of safety to the whole maritime industry.

1.5.14 International Safety Guide for Oil Tankers and Terminals (ISGOTT)

ISGOTT is the standard reference guide for the safe operation of oil tankers and terminals published by the International Chamber of Shipping, the Oil Companies International Maritime Forum (OCIMF) and the International Association of Ports and Harbours (IAPH).

1.5.15 International Ships and Ports Security Code (ISPS Code)

An international ship and port security code to combat global terrorism developed by the IMO.

1.5.16 International Tonnage Certificate (ITC)

A certificate issued under the provisions of the International Tonnage Convention on Tonnage Measurement of Ships 1969.

1.5.17 Length overall (LOA)

LOA is the extreme length of a vessel.

1.5.18 Local Traffic

Local traffic is defined as vessels conducting a voyage solely within the pilotage area, not arriving or departing, from or to sea. Vessels or combinations are normally below 50m LOA however can be above 50m LOA, but no more than 80m LOA, if operated under pilotage or pilotage exemption. Local traffic is normally exempt from being scheduled through QSHIPS.

1.5.19 Manager (Vessel Traffic Services) (MVTS)

The manager of VTS - reporting to the Harbour Master. Holds the appropriate delegation to give direction under the relevant provisions of the <u>Transport Operations (Marine Safety)</u> Act 1994.

1.5.20 Maritime Safety Queensland (MSQ)

The state government agency responsible for the operations of pilotage, pollution protection services, VTS and the administration of all aspects of vessel registration and marine safety in the state of Queensland.

1.5.21 MASTREP – the Modernised Australian Ship Tracking and Reporting System

The Modernised Australian Ship Tracking and Reporting System (MASTREP) is a Ship Reporting System designed to contribute to safety of life at sea and is operated by the Australian Maritime Safety Authority (AMSA) through the Rescue Coordination Centre (RCC) Australia in Canberra.

1.5.22 Navigation Act

Refers to the Navigation Act 2012.

1.5.23 Nett explosive mass (NEM)

The nett explosive mass refers to the nett content of explosive material in any given amount or parcel of cargo (sometimes referred to as the nett explosive content (NEC), or net explosive quantity (NEQ).

1.5.24 Non 'gas free' tankers - (NGF)

A tanker (includes OBO) or product carrier which has not had its cargo tanks washed, vented and inspected, or been issued with a 'Gas Free' certificate.

1.5.25 Pilotage Exemption Certificate – (PEC)

Exemption granted to certain qualified masters who have satisfied the necessary legislative requirements and are authorised to navigate ships in the port area without a pilot.

1.5.26 Port of Brisbane Pty Ltd (PBPL)

Port of Brisbane Pty Ltd (PBPL) manages and develops the Port of Brisbane, under a 99 year lease from the Queensland Government.

1.5.27 QSHIPS – Queensland Shipping Information Planning System

An internet web based ship movement booking service that may be accessed by the shipping community – 24 hours a day, seven days a week.

The programme allows port service provider organisations the ability to accept service requests made by shipping agents and streamline ship movement planning by significantly reducing the existing levels of point to point communications that are necessary to ensure a planned ship movement has been adequately resourced with supporting services.

1.5.28 **REEFREP**

The mandatory <u>ship reporting system</u> established by IMO resolution MSC.52 (66), as amended by resolution MSC.161 (78) and specified in Marine Orders Part 56 (Reef VTS) issue 2.

1.5.29 Reef VTS

The Great Barrier Reef and Torres Strait Vessel Traffic Service (Reef VTS) established by Australia as a means of enhancing navigational safety and environmental protection in Torres Strait and the Great Barrier Reef.

1.5.30 Regional Harbour Master (RHM)

The person authorised to give direction under the relevant provisions of the <u>Transport Operations (Marine Safety Act 1994)</u>.

1.5.31 Sailing time

The scheduled sailing time is the time of the last line.

1.5.32 Ship to Ship Transfer (STS)

The basic operation of transferring cargo from one ship to another without crossing a wharf or using a land based operation and is more often used as a term for transferring liquids from one tanker to another.

1.5.33 Tow Split

When a tow consisting of two or more vessels and/or barges are separated to form single operational conditions.

1.5.34 Tug and Tow Length - Total Combination Length

For the purposes of this section the following definitions shall apply:

- The length of tow is the total length of all items that go to make up the tow, to include tow lines, wires, bridles, vessels and/or barges, taken from the bow of the tug to the stern of the last vessel or barge making up the tow
 - Example: tug towing a barge on a tow line: Length is calculated based on length of tug, length of tow and bridles, and length of barge
 - Example: Tug hipped up to barge. Length is barge plus the length of the tug that is overhanging the stern of the barge.
 - o Example: Tug pushing barge. Length is barge plus the length of the tug

1.5.35 Under Keel Clearance (UKC)

This is the depth of water under a ship between the ship's keel and the bottom of the sea or river.

Static under keel clearance (SUKC) is a computer programme that is used for calculating tidal windows for deep draft vessels based on tidal predictions, declared depths and drafts of vessels.

NCOS is a cloud-based computer programme that calculates live tidal windows based on real-time environmental conditions and specific stability information for the vessel. Calculations are conducted by VTS operators.

1.5.36 Vessel Traffic Service (VTS)

A VTS is any service implemented by a competent authority, designed to maximise the safe and efficient movement of water borne traffic within the jurisdiction.

1.5.37 Vessel Traffic Service Operator (VTSO)

The officer reporting to the Manager (Vessel Traffic Management) at the VTS Centre who has appropriate delegation to give direction under the relevant provisions of the <u>Transport</u> Operations (Marine Safety) Act 1994.

1.6 Contact information

1.6.1 The Harbour Master

For operational maritime questions, marine incidents, pilotage, buoy moorings, navigation aids and towage requirements please contact the Harbour Master's office.

The Harbour Master's office is located at:

Physical address: MacArthur Avenue East (off Farrer Street)

Pinkenba, Brisbane, Queensland 4008

Phone: +61 7 3632 7500

Email: rhmbrisbane@msq.qld.gov.au

1.6.2 VTS Centre

The VTS centre is situated at the Harbour Master's office. For ship traffic scheduling, pollution incidents and reporting defective navigation aids please direct initial enquiries to the VTS centre.

Call sign is 'Brisbane VTS' provided by Maritime Safety Queensland 24 hours, seven days a week. The contact details are:

VHF Radio: VHF channels 12 and 16

Phone: +61 7 3623 3900

Email: VTSBrisbane@msq.qld.gov.au

In the event of a maritime emergency, VTS will activate the appropriate response agencies.

Ship traffic movements may be accessed on the QSHIPS website.

1.6.3 Port Corporation

The primary function of the <u>Port of Brisbane Pty Ltd (PBPL)</u>, under the Transport Infrastructure Act 1994, is to establish, manage and operate effective and efficient facilities and services within the port while maintaining appropriate levels of safety and security.

Phone: +61 7 3258 4888

Email: <u>info@portbris.com.au</u>

1.7 Rules and regulations

The rules and regulations in the port contribute to the safe, efficient and environmentally responsible handling of shipping traffic. The international rules of the IMO, such as the SOLAS convention and its amendments (for example the IMDG code) and state, national and local port authority regulations are in force in the port.

Based on the <u>Brisbane Port Notices</u> the port rules on dangerous substances contain additional, specific regulations for ships carrying dangerous cargoes in the port.

1.7.1 Applicable regulations

The procedures outlined in this document are designed to include the requirements of the:

- <u>Transport Operations (Marine Safety) Act 1994 (TOMSR)</u> and <u>Regulation 2016</u> (TOMSA)
- <u>Transport Operations (Marine Pollution) Act 1995 (TOMPA)</u> and <u>Regulation 2018</u>
 (TOMPR)
- International Maritime Dangerous Goods Code (IMDG Code)
- Australian Standard AS3846 2005
- International Ships and Ports Security Code (ISPS Code)
- Maritime Transport and Offshore Security Act 2003 and Regulations

In addition, it will also complement the procedures of:

- Port of Brisbane Pty Ltd
- Maritime Safety Queensland (MSQ)
- Australian Maritime Safety Authority (AMSA)
- Australian Border Force (Customs and Immigration)
- Royal Australian Navy (RAN).
- Department of Agriculture, Water and Environment (Biosecurity/Quarantine)

As they relate to ship movements within the jurisdiction of the Regional Harbour Master (Brisbane).

2. Arrival and departure procedures

2.1 General arrival and departure requirements

For a quick reference of what and when to report please consult the under mentioned tables:

Masters of vessels arriving at, staying in or departing from the Port of Brisbane are obliged to make previous notification on a variety of subjects, ranging from health to immigration and dangerous goods.

This section lists all the requirements for notifying the port authorities.

2.1.1 Arrival checklist

Sequence	Time	Report
1	48 hours before arrival	Arrival information to VTS via QSHIPS
2	48 hours before arrival	Application to Load or Unload or Transfer Bulk Liquids
3	48 hours before arrival	Gas Free status for tankers (see <u>15.9.6</u> 'Gas Free Status' Declaration)
4	96 hours before arrival	Australian Border Force (see <u>2.3</u>)
5	Not more than 96 hours or less than 12 hours before arrival	Quarantine of Australia – Biosecurity (see 2.2)
6	24 and 12 hours before arrival update ETA if necessary.	Arrival information update to VTS via QSHIPS
7	24 hours prior to loading/handling dangerous goods (includes bunkers)	Dangerous goods report to VTS, Australian Maritime Safety Authority and PBPL.
8	two hours before arrival pilotage area	Call 'Brisbane VTS ' VHF 12 (See sec 3.3 VTS communications)
9	In transit	VTS reporting points (see <u>3.6.1.1 VTS</u> <u>Calling Points</u>)

Table 1 - Arrival Check List

2.1.2 Departure checklist

Sequence	Time	Report	
1	24 hours before departure	Confirm departure information to VTS via QSHIPS	
2	3 hours before departure	Dangerous goods report to VTS and PBPL	
3	2 hours before departure	Pre entry report to MASTREP Reporting Marine Order 63 issued by AMSA makes the provision of Position Reports mandatory for:	

Sequence	Time	Report
		Foreign vessels from the arrival at its first port in Australia until its departure from its final port in Australia; and all regulated Australian vessels whilst in the MASTREP area.
		Domestic commercial vessels fitted with Global Maritime Distress and Safety System (GMDSS) and AIS technology are also encouraged to participate in the system as MASTREP assists AMSA in carrying out SAR activities.
		To assist Master /Agents, are MASTREP Australian Mandatory Reporting Guide and the Reef VTS User Guide is available from the MSQ Website.
4	In transit	VTS reporting points (see 3.4)

Table 2 - Departure Check List

2.1.3 Small Craft (Yacht) International Arrivals

Yachts arriving at Brisbane should report their arrival information to:

Australian Border Force, Small Craft Officer

Physical address: 21 Whimbrel Street, Port of Brisbane Queensland 4178

Telephone: +61 7 3895 6910 (office hours)
Telephone: +61 7 3895 6906 (after hours)

Facsimile: +61 7 3895 6977

Email: brissea@border.gov.au

Department of Agriculture, Fisheries and Forestry – Biosecurity (Seaports)

Physical address: 2 Port Central Drive, Port of Brisbane, Queensland 4009

Telephone: +61 7 3895 9705

Mobile: +61 4 0091 9001

Facsimile: +61 7 3895 9712

Website: www.awe.gov.au

Boarding station for arrival:

Physical address: Rivergate Marina and Shipyard

17 Rivergate Place, Murarrie Queensland 4172

Website: www.rivergate.com.au/

http://www.border.gov.au/Trav/Ente/Avia/Maritime

2.2 Quarantine and Biosecurity

(Source: Department of Agriculture, Fisheries and Forestry

The Department of Agriculture, Fisheries and Forestry (DAFF) require vessels from overseas to submit their documentation no more than 96 hours and no less than 12 hours prior to arrival:

Phone: +61 7 3246 8755 Fax: +61 7 3246 8639

Postal address: PO Box 222, Hamilton, Queensland 4007

2.2.1 Ballast water information

Ships with ballast water from ports that are considered a high risk for introduced marine species and that have not exchanged water ballast in mid ocean are now forbidden to discharge this ballast into Australian waters. Vessels that do not need to discharge ballast in Australian waters are exempt from these requirements.

The Fisheries and Forestry (DAFF) provides a Ballast Water Management summary sheet for use by Masters/Agents.

2.3 Australian Border Force (Customs and Immigration)

(Source: Australian Border Force)

Vessels arriving from overseas must submit their documentation 96 hours prior to the nominated date of arrival. If the voyage from the last port is likely to take less than 96 hours, the following timeframes will apply –

72 hours or more but less than 96 hours – submit documentation 72 hours prior 48 hours or more but less than 72 hours – submit documentation 48 hours prior 24 hours or more but less than 48 hours – submit documentation 24 hours prior

All Australian Border Force forms may be accessed on their website.

2.4 Port of Brisbane Pty Ltd Requirements

2.4.1 Security

All commercial vessels with a gross tonnage of 500 tonnes or more and passenger ships are required to report their security information to the port authority in accordance with the International Ship and Port Facility Security Code (ISPS).

2.4.2 Dangerous goods

Dangerous goods must not be brought into or handled in the pilotage area until notification has been sent to PBPL and VTS in the approved at least 48 hours prior to arrival in port limits.

For further information, refer to section <u>10</u> covering Dangerous cargo.

2.5 Australian Coastal Passage Requirements

2.5.1 MASTREP Reporting

Marine Order 63 issued by AMSA makes the provision of Position Reports mandatory for:

- foreign vessels from the arrival at its first port in Australia until its departure from its final port in Australia; and
- all regulated Australian vessels whilst in the MASTREP area.

Domestic commercial vessels fitted with Global Maritime Distress and Safety System (GMDSS) and AIS technology are also encouraged to participate in the system as MASTREP assists AMSA in carrying out SAR activities.

To assist Master /Agents, the MASTREP and Australian Mandatory Reporting Guide can be found on the <u>AMSA website</u>.

2.5.2 **Reef VTS**

Reef VTS is a coastal vessel traffic service (VTS) dedicated to the Great Barrier Reef and Torres Strait mandatory ship reporting system (SRS) operated under joint federal and state arrangements between Maritime Safety Queensland and the Australian Maritime Safety Authority (AMSA) from the Reef VTS centres at Townsville and Gladstone. The purpose of Reef VTS is to enhance navigational safety in the Torres Strait and the inner route of the Great Barrier Reef which encompasses the Whitsunday region.

Under section 6(2) of <u>Marine Order 63</u> the following vessels are required to report to Reef VTS:

- All vessels of 50 metres or more in overall length;
- All oil tankers, liquefied gas carriers and, chemical tankers or ships coming within the INF Code regardless of length; and
- Ships engaged in towing or pushing where it or the ship being pushed or towed is from one of the above categories or where the length of the tow is 150 metres or more.

The ship reporting system applies to all ships in the above categories irrespective of whether they are on overseas, interstate or intrastate voyages. This regulation does not apply to any warship, naval auxiliary or government vessel but they and all other vessels not mentioned above are encouraged to report.

To assist Master /Agents, the reporting requirements for REEFREP can be found on the MSQ website in the Reef VTS User Guide.

3. Movement and traffic procedures

3.1 Introduction

Maritime Safety Queensland, through the authority of the Regional Harbour Master, has jurisdiction over the safe movement of all shipping within the pilotage area.

The aim of this section is to outline the role and requirements of Vessel Traffic Service (VTS) as well as those key stakeholders interacting with VTS.

The scheduling of ship movements is initiated by the agent submitting movement details for a vessel to Brisbane VTS Centre via the QSHIPS ship planning programme in accordance with this section.

3.2 Vessel Traffic Service (VTS)

Vessel Traffic Service is the principal system by which the Regional Harbour Master manages the safe and efficient movement of vessel traffic approaching, departing and operating within the Brisbane VTS area.

This service is provided by Maritime Safety Queensland on a 24 hour, seven days a week rotating roster and operates within for the declared Brisbane VTS area, Brisbane Compulsory Pilotage area and the Port of Brisbane Limits. The VTS will operate under with the callsign" Brisbane VTS" and provides this service in accordance with IMO Resolution A.1158 (32).

VTS is delivered from the VTS centre at the Regional Harbour Master's office and is manned by trained and qualified vessel traffic service operators, under the management of the Manager (Vessel Traffic Services) and the Regional Harbour Master (Brisbane).

The purpose of VTS is to contribute to safety of life at sea, safety and efficiency of navigation and the protection of the environment within the VTS area by mitigating the development of unsafe situations through:

- The provision of timely and relevant information on factors that may influence the ship's movements and assist on-board decision making;
- The monitoring and management of ship traffic to ensure the safety and efficiency of ship movements; and
- Responding to developing unsafe situations.

In discharging this role, VTS will, within the declared VTS area provide a vessel traffic service that includes:

3.2.1 Timely Information

Brisbane VTS will, transmit essential and timely information to assist in the on-board decision-making process, which may include, position, identity and intentions of other traffic, hazards and other factors which may affect a vessels transit.

3.2.2 Monitoring and management of ship traffic

Brisbane VTS will plan vessel movements to prevent congestion and provide for safe and efficient movement of traffic. The VTS will identify and manage potentially dangerous traffic situations and provide essential and timely information to assist the on-board

decision-making process and may advise, instruct, or exercise the authority to direct movements.

3.2.3 Responding to developing unsafe situations

Brisbane VTS may provide navigational support to an individual vessel, at the request of the vessel or when deemed necessary by the VTS, to assist the decision-making process on board the vessel concerned. This service consists of navigational matters relating to a specific vessel and may include information, warning, advice and instruction subject to the authority of the VTS. There may be occasions where Brisbane VTS will be unable to provide navigational support and the requesting vessel will be advised of this information.

3.2.4 VTS Business Continuity Plan

Note that in the event of the VTS centre being disabled, all functions of the VTS centre will be temporarily transferred to a remote standby location. VTS will advise all parties of the new communication numbers at such a time.

3.2.5 Brisbane VTS area

The VTS Area is described as follows:

- (a) the waters bounded by a line commencing at:
 - The coastline of the mainland on northern headland at Maroochy River position latitude 26° 38.327' south, longitude 153° 06.108' east,
 - Then east to latitude 26° 38.327' south, longitude 153° 15.830' east,
 - Then south to latitude 26° 49.000' south, longitude 153° 15.830 east,
 - Then south-east to latitude 27° 01.664' south, longitude 153° 28.042' east,
 - Then following the western coastline of Moreton Island in a southerly direction to approximate latitude 27° 19.473' south, longitude 153° 25.096' east,
 - Then west-south-west to latitude 27° 22.865' south, longitude 153° 10. 769' east,
 - Then south-south-west to into the boat passage to latitude 27° 24.041' south, longitude 153° 09.906' east,
 - Then following the coastline upstream of the Brisbane River to Bulimba point at approximate latitude 27° 26.615' south, longitude 153° 03.064' east,
 - Then across the river to latitude 27° 26.539' south, longitude 153° 02.855' east at Newstead Park,
 - Then following the coastline downstream of the Brisbane River to luggage point at approximate latitude 27° 22.681' south, longitude 153° 09.611' east,
 - Then north-easterly to latitude 27° 22.484' south. Longitude 153° 09. 765' east,
 - Then northerly to latitude 27° 11.659' south, longitude153° 10.808' east in Moreton Bay,
 - Then north-easterly to latitude 27° 09.690' south, latitude 153° 18. 706' east,
 - Then north-westerly to latitude 26° 51.833' south, longitude 153° 08.631' east,
 - Then northerly to latitude 26° 49.485' south, longitude 153° 08.227' east,

- Then north-east to latitude 26° 48.232' south, longitude 153° 09.849' east,
- Then north to latitude 26° 44.957' south, longitude 153° 09.844' east,
- Then west to the coastline at approximate latitude 26° 44.816' south, longitude 153° 08.173' east.
- Then generally northerly along the coastline to latitude 26° 39.057' south, longitude
 - 153° 06.086' east,
- Then across the river to latitude 26° 38.732' south, longitude 153° 06.856' east,
- The north along the coastline to the starting position northern headland at Maroochy River position latitude 26° 38.327' south, longitude 153° 06.108' east,
- (b) the navigable waters of rivers and creeks flowing, directly or indirectly, into the waters in paragraph (a).

Section 15.1 includes a map showing the above boundaries.

3.2.6 VTS Role

The role of the Brisbane VTS is to facilitate the safe and efficient movement of shipping within the VTS area and to ensure that a continual program of shipping movements can be affected to the advantage of all commercial shipping in an impartial manner.

Brisbane VTS will:

- Forward plan the movement of vessels to prevent congestion and provide for safe and efficient movement of traffic;
- Wherever possible interact with vessel traffic by maritime VHF radio. Interact with port services in Brisbane;
- Provide essential and timely information to assist the on-board decision-making process and may inform, advise or instruct shipping in the VTS area;
- Where necessary communicate the directions of the Regional Harbour Master (Brisbane) or delegate;
- Monitor compliance with the Transport Operations (Marine Safety) Act 1994 and Regulation 2016;
- Record the details of shipping movements in the QSHIPS programme in real time;
- Maintain a situational awareness of traffic in the VTS area to the extent of the available information; and
- Participate in emergency procedures.

In the event of an emergency, the VTS centre is the key notification and communications facility that will activate the appropriate response agencies. Ship traffic movements may be accessed on the <u>QSHIPS</u> website.

VTS has authority and delegation of the RHM in its operational decision making and can exercise the function of the Harbour Master legislate powers to issue directions to vessels.

For critical matters that have not been resolved, or for a serious concern, the pilot can make a request to VTS to escalate the matter to the DHM's immediate attention.

3.3 VTS communications

Ships 35m or greater in LOA, are not to move within the pilotage area unless satisfactory two-way communications are maintained with the VTS centre, as shown at Section 15.

The Brisbane VTS (call sign 'Brisbane VTS'). The pilot station and launches based at Mooloolaba are also equipped with all selected maritime VHF channels including 6, 12, 16 and 67.

Communications Channels	Call sign	Service
VHF channel 16	User	Initial call up and primary emergency channel
VHF channel 12	Brisbane VTS	Working channel for vessels working in Moreton Bay and the Brisbane River between Point Cartwright and Hamilton Reach (Brisbane Cruise Terminal).
VHF channel 13	Brisbane VTS	Working channel for vessels working in the Brisbane River upstream from Brisbane Cruise Terminal and the Southern Moreton Bay, the area which lies to the south of a line running from the Boat Passage Bridge at Fisherman Islands to North Point, St Helena and then to Reeder's Point, Moreton Island and down to Latitude 27°40'S
VHF channel 14	User	Supplementary port operations and Pilot Launch working channel for pilot transfers.
VHF channel 06, 08, 09 and 10	User	Pilots and tugs working channels
VHF channel 63 and 73	User	Water Police/Coast Guard
VHF channel 67	User	Weather and navigational warnings

Table 3 - VHF Communication Channels

3.3.1 Language

The English language is to be used in all communication. The International Maritime Organisation's Standard Marine Communication Phrases (SMCP) 2001 will be used.

3.3.2 Voice recordings

All voice communications with the VTS centre, including telephone and marine VHF, as well as all radio communications on the channels monitored, are recorded against a date and time stamp. Access to the recordings is controlled by the Regional Harbour Master.

3.3.3 Distress and Emergency

Brisbane VTS, as part of the Queensland Marine Coast radio distress network, maintains a safety listening watch for South East Queensland coastal Waters from Sandy Cape to Coolangatta, on VHF channel 16 from 2200 to 0600 daily.

Brisbane VTS is not a coast radio station. Maritime Safety Queensland, Marine Rescue Queensland, Volunteer Marine Rescue (VMR) and the Australian Coastguard have an

agreement that the VTS will monitor channels 16 and 67, for emergency and distress calls only when the marine rescue groups are not operational. A distress call should, in the ordinary course of events, be referred to nearest SAR authority.

Any marine incident, for example a collision, grounding or fire, occurring within the port should be immediately reported to Brisbane VTS on:

VHF radio: channel 12 or 16
Phone: +61 7 3623 3900

3.4 Port Contact Details

Organisation	Telephone	Email
VTS Centre	+61 7 3623 3900	vtsbrisbane@msq.qld.gov.au
Regional Harbour Master	+61 7 3632 7500	rhmbrisbane@msq.qld.gov.au
Port of Brisbane Corporation	+61 7 3258 4888	info@portbris.com.au

Table 4 - Port contact details

3.5 Prior Notification of Movements

Sections 168 to 169 of the <u>Transport Operations (Marine Safety) Regulation 2016</u> require that all ship movements for vessels 35 metres in length or more are reported according to the following table:

Action	Minimum notice	Approved form	
Prior notification of movement	48 hours prior to entry	Notification via QSHIPS	
in pilotage area	24 hours prior to removal or departure		
Transport of dangerous	48 hours prior to entry	Refer 15.9 Vessel Traffic	
goods in pilotage area	three hours prior to departure	Management Forms	
Loading, removal or handling of dangerous cargo alongside (includes bunkering)	24 hours prior to handling	Refer 10.1	
Ship to ship transfer of dangerous cargo	24 hours prior to cargo transfer	Refer 10.1	
'Gas/Free Status' (bulk liquid cargo ships)	48 hours prior to entry, departure or removal	Declaration by master if vessel is 'gas free' for movement purposes.	

Table 5 - Pre-entry Notification Times

3.6 Reporting requirements

3.6.1 Overview of Reporting Requirements

All ships over 35 metres LOA transiting the Brisbane VTS area must report their movements to VTS on VHF Channel 12 as per the instructions below.

3.6.1.1 VTS Calling Points

All ships over 35 metres LOA are to advise to VTS and all ships via VHF broadcast at the following locations:

- Two hours prior to entering the VTS Area;
- North–west fairway beacon or NE2 buoy;
- 1nm north of Beacon North West 12;
- Entrance beacons;
- Upstream of Pelican Banks; Gateway Bridge, Pinkenba Beacon, Cement Australia Swing Basin and Luggage Point; and
- Berth, anchorage, moorings or designated location.

3.6.1.2 VHF Listening Watch

All vessels, regardless of length and type, equipped with VHF radio must maintain an active listening watch on VHF Channel 12 when navigating in and near shipping channels between the Pilot Boarding Ground (Point Cartwright) and Brisbane River – Hamilton Reach.

3.6.1.3 Movements Upstream of Hamilton Reach

All vessels over 15m LOA and operating upstream of Hamilton Reach must give advisory warning broadcasts on VHF channel 13 when approaching all corners, bends and bridges to alert other users.

Note requirements of section 3.5.3.5

3.6.1.4 Pilot/Exempt Master Initial Report

Prior to commencing an arrival, departure or removal, the following information is to be reported by the pilot or exempt master prior to commencement.

- Pilot name and onboard time or Exempt Master's name;
- Ship's LOA, (If LOA differs to that listed by VTS, pilot to confirm ship particulars sighted);
- Fore and aft drafts;
- Details of damage or defects that could affect the safety of navigation or the environment;
- Proposed navigational channel and route to be used;
- Destination berth/anchorage/moorings; berthing direction and tugs assisting; and
- Estimated time passing Entrance beacons and arrival at destination.

3.6.2 Arrival Reporting Requirements

The following reporting requirements are required for all vessels over 35m LOA entering Port of Brisbane and Brisbane VTS area. Report	Information to Report
Ship's Master to Brisbane VTS, Two hours prior to entering VTS Area	Ship's name and type (fishing, tug, recreational and so on) ETA to PBG/NWFWY or anchorage If the ship has any defects that could affect
Pilot/Exempt Master/Ship's Master to Brisbane VTS Commencement of Movement, passing Pilot Boarding Ground	the safety of navigation or the environment Confirm details of ship and intended movement Pilot's or exempt master's initial report as outlined above
Pilot/Exempt Master/Ship's Master to Brisbane VTS VTS Calling Points	Vessel name and current location/calling point Destination and estimated time of arrival at the entrance beacons and berth/anchorage.
Pilot/Exempt Master/Ship's Master to Brisbane VTS Anchoring in Brisbane Roads	Provide anchorage time and position as a bearing and distance off the entrance beacons.
Pilot/Exempt Master/Ship's Master to Brisbane VTS Vessels proceeding upstream of Brett's Wharf Ferry Terminal	To make an 'all ships' broadcast on VHF Channel 13 of their destination and manoeuvring intentions when passing under the Sir Leo Hielscher (Gateway) Bridges.
Pilot/Exempt Master/Ship's Master to Brisbane VTS When alongside the berth	Confirm time of first line and all fast. Berthed 'head up' or 'head down' Pilot disembarkation time

Table 6 - Arrival Reporting Requirements

3.6.3 Removal Reporting Requirements

The following reporting requirements are required for all vessels over 35m LOA transiting from one location to another within Port of Brisbane and Brisbane VTS area.

Report	Information to Report
Ship's Master to Brisbane VTS One hour prior to commencing	Confirm estimated time of departure if the ship has any defects that could affect the safety of navigation or the environment

Pilot/Exempt Master/Ship's Master to Brisbane VTS 15 minutes prior to commencing	Confirm details of ship and intended movement pilot's or exempt master's initial report as outlined above
Pilot/Exempt Master/Ship's Master to Brisbane VTS Commencement of movement	Confirm anchor aweigh or last line time Destination and estimated time of arrival at the entrance beacons and berth/anchorage.
Pilot/Exempt Master/Ship's Master to Brisbane VTS VTS Calling Points	Vessel name and current location/calling point Destination and estimated time of arrival at the entrance beacons and berth/anchorage.
Pilot/Exempt Master/Ship's Master to Brisbane VTS Anchoring in Brisbane Roads	Provide anchorage time and position as a bearing and distance off the entrance beacons.
Pilot/Exempt Master/Ship's Master to Brisbane VTS When alongside the berth	Confirm time of first line and all fast. berthed 'head up' or 'head down' Pilot disembarkation time

Table 7 - Removal Reporting Requirements

3.6.4 Departure Reporting Requirements

The following reporting requirements are required for all vessels over 35m LOA departing from Port of Brisbane and Brisbane VTS area.

Report	Information to Report
Ship's Master to Brisbane VTS One hour prior to commencing	Confirm estimated time of departure if the ship has any defects that could affect the safety of navigation or the environment
Pilot/Exempt Master/Ship's Master to Brisbane VTS 15 minutes prior to commencing	Confirm details of ship and intended movement pilot's or exempt master's initial report as outlined above
Pilot/Exempt Master/Ship's Master to Brisbane VTS Commencement of movement	Confirm anchor aweigh or last line time Destination and estimated time of arrival at the entrance beacons and Fairway.
Pilot/Exempt Master/Ship's Master to Brisbane VTS VTS Calling Points	Vessel name and current location/calling point Estimated time of arrival at the entrance beacons and Fairway.
Pilot to Brisbane VTS and Pilot Launch When passing NW12 and NW2	Provide estimated time of arrival at Pilot Boarding Ground Pilots transferring to the pilot launch should ensure that VTS is informed of the transfer time after the transfer.

Table 8 - Departure Reporting Requirements

3.7 Booking a vessel movement

The movement of all vessels of LOA 35 metres or more arriving at Brisbane is recorded in an internet based programme known as QSHIPS.

The programme is operated from the VTS centre; shipping agents submit booking information on line in accordance with the reporting requirements (see Section 3.5 Prior Notification of Movements) and record their requisitions for tugs, pilot and linesmen. The ancillary services respond online to acknowledge the booking and allocate their resources; the movement then assumes the confirmed status. Permit requests shall be submitted via QSHIPS and to the respective agencies if required (see15.9Work permits). QSHIPS will indicate when the approval has been granted and the agent is then able to print the permit for the vessel.

Since the programme is live, port service providers, agents, government agencies and the general community are able to view scheduled movements in any Queensland port in real time.

3.7.1 QSHIPS – (Queensland shipping information planning system)

The movement of all vessels of LOA 35 metres or more arriving at Brisbane is recorded in an internet based programme known as QSHIPS.

The programme is operated from the VTS centre; shipping agents submit booking information on line in accordance with the reporting requirements (see Section 3.6 Prior Notification of Movements) and record their requisitions for tugs, pilot and linesmen. The ancillary services respond online to acknowledge the booking and allocate their resources; the movement then assumes the confirmed status. Permit requests shall be submitted via QSHIPS and to the respective agencies if required (see 9 Work permits). QSHIPS will indicate when the approval has been granted and the agent is then able to print the permit for the vessel.

Since the programme is live, port service providers, agents, government agencies and the general community are able to view scheduled movements in any Queensland port in real time.

3.7.2 Removals

Removals from/to a berth/anchorage within the pilotage area are classified as removals with additional information below.

3.7.2.1 Notification

All removals whether they are carried out as a pilotage removal or a non-pilotage removal and from:

- One berth to another berth or anchorage or
- An anchorage to another anchorage or berth or
- A warp along a berth to another berth or
- A warp for operational reasons on the same berth
- A tug and barge combination with a total combination length greater than 80m

The use of the QSHIPS programme is mandatory for notification of the impending removal movement and subsequent movements of a vessel unless exceptional circumstances

preclude this. In this case the must be submitted to VTS by email at least 24 hours prior to the movement.

3.7.2.2 Pilotage removals

All <u>Vessels that require a pilot</u> (see <u>7.1</u>) and are booked in for a removal from one berth or anchorage to another berth or anchorage must do so under pilotage. Such removal must also have tug allocations per the port requirements and conditions (see 8.2). This requirement also applies to vessels that intend to let go, swing off, and make fast again at the same berth even if lines are still placed on the wharf.

3.7.2.3 Dead ship removals

Applications for ships requiring a dead ship removal to any berth or anchorage within the port will be assessed on their merits.

3.7.3 Booking a Tug & Tow

When a tug and tow is bound for, due to depart from or to do a removal (except defined as local traffic) within the port, the master, owner or agent is required to book the movements with VTS via the QSHIPS programme using the same arrangements as defined for other vessels. A visit for the towing vessel will need to be created in QSHIPS and then the details of the tow added to the *Visit Remarks*.

The information will include:

- Full details of the tug and of the vessel/s making up the tow (dimensions, drafts, and so on);
- The length of the tow at sea and when shortened up for entry into the port;
- Details of the makeup of the towline to include lengths and types of tow lines and bridles;
- Any special requirements for the handling of the tow within the port; and
- If an agent is unable to submit a booking by QSHIPS, the agent must complete the 15.9.4 VTIS A4 Form – Tug and Tow Advice in addition to the 15.9.1 VTIS A1 – Booking Form to VTS.

Tug and tows may be subject to varying scheduling arrangements.

3.8 Movement scheduling

3.8.1 Confirmation of schedules

On receipt of a movement booking VTS will cross check tug and pilot bookings, other movements and terminal schedules whilst verifying draft restricted vessels and tanker status requirements when putting the schedule together.

3.8.2 Schedule changes

Maritime Safety Queensland may make changes to the approved schedule of ship movements up to two hours prior to the commencement of the movement in order to ensure the safe and most efficient movement of shipping.

Agents are to modify scheduled movement times via QSHIPS up to twenty-four hours prior to the scheduled movement time. Changes will remain at the planned status until reviewed

and accepted by VTS. For changes just outside the 24hr period it is in the best interest for the agent to notify VTS via email or phone for any changes. Agents will be notified if a change does not comply with scheduling parameters.

Changes within 24 hours of any scheduled movement time must be made by phone to Brisbane VTS. Once accepted and confirmed by VTS, Agents must advise relevant services of the change.

Changes requested within two hours will incur delay or cancellation fees in accordance with *Transport Operations (Marine Safety) Regulations 2016*.

Estimated time of departure (ETD) cannot be brought ahead between 2200 hours and 0600 hours. Final notification to all port services, including VTS are to be made by 2130 hours daily.

3.8.3 Prioritising of ship movements

The principle of 'first come, first served' applies to all ships wishing to enter the port. For ships requiring a pilot it means first to the boarding ground, for exempt ships, it means first to the fairway beacon, however this principle may be modified under certain conditions.

The confirmation of all movements is the responsibility of VTS, who will ensure that all ships should move through the port efficiently and safely.

3.8.3.1 Tide restricted ships

Where a ship is restricted by draft or tidal current to a narrow tidal window, it will usually be given first priority.

3.8.3.2 Passenger ships

Passenger ships operate to fixed schedules that are booked months in advance; where possible, their schedules will be adhered to.

3.8.3.3 Commercial considerations

When the schedule dictates that certain ships must be delayed, those ships likely to suffer the greatest commercial disadvantages, such as those having labour standing by may be given priority.

3.8.3.4 Non gas-free (NGF) tankers

Non gas—free tankers generally require a clear river and additional passing restrictions apply (see <u>5.5.6 River Transits - advice to other vessels</u>). Movements of other ships may need to be adjusted in order to meet the restrictions. However, NGF tankers do not enjoy any special priority above the movement other ships.

3.8.3.5 Clearing after industrial delays

Subsequent to any industrial dispute, vessels which have suffered the longest delay may be given preference subject to the previous scheduling priorities and suitable environmental conditions for the ship type.

3.8.3.6 Late modification advice

The guidelines regarding tide restricted ships and non gas—free tankers apply. Those agents who maintain their booked in arrival, removal and/or departure times will usually be given preference over late or modified bookings.

3.8.3.7 Naval ships

Naval ships are expected to observe the commercial considerations and procedures of the port.

3.9 Movement clearance information

All ships with a LOA 35 metres or more require a clearance from VTS in order to enter, depart or move within the VTS area. It is the responsibility of the master or pilot to contact VTS to obtain the necessary clearance and information prior to the movement.

Clearances are valid for uninterrupted passage to a specified location or until the voyage is interrupted, completed (for example, by anchoring, berthing or due to a breakdown) or cancelled by the Harbour Master. Ships will require a new clearance for any subsequent movement.

3.10 Tug and Barge/Towing Operations

3.10.1 Operational Rules

All tugs and tows entering or departing the Brisbane Pilotage Area will be handled under the following conditions:

- All tug and tow combinations over 50m, as defined in section 1.5.34, require a pilot or an appropriately endorsed exempt master;
- All tug and tow combinations over 35m, departing or arriving in the Brisbane Pilotage area are to be booked through QSHIPS, including submission of VTIS A4 Form - Tug and Tow Advice;
- All tug and tow combinations over 80m, operating solely within the pilotage area and appropriately endorsed exempt master are to be booked through QSHIPS, including submission of VTIS A4 Form - Tug and Tow Advice;
- Tug and Tow combinations are usually to be scheduled so that the transit of Moreton Bay is conducted in daylight conditions, unless approved by the DHM;
- Pilot transfers, via pilot launch, are usually to occur in daylight;
- All arriving and departing tugs must have a total combination length of no greater than 250m. Tow combinations greater than 250m will be assessed on a case-bycase basis by the Regional Harbour Master;
- Tug and tow combinations are to ensure that the towline and barge are well lit for night and reduced visibility operations;
- Multi-unit tows, regardless of length, are not permitted to transit the Brisbane River upstream of the Entrance Beacons without the approval of the Regional Harbour Master. It is expected that tows are assembled/dis-assembled in Brisbane Roads;
- On a case-by-case basis, The Regional Harbor Master may require or direct harbour tugs to take charge of the tow or tows when transiting the Brisbane River upstream of the Entrance Beacons; and
- Tug and tow combinations should be appropriately configured for river transits above Fisherman Island Swing Basin. Appropriate configurations include, hipping up, pushing as a composite unit and/or towing on a shortened towline with the provision of an assist tug.

Any tow that is in a damaged condition will not be granted entry into the Brisbane pilotage area until the Regional Harbour Master is satisfied that the vessel/s does not pose a threat to the marine environment or a hazard to navigation in the port.

3.11 Mooring requirements

Masters are reminded that Brisbane is a river port and can be subject to very strong currents caused by storms and river flooding. It is the responsibility of the master, agent and terminal to assess the risk and ensure that sufficient mooring personnel are engaged to moor and unmoor a ship in a safe and efficient manner.

Passing vessel traffic is also likely throughout a vessel's stay at a berth. Masters are to ensure that their ship is securely moored alongside, and that the gangway is tended at all times. Masters are advised to exercise caution when using tension winches and to have contingency measures in place.

Best mooring practices are always to be followed. This includes dipping lines and a maximum of two pairs of lines in opposite directions on each bollard. The departure time is the last line time. Mooring gangs should be ready to commence the unmooring sequence at least 15 minutes prior to the scheduled departure time.

Further information regarding mooring consideration during extreme weather events can be found at 11.7.1 Mooring Considerations.

3.11.1 Separation distance between ships at the berth

It is important to ensure that there is adequate separation between vessels at terminals. This is to ensure that there is adequate space to safely manoeuvre the vessel and minimal interference with mooring lines between vessels. Outlines below are the minimum lengths which must be maintained for the duration of the vessel's call.

- For ships 300m or less LOA, the minimum separation between vessels is 20m; and
- At the time of berthing, +300m vessels are to have a minimum of 50m separation to vessels at adjoining berths. A minimum separation of 20m is permitted once alongside, providing safe mooring configuration can be achieved.

It should be noted that vessels with extra ordinary dimensions, such as carrying quay cranes, may require additional separation. If there is a specific requirement to reduce the separation between vessels for operational purpose, the Regional Harbour Master is to be contacted through VTS to make an assessment.

3.11.2 Moorings – Fisherman Islands and Luggage Point

Masters of vessels, especially high windage vessels such as container ships, car carriers and RORO ships, berthing at Fisherman Islands berths are advised that these berths are affected from time to time by strong south easterly offshore winds. Extra attention to moorings is required due to the open nature of the wharf area. The effectiveness of the mooring arrangement must be assessed and moorings tended on a frequent basis.

Masters are advised that the protracted use of push up tugs at berths during adverse weather conditions will not be sanctioned. Tugs are a valuable resource required to maintain safe vessel movements within the port and should only be used for the purpose that they are intended for or at the direction of the Harbour Master for marine safety reasons.

Fisherman Island container and vehicle carrier berths have bollards rated to 150 tonne Safe Working Load. With high windage vessels regularly calling, berthing perpendicular to

the dominant wind forces, it is important that the vessel is moored safely. Whilst this responsibility lies with the Master, Pilots and terminals will provide support including recommended mooring arrangements. On boarding, pilots are to discuss the mooring plan and requirements with masters. It should be noted that bollards should only have a maximum of two mooring lines attached.

Storm Bollards are available at some berths however are not held at immediate readiness. If a master believes these may be required, VTS is to be contacted to discuss requirements.

Masters of ships fitted with hull rubbing bands, "Panama fenders" and other hull protrusions are warned of the particular risk of entrapment upon the wharf fenders.

3.11.2.1 Moorings - +300m LOA Container Ships

Outlined below are additional requirements for the mooring of container ships greater than 300m at Fisherman Island;

- The vessel is to be moored in accordance with approved plans issued by Port of Brisbane Pty Ltd;
- The mooring gang is to consist of a minimum of 6 personnel, including the supervisor. The mooring supervisor is to be equipped with a marine VHF radio, monitoring VHF channel 12 from 30mins prior to scheduled arrival to discuss the mooring sequence;
- The mooring personnel at the bow and stern are to be in communication with the mooring supervisor at all times via radio; and
- Lines launch is required to support the arrival of the vessel.

3.11.3 Moorings – Above Pelican Banks

There is a risk of berth surge and interaction in the Brisbane River for berths above Pelican Banks. Berth surge is caused by a variety of environmental, poor mooring arrangements and overall vessel preparedness. The surge event is normally triggered by the berthed vessel being passed by another. A berth surge event can result in broken mooring lines, damaged gangways, impacts to the environment and injury to persons in the vicinity.

3.11.3.1 Berths prone to interaction

Berth surge is known to occur at the following terminals:

- Ampol Products;
- Cement Australia;
- Wagner;
- BP Products;
- Viva:
- Quantem Liquid;
- SIMS Metal; and
- Pinkenba Common User Berth.

3.11.3.2 Requirements for all vessels alongside

Outlined below are the requirements for all vessels moored at the terminals listed above to assist in reducing the risk of berth surge events.

- The ship is to maintain a listening watch on VHF channel 12
- The ship's agent is to provide VTS with an alternative contact telephone number if the vessel does not have the facilities to maintain a listening watch on VHF channel 12.
- VTS will call the ship at least 30 minutes prior to the passing of any large vessel; the call is to be acknowledged by the duty officer
- The ship is to ensure that all mooring lines and the gangway are tended before the other ship passes
- VTS may subsequently provide a broadcast if the passing vessel cannot maintain the operational speed limit
- Additionally, a vessel handling bulk liquids is required to cease pumping; the
 manifolds on the ship and shore are to be closed during transit of such passing
 vessels. (Terminals may apply to the Regional Harbour Master for approval to relax
 this restriction, following a thorough risk analysis and development of other mitigating
 strategies)

3.11.3.3 Requirements of passing vessel

- The following applies to vessels passing another at terminals listed above.
 Scheduling will achieve a minimum separation of 30 minutes between consecutive passing movements of ships that are on a through transit of the area, for all berths between the Gateway Bridge and Pelican Banks;
- Maintain operational speed limit of 6 knots through the water;
- VTS will advise the transiting ship of the tidal current flow at 2F beacon;
- VTS standard notifications to berthed ships and radio advisory calls still apply (Refer to 3.11.4.2).

3.11.3.4 Anchoring

Ships are only to anchor in the area designated by VTS. Upon anchoring, ships are to advise VTS of their anchoring time and position. Ships at anchor in the area are to maintain a continuous listening watch on VHF channel 12 and are to report to VTS if dragging their anchor.

Ships are not Permitted to Immobilise Main Engines without the written approval of VTS.

3.11.4 Non pilotage removals (warping)

Non pilotage removals (warping) within a berth or to an adjacent berth may be conducted for operational reasons (align loading arms, stern ramps or hoppers) by the master of the ship subject to the following conditions:

- The movement is to be booked in QSHIPs and the master confirms the ship's ability to safely conduct the manoeuvre;
- The removal is along a continuous uninterrupted stretch of wharf and is restricted for a distance not exceeding 250 metres;

- Vessel LOA is 200m or less and not considered to have high windage;
- Weather to be favourable; Limited to less than 0.5 knots of current, less than 15 knots of sustained wind and no thunderstorms forecasted;
- The vessel remains securely alongside at all times, with all ship's lines are ashore at all times and the use of a lines launch is required to move additional lines;
- The terminal/wharf operator is to have a procedural plan regarding the warping of vessels; the person in charge on the wharf is to discuss procedures of the removal with the master of the vessel prior to the move and is to agree on a VHF channel for communications; and
- The master is to advise VTS of the commencement and completion of the move.

The Regional Harbour Master, to ensure the safe and efficient operation of the port, may at any time require the removal to be conducted by a pilot with or without tug assistance.

3.12 Superyacht

On occasion, superyachts have transited above Hamilton Reach to moor in Town Reach. Each proposal is to be assessed by the RHM. The proposal will consider the suitability of the vessel, proposed location and timings of the movement. Listed below are examples of possible limitations that might be placed on this operation.

- Requirement for licenced pilot, regardless of length;
- Daylight transit from/to mooring location;
- Mooring head down stream to allow quick departure in the event of extreme weather;
- Vessel moored fore and aft to reduce impact on passing traffic; and
- Arrival/departure from/to mooring location scheduled for slack water and clear of peak ferry operations.

3.13 Detained Vessels

Confirmed bookings for vessels under Port State Control detention will not be accepted until clearance from AMSA is received. This is to ensure efficient application of port resources. A tentative booking may be accepted to aid in future scheduling, but no timings will be allocated.

3.14 Reporting defects

The Australian Maritime Safety Authority (AMSA) requires notification of any deficiencies or suspected deficiencies on ships visiting Australian ports. Deficiencies are to be reported to VTS via the QSHIPS programme and the Australian Maritime Safety Authority using AMSA Form 355 Report of marine safety concern (report of suspected non-compliance with Navigation Act or safety/pollution conventions).

3.15 Small vessels navigating in and near shipping channels

Small vessels traversing the shipping channels between the Fairway Buoy to the Brisbane River are reminded of their obligations under the "collision regulations" in respect to navigating in narrow channels. A large vessel that is constrained by draft to navigate within

the confines of the buoyed shipping channels has limited manoeuvring capability within these channels. Small vessels are therefore required to keep clear of or to the side of the channels and are not to impede the passage of large ships.

For reasons of safety, a recreational ship should only cross a shipping channel at recommended locations and at 90° to the channel (refer to MSQ Boating Maps, formerly Beacon to Beacon, Guides for recommended crossings).

A recreational ship equipped with VHF radio is required to maintain a listening watch on VHF channel 16 and either channel 12 or 13 depending on its area of operation.

4. Port Description

Brisbane is one of Australia's most diverse ports and Queensland's largest general cargo port. The Port of Brisbane Pty Ltd, manages and develops the port, under a 99 year lease from the Queensland Government. There are currently 28 operating berths, with over 7.5km of quay line.

4.1 Geographical Areas

4.1.1 Pilotage area

The Brisbane pilotage area is described in Schedule 2 of the <u>Transport Operations (Marine Safety) Regulation 2016</u> and depicted in appendix 16.1.3 Brisbane Port and Pilotage Limits

(Refer 15.1.2 Brisbane Port and Pilotage Limits)

4.1.2 Port of Brisbane area

(Refer 15.1.2 Brisbane Port and Pilotage Limits)

4.1.3 Brisbane VTS area

(Refer 15.1.1 Brisbane VTS area)

4.2 Load lines

Brisbane is in the summer load line zone.

4.3 Maximum vessel size

Please refer to 5.7 for vessel size limitations.

4.4 Time zone

All Queensland ports: UTC + ten hours throughout the year.

4.5 Working hours

- Port service providers are usually available 24 hours per day, seven days per week;
- Normal business office hours are Monday to Friday, 0900 to 1700 hours; and
- Refer to stevedoring companies' for the availability of their labour force.

4.6 Official Navigation Resources

For navigation in pilotage areas, masters should refer to the nautical charts and publications produced by the Australian Hydrographic Office.

4.6.1 Recommended Paper Charts

AUS 236 – Moreton Bay

- AUS 237 Brisbane River
- AUS 814 Point Danger to Cape Moreton
- AUS 815 Cape Moreton to Double Island Point
- AUS 4602 Tasman and Coral Seas Australia to Northern New Zealand and Fiji
- AUS 4060 Australasia and adjacent waters

4.6.2 Recommended Publications

- NP15 Admiralty Sailing Directions (Australian Pilot Volume III)
- AHP11 Australian National Tide Tables
- AHP20 Seafarers Handbook for Australian Waters

4.7 Shipping announcements

4.7.1 Notices to Mariners

Maritime Safety Queensland circulates marine safety information to mariners, organisations and other interested parties in the form of Queensland <u>Notices to Mariners</u> and Advice to Mariners, which advise of:

- Navigation warnings and hazards (such as aids to navigation which may have been destroyed, missing or unlit);
- Changes to the uniform buoyage system (which assists with the correction and updating of marine charts);
- Navigation depths (necessary when navigating in channels with depth restrictions);
 and
- Any other works which may affect the safe navigation of vessels in Queensland coastal waters and ports (such as dredging operations and construction works).

Australian Notices to Mariners are produced by the Australian Hydrographic Service.

4.8 Brisbane berth information

For complete information on berths at Fisherman Islands and berths on the Brisbane River please refer to 15.3 Wharf and berth information and the Port of Brisbane Pty Ltd website.

4.9 Wharf cranes and loaders

Quay cranes and bulk loaders should be positioned at the mid length of the proposed berthing position or at the designed securing site for that equipment, the vessel will not be berthed or moved until this condition is complied with.

If a pilot considers that a quay crane is parked in an unsafe position it is to be immediately moved otherwise the ship will be directed to an anchorage until such time as the vessel can berth safely; the additional movement will be charged as a separate pilotage removal.

When a berth is unoccupied and a crane or gantry is lowered such that it protrudes outside the wharf line, the operator must notify VTS. The obstruction caused by the equipment must be adequately lit at night.

For the most up to date information on Cranes and Loaders, including their dimensions, operating limitations and position, please contact the terminal operator, listed in Section 15.3 Wharf and berth information.

4.10 Anchorage areas

The following anchorages apply in the Port of Brisbane:

4.10.1 Point Cartwright

Vessels awaiting pilot or those directed to anchor off the port are advised to anchor in the area outside of an arc taken as five nautical miles due east of Point Cartwright to five nautical miles south/east of Point Cartwright. Vessels are not to anchor inside of this line, or to the north or south of the bearings lines from Point Cartwright. (Refer 15.2.1 Pilot Boarding Ground and Fairway Approach)

4.10.2 Moreton Bay (Brisbane Roads)

Moreton Bay is a marine park and every effort will be made by Maritime Safety Queensland to reduce the risk of ship sourced pollution in Moreton Bay. In general, anchoring will only be permitted for those vessels expected to work within the port, for example awaiting a berth or suitable tide and weather conditions.

Cruise ships may be scheduled to anchor at Tangalooma. The anchorage on the eastern side of the shipping channel is limited for cruise ships up to 270m LOA and where westerly winds are not forecasted. If the winds are forecasted from the west the anchorage on the western side of the shipping channel is to be used.

Anchorages locations as follows;

- Mooloolaba 26°40.0'S, 153°08.3'E
- Tangalooma East 27°10.1677'S 153°21.2641'E
- Tangalooma West 27°10.2'S 153°20.3'E

Ship to ship transfers of liquefied gas product has been identified as an operation that is conducted periodically in the following locations:

- STS 1 27°17.1682'S 153°16.5684'E
- STS 2 STS2 27°16.5078'S 153°17.7965'E

Both anchorages are marked on chart AUS 236 and have depths over 15 metres.

4.10.3 Small craft anchoring

The following applies to small craft anchoring.

4.10.3.1 Whyte Island Boat Passage

The Port of Brisbane Pty Ltd has declared the area of the Boat Passage between Fisherman Islands and Whyte Island a port operational zone. This is the area of waterway to the west of the Boat Passage Bridge up to the Brisbane River and on the east of the bridge for a distance of approximately 600 metres. Vessels must not remain in or be anchored or moored in this zone for a continuous period exceeding 48 hours.

4.10.3.2 Colmslie Anchorage

To ensure safety of recreational traffic and large foreign trading vessels operating in close proximity in Hamilton and Quarries reaches of the Brisbane River, anchoring of small craft is restricted. Anchorage is only permitted in the regulated area indicated by special mark buoys (light characteristic FI.Y.2.5s) and shown on chartlets <u>15.2.15</u>, <u>15.2.16</u> and <u>15.2.17</u>

4.11 Leading Lights

4.11.1 Moreton Bay

Lead Channel		Direction	Characteristics		
Leau	Channel	Direction	Front	Rear	
North West	North West Channel	328.3/148.3	Q.Bu (F Day) & Q.G	Iso.Bu.2s (FY Day)	
Spitfire	Spitfire Channel	290/110	Q (F Day)	Iso.2s (F Day)	
Cowan	Main	W 048 - 055 W 132 - 141	FI.WRG.2s		

Table 9 - Morten Bay leading lights

4.11.2 Outer Bar Reach reciprocal leads

Load Booch		Direction	Characteristics	
Lead Reach	Direction	Front	Rear	
Reciprocal	Outer Bar	211.9/031.9	Dir.Q.Bu & LFI.10s	Dir.Iso.Bu.2s & Mo(A).6s

Table 10 - Outer Bar Reach reciprocal leads

4.11.3 Below Pelican Banks

Lond	Reach	Direction	Characteristics		
Lead			Front	Rear	
1			Q.Bu (Q Day)	Iso.Bu.2s (Iso.2s Day)	
1S	Inner Bar	211.9/031.9	Q.R (Q Day)	Iso.R.2s (Iso.2s Day)	
1N			Q.G (Q Day)	Iso.G.2s (Iso.2s Day)	
FI Berthing Leads	Inner Bar	211.9/031.9	Q.Y	Iso.Y.2s	
FI Swing Leads (BC08 & BC 10)	Inner Bar	211.9/031.9	Iso.R.4s	Iso.R.4s	

Table 11 - Below Pelican Banks - leading lights

4.11.4 Above Pelican Banks

Lood	Doorh	Direction	Characteristics		
Lead	Lead Reach		Front	Rear	
2	Lytton Rocks	199.3/019.3	Q.Bu & Fl.R.2.5s	Iso.Bu.2s	
3	Pelican Banks	185.7/005.7	Q.Bu (Q. Day)	Iso.Bu.2s (Iso 2s Day)	
4	Pelican Banks	185.7/005.7	Q.Bu (Q Day)	Iso.Bu.2s (Iso.2s Day)	
5	Lytton Rocks	199.3/019.3	Q.Bu (Q. Day) & Fl.R.4s	Iso.Bu.2s (Iso.2s Day) & FI.Y.4s	
6	Upper Lytton	246.3/066.3	Q.Bu (F Day) & Q.R	F.Bu & Iso.Bu.2s (FY Day) & FI.Y.4s	

Lond	Deark	D: ()	Characteristics	
Lead	Reach	Direction	Front	Rear
7	Lytton & Quarantine	216.6/036.6	Q.Bu (F Day)	Iso Bu.2s (F Day)
8	Pinkenba	236.7/056.7	Q.Bu (Q Day)	Iso.Bu.2s (Iso.2s Day)
9	Parker Island	241.8/061.8	F.WRG & Q.Bu	
10				F.Bu.(F Day)
10S	10S Quarries 10N	255.7/075.7	F.R (FY Day)	F.R (FY Day)
10N			Q.G (F Day)	Iso.G.2s (FY Day)
11	Eagle Farm Flats	216.6/036.6	F.WRG & Q.Bu	
12	Parker Island	241.8/061.8	Q.Bu (Q Day)	Iso.Bu.2s (Iso.2s Day)
13	Hamilton	287.8/107.8	Q.Bu (Q Day)	Iso.Bu.2s (Iso.2s Day)
14			Q.Bu (Q Day)	Iso.Bu.2s (Iso.2s Day)
14S	14S Quarries	255.7/075.7	Q.R (Q Day)	Iso.R.2s (Iso.2s Day)
14N			Q.G (Q Day)	Iso.G.2s (Iso.2s Day)
15	Hamilton	287.8/107.8	F.Bu (F Day) & Fl.G.3s	F.Bu (FY Day)

Table 12 - Above Pelican Banks - leading lights

4.11.5 Bridge Clearance Lights

Gateway Bridge Clearance Lights: The centre line of Quarries Reach leads is marked on the arch of the Gateway Bridge by lights F Bu. The edges of the channel cutting are marked by lights F.G to the north and F.R to the south.

Story Bridge Clearance Light: The centre line of the bridge is marked with F.Bu lights on both sides of the bridge.

5. Port navigation and operational restrictions

5.1 General

Draft figures are related to a draft in salt water of density 1025 kg/m³ and should be 'as read'.

5.2 Passage Information

Vessels generally follow a series of channels from the Fairway, through Moreton Bay and then into the harbour and river. The route and channels selected will vary according to draft, speed, traffic and environmental conditions. Further information is contained in NP15 Australian Pilot Volume III.

Note – The North East Channel is not a maintained channel used by the pilot service. The channel is used by small craft such as fishing vessels, recreational vessels, small naval craft, and local tugs and barges.

5.3 Speed Limits

5.3.1 Moreton Bay

Smooth water limits 40 knots, unless otherwise prescribed.

5.3.2 Brisbane River – Gazetted Speed Limits

The gazetted speed limits over the ground, by legislation for the Brisbane River are:

- From the Entrance Beacons to Luggage Point 13 knots (three metre draft and over);
- Upstream of Luggage Point eight knots (three metre draft and over);
- From the public boat ramp at Kookaburra Park to Mount Crosby Weir six knots (all traffic);
- Story Bridge to William Jolly Bridge 15 knots (eight metre LOA and over); and
- All creeks and waterways flowing into the Brisbane River (except the Bremer River) six knots all traffic.

Temporary speed limits may be gazetted during harbour works, such as wharf and bridge construction. Further information is available via VTS or Notice to Mariners.

5.3.3 Brisbane River – Operational Speed Limit

To assist in the management of berth surge and other safety factors, an operational speed limit (for vessels 3m draft and over) is six knots through the water, when passing vessels that are moored at the following berths:

- Ampol Products;
- Cement Australia;
- Wagners;
- BP Products:
- Viva;

- Quantem Liquid;
- SIMS Metal;
- Pinkenba Common User Berth; and
- When transiting beneath the Gateway Bridge.

There may be circumstances where this speed is required to be exceed, such as high windage vessels. The vessel, normally via the embarked Pilot, will advise Brisbane VTS who will pass this information to vessels alongside.

5.4 Draft restrictions

Information about tidal windows and maximum drafts is available from VTS. As a guideline, tidal restrictions may apply for vessels over 12.0m draft through Moreton Bay up to the Fisherman Island berths: and for vessels over 8.5m draft for berths in the Brisbane River, upstream of Fisherman Island.

Note: Large swell height and/or period, tidal conditions or other special circumstances may require the restrictions be applied to shallower draft vessels for the duration of the event. This will be advised to agents and terminals when enacted and returned to the standard restrictions at the first safe opportunity.

5.4.1 Under Keel Clearance Management Overview

Port of Brisbane utilises both live and static systems to manage the safe movement of vessels within the port with respect to under keel clearance. The static system is a simple calculation of predicated tide against draft and is used for long term planning. Minimal under keel requirements within the static system are outlined in section 16.7.1.

The live system utilises live environmental data across the full breadth of the channels. This includes tide, wind and wave motion. The system uses the vessels specific stability data to calculate its predicated motion for the period of the specific transit, producing a under keel clearance profile along the length of the pilotage.

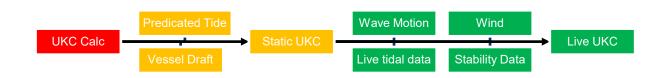


Figure 1 UKC Management

Note – The live system, with more accurate real time data inputs, is considered more precise than the static system therefore tolerances outlined at section 15.7 do not apply.

5.4.2 Static UKC programme (SUKC)

A SUKC programme provides tidal window information for transits above Pelican Banks. The following information is required:

Name of ship;

- Date of arrival/departure/removal;
- Earliest ETA/ETD/removal;
- Ships draft ('as read');
- Ships beam; and
- Name of berth.

5.4.3 Live UKC programme

Port of Brisbane operates the DHI Water and Environment Pty Ltd NCOS Online Under keel Clearance Forecasting System to manage the safe movement of deep draft vessel transits of Moreton Bay. Vessels with a draft > 12·0 metres are required to supply stability information on the NCOS Vessel Particulars form (15.9.5).

5.4.4 Maximum draft forecasts

The SUKC program can provide a listing of maximum drafts on a monthly or daily basis for Moreton Bay and Brisbane River transits.

5.4.5 Hourly drafts alongside

For vessels loading to a deep draft for a particular berth, maximum predicted drafts alongside are available to assist masters and terminal operators to plan cargo operations.

Note: Drafts supplied are taken 'as read' and do not take into account water salinity or the tides being below predicted height.

5.4.6 Under Keel Clearances (UKCs) – Moreton Bay

Minimum UKCs for Moreton Bay vary according to the route taken. The clearances are greater towards the north of the bay, where waves and swell have the greatest effect. Generally, if the draft exceeds 12·0 metres irrespective of beam, then a tidal window may exist, and a draft check should be made.

If, because of draft restrictions, it is not possible to do a complete bay and river transit in an unbroken passage, it may be possible to affect the movement in two stages.

- **Stage 1** Fairway to Brisbane Roads anchorage.
- **Stage 2** Brisbane Roads anchorage to the relevant berth or vice versa for the departure of deep draft ships.

(Refer 15.7.1 Moreton Bay and Brisbane River)

5.4.7 UKC's – Brisbane River

The Brisbane River is dredged and maintained to a least depth of 9·1m LAT. A minimum UKC of 0·6 metre is required which increases with draft. The actual tide required for a given draft can be found in the UKC table.

(Refer 15.7.2 Tides – UKC required for Brisbane River).

5.4.8 UKC's – alongside berths

All vessels must maintain a minimum UKC of at least 0.3 metre whilst alongside any berth.

5.4.9 Trim and list requirements

The trim of a vessel must not exceed 2% of the vessel's LOA, with propellers fully immersed. The vessel must not be trimmed by the bow and must be upright with no list for any passage within the Brisbane Pilotage Area.

5.5 Passing requirements

The following conditions are the parameters used for ship scheduling purposes.

Any passing manoeuvre must be agreeable to the pilots and/or exempt masters on the passing ships. Weather, tidal conditions or special circumstances may require a departure from the following guidelines.

Overtaking should be avoided unless both vessels agree and VTS is advised.

5.5.1 Local Traffic

Regular river users (local traffic), such as sand/bunkering/landing barges and dredges, are to keep well clear of larger ships and are not to impede their passage in any way. The pilot / exempt master must agree to the passing which should occur either:

- Downstream of the Pelican Banks Buoy;
- Where the navigable width of the river is >180 metres Hamilton Reach, Pinkenba swing basin or Cement Australia swing basin; and
- Where the regular river user can operate safely outside of the dredged channel.

5.5.2 Moreton Bay

Channels within Moreton Bay vary in width and depth profile throughout the bay. The following applies when any of the vessels is greater than 300m LOA and/or over 12 m draft

- Passing is not to occur between NW2 and NW4;
- Passing is not to occur at NW12;
- Passing is not to occur at E5;
- Passing may occur by mutual agreement between NW4 and NW6 if the smaller vessel is able to safely use the Northwest Bypass Channel; and
- Passing may occur by mutual agreement between NW2 and the Fairway if one of the vessels is safely able to transit north of the Fairway.

5.5.3 One mile to seaward of the Entrance Channel, Entrance Channel and Outer Bar Reach

Ships with an aggregate LOA less than 370 metres may pass provided:

- Neither ship has a draft 12 metres or more; and
- Neither ship has a beam greater than 33 metres.

Ships with an aggregate LOA greater than 370 metres and less than 420 metres may pass provided:

- Neither ship exceeds the draft and beam parameters as above;
- Favourable weather and tidal conditions permit; and

Pilots and masters agree to the passing.

Non-Gas Free (NGF) Ships with an aggregate LOA less than 370 metres may pass provided:

- Neither ship exceeds the draft and beam parameters as above;
- Favourable weather and tidal conditions permit;
- Pilots and masters agree to the passing;
- Only one of the ships is a NGF Tanker; and
- One ship has an LOA less than 160m.

Where the above passing requirements are not able to be met, the inbound vessels will be required to;

- Not pass abeam of the Rear Reciprocal before the outbound vessel has passed the Entrance Beacons outbound; and
- Not pass abeam of the Front Reciprocal until the outbound vessel has completed its alteration to the ENE if departing via the East Channel.

5.5.4 Inner Bar Beacons to Pelican Bank Buoy

Ships with LOA less than 300m may pass provided:

- Favourable weather and tidal conditions permit; and
- Pilots and masters agree to the passing.

Non-Gas Free (NGF) Ships with an aggregate LOA less than 420 metres may pass provided:

- One ship less than 190 metres LOA;
- Only one of the ships to be a NGF tanker;
- Neither ship to be subject to tidal restriction; drafts 12.0 metres or more;
- Neither ship to have a beam greater than 33.0 metres; and
- Pilots/exempt master to agree to the passing.

5.5.5 Brisbane River upstream from the Pelican Bank Buoy

Ships will not be scheduled to pass in the Hamilton Reach with the exception of local river traffic as outlined in section 5.5.1 above.

5.5.6 River Transits – advice of movement to other vessels

In order to alert all river users of the arrival/departure or removal of a ship transiting the river between Pelican Banks to Hamilton, a radio message that advises the current guidelines will be broadcast by VTS.

5.6 Maximum Ship Size

Port of Brisbane can be defined as three sub areas with the following size limitations;

5.6.1 Below Pelican Banks

The maximum permissible Vessel LOA below Pelican Banks is 350m, defined by the Koopa Swing Basin.

The maximum permissible vessel Beam below Pelican Banks is 55m, defined by berth dimensions

The maximum permissible displacement for Fisherman Island 1 to Fisherman Island 12 berths is 140,000 tonnes.

5.6.2 Above Pelican Banks

Generally, the maximum length of vessels to be 230 metres and a maximum beam of vessels to be less than 33 metres

Ships greater than 200 metres LOA will attract additional restrictions that will be assessed on a case by case basis.

High windage vessels, such as RORO are generally limited to 200m LOA.

5.6.3 Above Hamilton Reach

The maximum permissible vessel above Hamilton Reach is 80m LOA or total combination for Tug/Barge operations. Movements above this limit may attract additional restrictions that will be assessed on a case by case basis.

5.6.4 Swinging – maximum ship length

The maximum size of ship permitted to swing in a particular location is determined by the LOA of the vessel relative to the diameter of the swing basin. As a general rule, the diameter of the swing basin should exceed 1.6 times the LOA of the ship being swung. Details of the restrictions are given in the table contained in 15.4 Swing basin and swing areas Brisbane River. For standard operations, the most commonplace restrictions are:

- Downstream of Pelican Bank ships less than 308 metres LOA may swing at the Fisherman Island swing basin. Ships less than 350 metres LOA may swing at the Koopa swing basin
- Upstream of Pelican Bank ships should meet the LOA criteria for the nominated swing basin that they are using (refer 15.4). Pilots should give VTS as much notice as possible of which swing basin they intend to use. Ships proceeding above Pelican banks are also subject to the following limitations:

5.7 Air draft/bridge heights

Information regarding air draft and clearance requirements for the Sir Leo Hielscher (Gateway) Bridge, Bulimba Power Lines and Story Bridge can be found at 15.5 Air Draft/Bridge Heights.

5.8 Specific Berth & Operational Manoeuvre Requirements

5.8.1 Ampol Products wharf - berthing/unberthing restrictions

Due to the proximity of the Ampol Products Berth to the navigation channel, the following scheduling rules apply.

- Berthing and unberthing of ships at Ampol Products wharf in a "head down" direction, is not permitted during the ebb tidal stream.
 - Vessel over 9.0m draft if berthing 'head up' should be scheduled to berth on their tidal window and with a predicted flood tidal stream no greater than 0.5 knots OR on the ebb tidal stream.
 - o if berthing 'head down' should be scheduled to berth on their tidal window and swing with sufficient time to berth before the onset of the ebb stream.
- Vessel 10.0m draft and over
 - Vessels 10.0m draft and over, should only be scheduled to berth head up at slack water, irrespective of the duration of tidal window.

5.8.2 Wagner Wharf – berthing/unberthing restrictions

Vessels over 9.0m draft:

- If arriving 'head up' should be scheduled to berth on their tidal window and with a
 predicted flood tidal stream no greater than 0.5 knots, OR on the ebb tidal stream at
 the berth.
- If arriving 'head down' should be scheduled to berth on their tidal window and swing with sufficient time to manoeuvre at the berth before the onset of the ebb stream.
- If departing 'head up' should be scheduled to depart on their tidal window and swing
 with sufficient time to manoeuvre at the berth before the onset of the ebb stream.

Vessels 10.0m draft and over:

 Scheduled to berth head up between slack water and 0.5 knots ebb within the tidal window.

5.8.3 +300m LOA Container - berthing/unberthing restrictions

Outlined below are the operational requirements for handling large container vessels, defined as a LOA of more than 300m.

- If berthing head up on arrival, to be scheduled either on slack water or ebb tide up to a maximum of 1 knot.
- If departing head down, to be scheduled either on slack water or flood tide up to a maximum of 1 knot.
- Swing to be scheduled for either high or low water slack.
- Maximum wind speed of 20 knots gusting 25 knots for transit upstream of Entrance Beacons.

5.8.4 QBT Berth – Ships 200m to 230m LOA, berthing/unberthing restrictions

Vessels with an LOA between 200m and 230m will be subject to the following operational conditions.

- Vessel to arrive unladen;
- Berthing to be Head Down imperative on arrival swinging at Hamilton Swing Basin;
- 2 tugs required for berthing (including swinging) and unberthing; and
- Maximum wind speed of 20knots, gusting 25 knots for transit upstream of Pelican Banks.

5.8.5 Pinkenba Berth - LR1 Tankers berthing and unberthing restrictions

Vessels with an LOA between 200m and 230m will be subject to the following operational conditions.

- Vessel to berth head up at slack water;
- Swing on departure timed close to slack water;
- 3 tugs required when arrival draft exceeds 10.0m;
- Clear berth and river transit required; and
- Maximum wind speed of 25knots for transit upstream of Pelican Banks.

5.9 Restricted Visibility

Fog and other sources of restricted visibility are known to occur in Port of Brisbane. Visibility is considered to restricted when limited to no more than 0.8nm. In the event visibility is reduced, VTS may re-direct movements. This may include being held at the berth, diverted to Brisbane Roads or the movement cancelled until conditions improve.

5.10 Operational Wind Limitations

Details of operational wind limitations and the associated standard tug allocations are contained in a table in section <u>15.8 Wind Limits</u>. This table is to be read in conjunction with Section 5 and Section 8 of the Port Procedures Manual. Where there is a discrepancy or conflict between the table and respective PPM section, the PPM section takes precedence, with any issue highlighted to the RHM at the earliest opportunity.

6. Environmental information

The majority of berths at the port of Brisbane are located at Fisherman Islands, at the mouth of the Brisbane River which extends into Moreton Bay. The area is very exposed to the prevailing winds which include fresh to strong SE trades year round, strong N/NE sea breezes in the afternoons during the summer months and strong to gale force SW/W winds in the late winter months.

Weather charts, satellite images, warnings and reports are available from the <u>Australian</u> <u>Bureau of Meteorology</u>.

6.1 Tidal information

Brisbane Bar is a standard port in the Queensland Tide Tables published each year by Maritime Safety Queensland.

The tidal heights are: HAT 2.78metres

MHWS 2.22 metres
MSL 1.32metres

MLWS 0.42 metres

Mariners can request the actual heights of tide from the Brisbane Bar and Mooloolaba tide gauges by calling VTS on VHF channel 12.

Maritime Safety Queensland provides tidal predictions for pilotage areas. The tidal times and heights for standard Queensland ports are available in the Queensland Tide Tables and may also be accessed at the Bureau of Meteorology website.

Tidal stream predictions for standard Queensland ports are available upon request through the Regional Harbour Master's office.

Mariners and agents are reminded that tidal ebb and flows can begin or continue after the times of high or low water at various localities in the Brisbane River. This should be borne in mind when booking ships in for 'head up' or 'head down' berthing.

6.1.1 Tidal information - Tsunami effects

The north/west and east coasts of Australia are bordered by active tectonic plates which are capable of generating a tsunami that could reach the coastline within two to four hours. The resultant change in swell height could have an adverse effect on a vessel with a minimum under keel clearance navigating within or close to port areas.

The <u>Joint Australian Tsunami Warning Centre</u> (JATWC) has been established to monitor earthquake activity that may lead to a tsunami forming. Warnings are currently issued for the Pacific Ocean region by the Australian Tsunami Warning System, Pacific Tsunami Warning Centre (PTWC) in Hawaii and for the Indian Ocean region by the Japan Meteorological Agency (JMA).

VTS will enact its tsunami warning procedures upon receipt. Actions may include: clearing anchorages, suspension of shipping movements and suspension of certain port activities. Mariners are advised to take heed of such warnings, plan their movements and activities accordingly.

6.2 VTS – information services

VTS can provide mariners on request the following on time tidal and current conditions, on time weather information as well as current forecasts, along with shipping schedules, navigational warnings and any special operational requirements.

6.2.1 Tide gauges

Location	Operator	Area of use	Notes
Mooloolaba	DEPH	Mooloolaba, NW Fairway and NW Channel	Real time
NW Front Lead	PBPL	NW Channel – NCOS system	Real time and current residual pattern
Whyte Island	MSQ	Brisbane Bar Cutting Fisherman Islands Lytton Rocks	Real time, electronic and visual gauges
FI Grain Terminal	PBPL	Fisherman Islands	Real time
Pinkenba Base	MSQ	Gateway Bridge	Real time electronic gauge
Queensland Bulk Terminal	PBPL	Gateway Bridge and Hamilton Reach	Real time

Table 13 - Tide Gauges

VTS currently provides tidal residual information for the use of deep draft vessel operations only.

6.2.2 Weather stations

Location	Operator	Area of use	Notes	
Maroochy Airport	Bureau of Meteorology	Sunshine Coast		
Cape Moreton	Bureau of Meteorology	N Moreton Bay	On line, data as per	
Spitfire S1	Bureau of Meteorology	Spitfire	last reading 30 minute	
Inner Beacon (Front Reciprocal)	Bureau of Meteorology	Brisbane Roads	intervals. Data retained for 72 hours	
Brisbane Airport	Brisbane Airport Bureau of Meteorology			
Banana Banks	Bureau of Meteorology	S Moreton Bay		
Beacon No BC1	MSQ	Fisherman Islands	Real time	
Beacon No BC13	MSQ	Fisherman Islands	Real time	
Fisherman Islands	PBPL	Fisherman Islands		
Lead 2F	MSQ	Fisherman Islands & River	Real time	

Pinkenba	MSQ	Pinkenba	Real time
Lead 8F	MSQ	Pinkenba and Eagle Farm	Real time
Lead 14R	MSQ	Colmslie, Hamilton Reach	Real time
Lead 15F	MSQ	Hamilton Reach	Real time

Table 14 - Weather Stations

(Refer 15.6 Weather Stations).

6.3 Hazard to shipping – Jellyfish

Masters should be aware that during the warmer summer months, from November to March, many incidents have been reported of vessels cooling water intakes being fouled by blue blubber jellyfish. If they are observed, it is wise to take precautions to prevent their ingress.

6.4 Advisory Note – Interaction with Marine Mammals

The presence of whales or marine mammals indicates that our ports are seen as environmentally attractive places. The safety of life and the security of the environment from ship based incidents is paramount.

All vessel masters are required to fully comply with relevant marine mammal legislation, such as the provisions of the <u>Nature Conservation (Animals) Regulation 2020 Chapter 6</u>

<u>Part 1</u> which prescribes minimum approach distances and maximum speeds within proximity to whales as illustrated in the diagram below.

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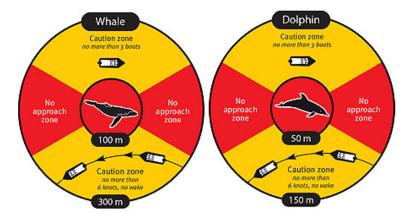


Figure 2 Minimum approach distances and maximum speeds within proximity to whales and dolphins

When whales or marine mammals are reported in the vicinity of port areas and a risk to marine mammals is perceived, then every possible endeavour will be undertaken to manage shipping movements around the marine mammals to keep them safe, provided the safety of life, the ship and other environmental protection objectives are not threatened. Such action may include not commencing transits until the mammals are deemed clear.

In situations where a vessel is underway and restricted in its ability to manoeuvre or constrained to a channel and marine mammals are reported in the vicinity of the transit and a risk to marine mammals is perceived, the master must take all reasonable action necessary to keep them safe, without endangering the vessel, crew and the environment. Such action may include the reduction of speed to the minimum safe speed to safely navigate the channels.

Masters are required to report collisions with marine mammals to VTS and Department of Environment and Science **1300 130 372**

https://www.gld.gov.au/environment/plants-animals/wildlife/marine-strandings

7. Pilotage

7.1 Vessels that require a pilot

The <u>Transport Operations (Marine Safety) Act 1994</u> specifies that, unless a current pilot license with a pilotage area endorsement for the port of Brisbane is held by the master of a ship, pilotage is compulsory for:

- A ship that is 50 metres or more (LOA);
- A vessel towing another vessel where the combined length of the vessels is 50 metres or more;
- A ship whose owner or master asks for the services of a pilot; and
- A ship whose master is directed by the Regional Harbour Master to use the services of a pilot.

7.2 Pilotage area

Refer to Geographical Areas in section 4.1

7.3 Night pilotage

The port of Brisbane is open for pilotage and exempt ship movements 24 hours per day.

7.4 Request for pilot

The requirements of the *Transport Operations* (Marine Safety) Regulation 2016 shall be observed for all bookings. Pilotage services in the port are provided by <u>Poseidon Sea</u> Pilots on behalf of Maritime Safety Queensland.

7.4.1 Poseidon Sea Pilots

Address: 655 MacArthur Avenue Central, Pinkenba QLD 4008

Postal Address: PO Box 1430, Eagle Farm QLD 4009

Phone: +61 7 3633 4186

Email: <u>psp-operations@poseidonpilots.com.au</u>

Requests for pilotage services are made directly with the provider and are also recorded in the QSHIPS booking system.

7.5 Notice Required

Ships requiring the services of a pilot in the port of Brisbane are required to submit arrival, removal and departure notices no less than the indicated number of hours prior to the desired movement:

Arrivals 48 hours
Removals 24 hours
Departures 24 hours

Initial notification should be made via QSHIPS – (Queensland shipping information planning system)

7.6 Notification of Arrival

In order to ensure the services of a pilot, masters of ships should confirm their ETA at the pilot boarding ground and maximum draft 24 hours before arrival, or on departure from the previous port whichever is the lesser, and again if necessary eight hours before arrival. Masters of ships should contact VTS by VHF channel 16 two hours prior to arrival at the pilot boarding ground, or after passing Point Lookout when north bound. Pilots are embarked and disembarked by launch.

7.7 Pilot Assignment

Pilots are assigned by the pilotage service provider.

Normally one pilot is assigned for each pilotage task. On occasion a second pilot will be carried for training or assessment purposes. This will only incur one pilotage fee.

For specific operations there is a requirement for an assisting pilot resulting in two pilots being assigned and two fees charges. Large vessels, first time callers and extra-ordinary operations will be risk assessed by the Regional Harbour Master.

7.7.1 2nd Pilot - +300m LOA Container Vessels

When swinging, +300m LOA are required to embark a second pilot. When arriving, the 2nd pilot will embark at the Pilot Boarding Ground (Point Cartwright). When departing, the 2nd pilot may disembark once safe and well clear of the Entrance channel, abeam the rear reciprocal beacon.

7.8 Point Cartwright Anchorage

Mariners are advised that a suggested anchorage for ships waiting at the pilot station for either pilots or orders should use the area to seaward of, from five nautical miles due east to five nautical miles south/east of Point Cartwright. Ships are not permitted to anchor directly on the pilot boarding ground.

7.9 Pilot boarding position

The pilot boarding ground (see appendix 16.2.1) is situated three nautical miles south/east from Point Cartwright latitude 26°43'S, longitude 153°10.5'E.

VTS will coordinate the schedule and sequence of Pilot Boarding Operations, with a preference of embarking inbound vessels first.

The pilot launch will advise the master of the required course and speed to facilitate pilot transfer. Pilots may embark or disembark outside these limits by special arrangement, or when required by VTS.

7.10 Pilot boarding arrangements

Pilot transfer instructions will be advised to the ship prior to the pilot boarding by VTS. The instructions may include:

- Pilot boarding time;
- Restrictions/requirements;
- Boarding position; and

Pilot boarding/disembarkation sequence.

Ships are to be at the pilot boarding ground at the notified time of pilot boarding, with all preparations for boarding completed in accordance with the instructions in this section.

The pilot launches have the word 'PILOT' in black on either side of the main superstructure and exhibit the standard pilot launch signals.

For Port of Brisbane transfer operations, Ships should be underway, proceeding at ten knots and providing a good lee. The pilot launch will contact the vessel on VHF Channel 14.

7.10.1 Pilot Transfer Safety

MSQ considers the safety of pilots and other personnel boarding underway absolutely critical. Responsibility for safe practices for personnel transfers rests with each person involved in the activity including the ship owners, operators, master and crew, pilotage providers, pilots and pilot boat crew, as well as the person being transferred. All parties should observe both the spirit and intent of the regulations, to ensure safety is not compromised.

The pilot ladder is to be rigged two metres above the water, with two manropes and a heaving line standing by. At night, a forward-facing light is required to illuminate the ladder in accordance with IMO requirements and IMPA recommendations. See <u>Pilot Boarding Ladder Arrangement</u> and <u>Pilot transfer arrangements – Marine Notice 04/2023. (Pilotage - boarding ladder arrangements)</u>.

Where a Pilot suspects that the pilot transfer arrangement provided are unsafe, they should refuse to board the vessel until the matter is resolved and is made safe by the master and crew. If the issue cannot be resolved to the satisfaction of the pilot, then the movement will be aborted until such time that the Pilot boarding arrangement is made to safe

Additionally, the matter must be reported immediately to AMSA, Brisbane VTS and the pilot's employer.

7.11 Pilot licences

7.11.1 Pilotage Area Endorsements

A person must hold a current pilot license with a current pilotage area endorsement (relevant to the pilotage area of operation) in order to have the conduct of a ship of 50 metres or more LOA within the pilotage area for Brisbane.

- Pilot licences are valid for a period of five years; and
- Pilotage Area Endorsements (PAE) are valid for a period of two years.

7.11.1.1 Pilotage Area Endorsement Levels

For the purpose of PAEs, the Brisbane Pilotage Area is separated into two separate zone covering below Pelican Banks (Fisherman Island precinct) and above Pelican Banks (Brisbane River berths). Further information, including operational limitations for each PAE, is outlined in the table below.

Level	Above Pelican Banks	Below Pelican Banks
4	vessels up to 160m LOA and 8.5m draft	vessels up to 185m LOA and 10m draft
3	vessels up to 185m LOA and 9.0m draft	vessels up to 200m LOA and 11m draft
2B		vessels up to 230m LOA and 12m draft
2A	vessels up to 185m LOA and over 9.0m draft	
1B		vessels up to 295m LOA and over 12m draft
1A	vessels up to 200m LOA and over 9.0m draft	vessel size limited by Port Procedures
1U	vessel size limited by Port Procedures	

Table 15 - Pilotage Area Endorsement Levels

7.11.2 Cancelation of licences

A licence may be cancelled or suspended when major port changes or developments are taking place. It may also occur where masters fail to comply with port procedures.

7.11.3 Pilotage Exemption Certificates

Pilotage exemptions are issued for a specific vessel conducting a specific operation in a portion of the pilotage area. Application for a pilotage exemption should be made to the Regional Harbour Master's office.

7.12 Pilotage area – navigational data

Passage planning information is available on the <u>Poseidon Sea Pilots</u> websites. To further assist mariners in compiling and completing navigational passage plans for transit of Moreton Bay and the Brisbane River further details on distances, tide predictions and steaming times can be found in section 15.10 Navigation Data of this manual.

7.13 Pilotage area – marine incidents

It is a requirement of the <u>Transport Operations (Marine Safety) Act 1994</u> that all marine incidents have to be reported to a shipping inspector within 48 hours. (Refer <u>11.6</u>)

7.14 Pilotage delays and cancellations

The following will apply to all piloted vessels when arriving, departing or being removed within the Brisbane pilotage area:

 Delay fees will apply if a vessel departs after her programmed or booked departure time; fees are charged on an hourly basis up to a maximum of two hours after that time. However, the fee will not be incurred if the departure occurs within the first 30 minutes of the booked departure time;

- If the delay exceeds two hours, then pilotage is deemed to have been cancelled and a full cancellation fee applies; when a cancellation fee is applied then the hourly delay fees are not applicable;
- A delay exceeding two hours may necessitate a rescheduling of the ship, however a
 delay caused by weather which may affect a vessel's ability to be safely navigated
 will not constitute a delay for the purpose of this section; and
- Equipment and mechanical failures will constitute a delay and attract a delay fee or cancellation fee as described above.

In determining the delay time the following criteria will be used:

- Inbound delay fees will be incurred if the pilot boards a vessel more than 30
 minutes after the programmed estimated time of arrival of the vessel at the pilot
 boarding ground or the agreed boarding ground; and
- Outbound or removal delay fees will be incurred if the vessel departs the berth or anchorage more than 30 minutes after the programmed estimated time of departure. The actual time of departure will be taken as 'last line' or 'anchor aweigh' as these times are recorded in QSHIPS and are the acknowledged and accepted time of departure.

Agents would be aware that some vessels take longer to let go all lines and this fact should be taken into consideration when nominating sailing times.

Full details of the regulations and fees are contained in Schedule 6 Part 2 Division 3 of the *Transport Operations (Marine Safety) Regulation 2016.*

7.14.1 Pilotage delays – arrival

All ships arriving under pilotage which are held at Brisbane Roads for any reason will be treated as one arrival for the purposes of pilotage fees if the delay is less than four hours (calculated from anchor down to anchor aweigh). A delay in excess of four hours will attract a pilotage removal fee in addition to the arrival pilotage fee, whether the pilot disembarks or not.

7.14.2 Pilotage delays – departure

All ships departing under pilotage which are held at Brisbane Roads for any reason will be treated as one departure for the purpose of pilotage fees if the delay is less than four hours (calculated from anchor down to anchor aweigh). A delay in excess of four hours will attract a pilotage removal fee in addition to the departure pilotage fee, whether the pilot disembarks or not.

If a departing vessel is delayed and anchors at Brisbane Roads for whatever reason and subsequently returns to a berth, then the movements will be charged as two removals.

7.14.3 Pilotage delays – removal

Is a ship is required to remove from a berth or outer anchorage and is required to anchor at Brisbane Roads will be treated in the same manner as 7.13.1 and 7.13.2.

7.14.4 Aborted movement due to pilots assessment

Whilst every effort is made to maintain schedule integrity, safe movements are the priority. Once boarded, an allocated pilot may make a further safety assessment which could result in abort movement. This can include ship's ability to safely navigate or weather conditions. An aborted movement will still incur a full pilotage fee.

7.15 Passage planning – Bridge resource management (BRM)

Any passage plan is a basic indication of preferred intention and both pilot and master should be prepared to depart from it when circumstances so dictate. (Refer to <u>AMSA</u> Marine Notice 07/2021).

7.16 Instrument Navigation – Portable Pilot Units

The use of independent high precision instrument navigation (Portable Pilot Units (PPU)) is mandatory to support all piloted movements within Port of Brisbane. This is to ensure the safe movement of all vessels including passing, swing and docking.

In the event of failure of the PPU, VTS is to be advised and a vessel defect risk assessment for the movement to be conducted.

Vessel movements conducted by local master under Pilotage Exemption are not required to have PPUs.

7.17 Alcohol management

The <u>Transport Operations (Road Use Management) Act 1995</u> section 79 requires that persons in charge of ships have a zero blood alcohol reading. The Queensland water police periodically conduct random breath tests of masters and pilots on ships arriving at Brisbane, or about to depart. Severe penalties apply to infringements.

7.18 Master/pilot responsibilities

Masters and owners of vessels are responsible for due compliance with the provisions of the <u>Transport Operations (Marine Safety) Act 1994</u> (the act) and <u>Transport Operations</u> (Marine Safety) Regulation 2016 (the Regulation).

When a vessel is under the direction of a pilot, the pilot is responsible for due compliance with the provisions of the act and regulations, however the responsibility of the pilot does not relieve the master and the owner of a vessel of their responsibility.

Arising from these responsibilities is the obligation of persons directing the navigation of vessels to comply with directions of the Regional Harbour Master. VTS is delegated to exercise the relevant functions of the Regional Harbour Master.

7.19 Smoking on the Bridge while under Pilotage

Research continues to confirm and further define the effects of the exposure to environmental Tobacco smoke (Passive Smoking) and case law highlights legal liability and duty of care obligations in relation to passive smoking. The Queensland Government have responded to these developments by the introduction of a total smoking ban in the workplace.

The bridge of a vessel is considered a work place for the pilots and therefore it is requested that no smoking is conducted in the bridge of a vessel whilst under pilotage.

8. Harbour Towage & Support Vessel Procedures

Tugs are an aid to safe and efficient manoeuvring of ships in confined waterways. The requirements of this section outline the minimum number of tugs that are required to be in attendance when berthing or unberthing a ship. In special circumstances the agent may apply to the Regional Harbour Master for a reduction in the tug allocation. Such requests will be considered after due consultation with <u>Poseidon Sea Pilots</u>.

Pilots and masters are to assess the requirement for additional tugs on a case-by-case basis. Masters and their agents are requested to monitor the prevailing weather conditions and forecast, to ensure the initial tug allocation remains sufficient. Additional tugs should be ordered in good time.

For the purposes of these conditions, flood tides and ebb tides are determined from the 'Maritime Safety Queensland Tidal Predictions – Brisbane River Current Meter – Hourly Tidal Stream Velocity,' with an appropriate allowance made for location.

8.1 Tug booking

Initial tug booking should preferably be made via the QSHIPS programme – refer to <u>3.7</u> <u>Booking a vessel movement</u>. Updates to vessel movements should be made either via the QSHIPS programme or by direct contact with the tug company.

8.2 Tug Allocation – General Requirements

Based on the assigned tug(s) being ASD or Z-peller, the following is the general requirements in favourable conditions (refer to 5.11) for tug allocation

- General guide tug bollard pull required (T) = displacement ÷ 1000;
- Where two tugs are required, they are to have similar bollard pull to ensure balanced manoeuvring;
- Safe working load (SWL) of a ship's deck towage fittings is to be consistent with the power of the allocated tugs;
- Ships < 105 metres LOA as required;
- Ships 105 metres to 150 metres LOA one tug;
- Ships >150 metres LOA two tugs:
- Ships >300 metres LOA three tugs to swing;
- All car carriers two tugs, irrespective of LOA;
- STS transfers at anchorage minimum of one tug for all ships, irrespective of LOA;
- Ships with unusual manoeuvring characteristics and / or fitted with advanced manoeuvring systems, such as vessels fitted with azimuth thruster, will be assessed on a case-by-case basis; and
- Tug requirements are based on the vessel stemming the current when berthing and departing; manoeuvring with a contrary current may require the use of an additional tug.

8.3 Substitution of a tug with a bow thruster

In favourable conditions (refer 5.11) a tug may be substituted by an efficient thruster, except in the following circumstances:

- Ships with a displacement of greater than 80 000 tonnes;
- Ships swinging with a draft greater than 12·0 metres or an LOA greater than 280 metres;
- Ships with a draft greater than 11·0 metres or an LOA greater than 230 metres, if the effective power of the thrusters are <1100kw (1500hp);
- Ships with a LOA greater than 200 metres fitted with both bow and stern thrusters (irrespective of their rating) usually require one tug to swing;
- Ships berthed at Cement Australia berth when departing with a contrary current;
- Ships berthing and unberthing at Wagner terminal with a draft greater than 9m; and
- Ships berthing and unberthing upstream of the Gateway Bridge.

8.4 Escort harbour towage

At times there may be a requirement for vessels to be escorted to their berth through the Entrance Channel upstream. This is due to the narrow channel which sits perpendicular to the dominate winds experienced in Moreton Bay combined with high windage vessels.

If a vessel is considered high risk due to the nature of its operation, cargo or is defective, then this may be extended to the Fairway. This will be risk assessed with specific requirements provided by the Regional Harbour Master.

8.4.1 +300 metre LOA Container Ships

- The above-mentioned vessels are to be escorted by two similar azimuth tugs (over 62t bollard pull) tugs between the berth to the Entrance Beacons on arrival and departure; and
- Tugs are to be configured based on the pilot's assessment of the prevailing conditions.

8.4.2 Movements above Pelican Banks

- Assigned tugs for arrival movements above Pelican Banks are to rendezvous at Luggage Point with the inbound vessel;
- Assigned tugs for departure movements above Pelican Banks are to remain with the vessel until the Fisherman Island Swing Basin; and
- Assigned tugs for removal movements above Pelican Banks are to remain with the vessel at all times between the berth and the Fisherman Island Swing Basin.

8.4.3 Movements above Sir Leo Hielscher (Gateway) Bridge

- Assigned tugs to escort as above for Pelican Banks; and
- 1 tug, centre lead aft where possible, to be made fast between QBT and Pinkenba Swing Basin for transit under Sir Leo Hielscher (Gateway) Bridge for vessel greater than 105m LOA.

8.5 Lines Launch Requirements

All ships usually require a lines launch for arrival, unless the master and pilot agree otherwise

8.6 Push up tug for Ampol Products

Vessels berthed at AMPR with a beam of \geq 30m or greater are to have a standby tug pushing up for all passing vessels also with a beam of \geq 30m or greater and a draft greater than >8.0m. Tugs used as a push up tug alongside vessels at Ampol Products are to be separate to tug on passing vessel.

8.7 Emergency communication – jammed radio

The adopted emergency signal to alert a pilot, ship, tug or wharf of a jammed VHF radio is one prolonged blast on a ship's or tug's horn or whistle made by a ship or tug; all parties will change to VHF channel 16.

8.8 Tug companies

Svitzer Australia

Address: 20 Howard Smith Drive, Whyte Island, Queensland 4174

Postal address: PO Box 555, Wynnum, Queensland, 4178

Telephone: 1800 453 938 or (07) 3895 1022

Operations email: sthqld.controllers@svitzer.com

	Bollard pull	hp	Steering system
Clontarf	62 tonne	4894	Z peller
Colmslie	68 tonne	5600	Z peller
Newstead	68 tonne	5600	Z peller
Beltana	62 tonne	4827	Z peller
Murrumbidgee	69 tonne	5600	Z peller

Table 16 - Svitzer Tugs

Smit Lamnalco Towage

Address: Gate B51, Unit 5, 11-13 Friendship Road, Port Botany, NSW 2036

Postal address: PO Box 733, Botany, NSW 1455
Telephone: 02 9695 0700 or 0466 793 699

Email: <u>sltowageinfo@smitlamnalco.com</u>

Bhagwan Marine (Telephone (07) 3907 3111) and **Pacific Towage Group** (Telephone (07) 3383 6660) have fleets of smaller tugs that are able to provide harbour towage services for small vessels and barges.

Note – check directly with the relevant tug company for the latest accurate information about tug capability.

8.9 Lines launch services

Lines launch services are provided by:

Brisbane Port LaunchesTelephone(07) 3348 6255Bhagwan MarineTelephone(07) 3907 3111Southern Cross Port ServicesTelephone1300 790 673AUSPORT MarineTelephone0425 445 675

8.10 Pilot launch services

Poseidon Sea Pilots operate pilot launch services from Mooloolaba, Scarborough (by exception), and Pinkenba.

Poseidon Sea Pilots

Address: 655 MacArthur Avenue Central, Pinkenba QLD 4008

Telephone: +61 7 3633 4186

Email: psp-operations@poseidonpilots.com.au

9. Work permits

9.1 General

Certain shipboard activities are regulated through a system of permits. Applications should be submitted via the QSHIPS programme and by fax or email to the relevant authorities. Ship masters must comply with all requirements specified in the permit.

Works requiring permits include:

- Vessel immobilising (main engine/s and so on);
- Main engine trials after maintenance (non-routine);
- Tank/crude oil washing;
- Hot work, sand blasting, overside work and paint spraying (controlled activities);
- Bulk Liquid Transfer (bunkering);
- Ship to ship/shore transfer operations;
- Diving or underwater works;
- Lifeboat drills; and
- Fumigation.

Permit requests					
All ships	PBPL	Controlled activities – refer PBPL website	48 hours prior to arrival	Lodged to PBPL	
All tankers	PBPL	Tankers at non tanker berths	48 hours prior to arrival	Lodged to VTS and PBPL: must be certified as 'gas free' by an independent chemist on approved form	
All ships	ABF	Lifeboat drill	Prior to event	Lodged to ACS – copy to VTS	
All ships	VTS and PBPL	Engine trials	Prior to event	Lodged to VTS via QSHIPS	
All tankers	PBPL	Tank washing and Gas Free Declaration	24 hours prior to arrival	Lodged to VTS and PBPL	
All ships	VTS	Immobilisation	24 hours prior to event	Lodged to VTS via QSHIPS	
All tankers	VTS	Diving Operations	24 hours prior to arrival	Lodged to VTS via QSHIPS	
All ships	VTS and PBPL	Bulk Liquid Transfer	48 hours prior to the event	PBPL (Form F3217)	
All Ships	VTS and PBPL	Fumigation	24 hours prior to arrival	Lodged to VTS via QSHIPS	

Table 17 - Permit Requests

9.2 Work permit descriptions

9.2.1 Immobilisation main engines

Ships wishing to gain permission to immobilisation main engines (15.8.8) whether at anchor or alongside must:

Lodge an application via QSHIPS with VTS at least 24 hours prior to the requested immobilisation. for the entire period of works up to a maximum of 72hours. The application is to include the nature of the defect, work to be undertaken and any subsequent movement limitations (for example slow speed departure). Vessel must be ready to proceed to sea within 8 hours of notification during the requested immobilised period.

Consecutive applications will not be accepted.

If the above conditions can not be met, a separate application is to be made to the Regional Harbour Master.

9.2.2 Diving or Underwater Operations

Ship's wishing to carry out diving or underwater operations alongside a terminal or in Moreton Bay are to make application with VTS at least 24hrs prior via email. Application is to include the nature of the works, duration and estimated start/end times. VTS is to be contact on VHF channel 12, 30minutes prior and post diving operations.

9.2.3 Lifeboat drills

Ships wishing to carry out lifeboat drills or put boats in the water for painting or maintenance purposes must obtain clearance from the Australian Border Force and notify VTS of the intended operation.

Masters are requested to advise VTS when such drills are to commence and when completed. (See <u>15.9.8 Notification to conduct lifeboat drills</u>).

9.2.4 Engine trials

Ship's wishing to carry out engine trials must lodge an application with VTS via QSHIPS 24 hours prior to the trials. (15.9.9 'Permission to hold Main Engine Trials' - Sample).

9.2.5 Notification of handling of bulk liquids

The movement, handling and storage of bulk liquids on a ship are subject to the provisions of *Transport Operations (Marine Pollution) Act 1995.* The applicable conditions are contained in the <u>Port Notice - Bulk liquid transfers, tankers in non-tankers berths, use of sea valves and tank washing.</u>

It is a requirement for all vessels >15 metres LOA to notify PBPL and VTS of the intention to load, unload or transfer any form of bulk liquids in the port area. Notification is made to PBPL (Login to the Load, Unload or Transfer Bulk Liquids Form)

Masters of vessels conducting bulk liquid transfers, as specified above, are required to notify VTS on VHF channel 12 of the time of commencement of such transfers and again the time when the operation is completed.

9.2.6 Controlled Activities Permit (Hot work, spraying, sand blasting and overside work)

PBPL has strict guidelines on the performance of "Controlled Activities" on ships within the port limits. Ships wishing to undertake such work must:

- Submit an application to PBPL (Login to the Controlled Activities and Overside Maintenance Requests); and
- When granted, masters must comply with the conditions of the approval.

Masters are required to advise VTS on VHF channel 12 when such work will commence and again when all work has been completed.

9.2.7 Tank/crude oil wash and tanker ballasting

Ships wishing to carry out tank washing, including crude oil wash operations must:

- Comply with the conditions contained in the <u>Port Notice Bulk liquid transfers</u>, tankers in non-tankers berths, use of sea valves and tank washing; and
- Submit an application to PBPL and VTS at least 24 hours prior to the work. Masters are to comply with the requirements of the MSQ permit <u>15.9.10 'Permission to tank/crude oil wash'</u> Sample.

Except where permitted by the designated port officer, the master of a ship handling bulk liquid cargoes shall ensure that all sea and overboard discharge valves that are connected to cargo or ballast pumps, other than those of segregated ballast lines, are kept closed. It is not the general policy of the PBPL to allow such valves to be opened within port limits (refer Port Notice).

Ships wishing to proceed with an application to open sea valves must comply with the conditions of the <u>Port Notice – Bulk Liquid Transfers</u>, <u>Tankers in Non-Tanker Berths</u>, <u>use of Sea Valves and Tank Washing</u>.

9.2.8 Tankers at non tanker berths

PBPL has strict guidelines on the berthing of tankers at non tanker berths. Agents and masters wishing to berth tankers at such berths must:

- Comply with the conditions contained in the Port Notice Bulk Liquid Transfers,
 Tankers in Non-Tanker Berths, use of Sea Valves and Tank Washing;
- Submit an application to PBPL at least 48 hours prior to entering the pilotage area;
 masters will comply with the requirements of the approval; and
- A copy of the Authorisation is to be sent to VTS.

For the purposes of this section a tanker includes: OBO, tankship, LPG/LNG carrier, chemical tanker, product tanker that is carrying any cargo or cargo residue with a flash point of < 60° Celsius. For vessels with cargoes > 60° PBPL will address each application on a case-by-case basis.

9.2.9 Vessel Fumigation

For vessels undergoing fumigation an assessment of the vessel, location and weather conditions may be required when the fumigation period may impact safe vessel operation.

If the vessel is to conduct fumigation operations, answers to the following questions will need to be provided to VTS in visit email correspondence.

- 1. Is the vessel being fumigated whilst alongside?
- 2. If YES above, will fumigation prevent safe vessel function alongside or in the event of an emergency departure?
 - a. Whilst alongside can the vessel's mooring systems be accessed for active management (tendering lines and so on)?
 - b. Can the vessel navigation (bridge), mooring (lines), engineering systems and pilot boarding arrangements be accessed for departure?
- 3. For what period will the fumigation impact safe vessel function accessibility?
 - a. Start date and time
 - b. End date and time

If YES to fumigation effecting safe vessel function, there may need to be addition risk mitigations established periods of poor weather. This may include a delay in commencement, berthing direction to allow RORO ramp deployment if not required for fumigation and additional moorings run.

9.3 Marine Civil Construction

MSQ does not issue permits for civil construction directly. This process is managed as a development approval through the Department of State Development, Manufacturing, Infrastructure and Planning. A condition of these works may be the requirement to provide commencement and completion notification.

Civil construction activities that will possibly impact vessel operations may be required to submit a marine execution plan (MEP). This may be as a condition of the development approval or separately. The purpose of the MEP is to provide key information to the Regional Harbour Master in the event of extreme weather, deconflict with other key activities and to provide information required for the release of a Notice to Mariner.

The MEP should include, but not limited to, the following;

- Forecasted start and end dates;
- Hours of work;
- General methodology overview;
- Name of principal barges and marine equipment involved;
- Barge Mooring Plan;
- Extreme weather contingency plans;
- 24/7 point of contact to ensure timely communication with VTS during extreme weather and other maritime emergencies;
- Vessel traffic management plan to allow safe passage of passing traffic;
- Marking of navigation hazards during construction, such as unattended piles and barge anchors; and
- Any other information to support the safe management of the marine works as identified by the applicant.

10. Dangerous cargo

10.1 General

PBPL is responsible for the management of dangerous goods in port, including the loading and unloading of ships alongside and movement across the wharf. VTS is responsible for monitoring and managing the safe movement of ships in Queensland waters. VTS will assist the port authority in controlling traffic movement in the port, maintaining on/water safety distances, and responding to emergency situations.

The following codes and guidelines apply:

- IMO IMDG Code;
- International chamber of shipping oil companies, international marine forum;
- Society of international gas tankers and terminals (ISGOTT);
- Australian Standard AS 3846 2005
- AMSA Australian annexe to the IMDG Code Marine orders part 41; and
- AAPMA dangerous substances guidelines.

10.1.1 Notification

Chapter 5 Part 4 of the <u>Transport Operations (Marine Safety) Regulation 2016</u> outlines the duties of owners and masters of vessels in relation to the carriage of dangerous goods. The regulation requires that ships carrying dangerous goods and bulk liquids must comply with the appropriate directions of the IMDG code and AS3846 and are to notify PBPL and VTS of the intent to bring dangerous cargo into or depart from a pilotage area. (<u>Port Notice - Dangerous Goods</u>)

Ships have to report the information required in section 90(2)(a) of the regulation namely the arrival and/or departure of the ship, the removal of the ship to another berth or anchorage, the transfer of the cargo to another ship the loading of the cargo, and the details of the cargo in an approved form.

In the port of Brisbane agents/masters are to submit dangerous goods information electronically to the PBPL through the 'DGTrack' system. VTS has access to this system thus meeting all dangerous goods reporting requirements.

Minimum notification times for the scheduled movement or handling of dangerous cargo in a pilotage area are as follows:

Movement	Minimum notification
Ship inbound	48 hours prior to scheduled arrival at pilot boarding ground
Ship departure or removal	3 hours
Ship to ship transfer	24 hours
Loading, removal or handling alongside	24 hours
Operation of a local marine service	48 hours (See section.90&91 <u>Transport Operations</u> (Marine Safety) Regulation 2016)

Table 18 - Dangerous Cargo Minimum Notification Times

10.2 Explosives

10.2.1 Explosives notification

PBPL requires all shipments of class 1 cargo, be they import, export or transit cargo, be advised prior to the shipping line or company taking any bookings for this type or class of cargo. A PBPL reference number will be issued to track all subsequent communications and operations relating to each approved shipment.

10.2.2 Guidelines

The quantity of dangerous goods that may be handled by a ship at any berth is determined by the NEM (1.5.23 Nett explosive mass (NEM) of the cargo, and the location of the berth. Where berths are located close to residential or industrial areas, the amount of explosives that can be handled is reduced. (Port Notice – Dangerous Goods).

10.3 Dangerous cargo limits

PBPL will promulgate the limits that apply to the class of dangerous cargo loaded and unloaded in the port, including the maximum permissible types and quantities for approved berths. (Port Notice – Dangerous Goods).

10.4 Dangerous cargo events

Section 93 of the <u>Transport Operations (Marine Safety) Regulation 2016</u> defines a dangerous cargo event as:

- The loss, or likely loss, of the cargo from a ship into Queensland waters
- A breach, or danger of a breach, of the containment of the cargo that could endanger marine safety
- Anything else involving, or that could involve, the cargo that causes risk of explosion, fire, a person's death, or grievous bodily harm of a person
- For a cargo that is a materials hazardous only in bulk (MHB) an event that causes risk of explosion, fire, a person's death, or grievous bodily harm to a person.

The master and or the person in charge of a place where a dangerous cargo event has occurred are required to report the event immediately to VTS and other relevant authority. A full written report is to be submitted on Form F3220 - Dangerous Cargo Event Report to VTS as soon as is reasonably practical.

10.5 Ship to ship transfer (STS) operations

Due to the relatively sheltered waters of Moreton Bay, ship to ship transfer (STS) operations for LPG carriers are permitted under strict conditions.

10.5.1 LPG Carriers

Operations are carried out on a regular basis and under the following conditions:

 Operation to be carried out under Australian Standard AS3846 – 2005 and the guidelines set out in the Ship to Ship Transfer Guide for Petroleum, Chemicals and Liquefied Gases (1st Edition), OCIMF, and the ISGOTT safety guide;

- Operation permitted in weather conditions up to wind speeds of 25 knots (strong wind warning);
- Agents to advise VTS not less than 48 hours prior to the planned operation and request permission;
- Agents to confirm that all operational details such as anchoring, mooring, fendering and operational plan have been completed and a copy provided to VTS;
- Agents book the vessels' movements in QSHIPS;
- Agents to arrange supply of approved fendering; and
- All vessel movements to be conducted with a licensed pilot, endorsed for STS operations, on board.
- Designated STS anchorages in Moreton Bay:
- STS ^1 east entrance beacon bearing: 246° (T) x 3.82 nautical miles (latitude 27° 17·17' S, longitude 153° 16·57' E.); and
- STS ^2 east entrance beacon bearing: 244° (T) x 5.11 nautical miles (latitude 27° 16·51' S, longitude 153° 17·80' E).

10.5.2 Gas Transfer operation procedures:

- The larger vessel anchored and the smaller vessel berthed alongside using the larger vessel's ground tackle to sustain the anchorage;
- Lightering vessel to anchor in this location, using her off side anchor;
- Berthing of the receiving vessel will only be conducted between 30 minutes before sunrise and to be completed no later than 30 minutes after sunset;
- Separation and departure of the receiving vessel may be conducted either day or night with adequate illumination provided at night;
- Berthing of receiving vessel; tug requirements as per port practice and conditions (refer <u>8.2 tug allocation – general requirements - arrival and departure);</u>
- Unberthing, tug requirement assessed on a case by case basis;
- Venting and purging of tanks, by either vessel, is prohibited during berthing and unberthing operations;
- Both vessels to provide and use as required secondary fendering;
- 1000 metre all vessel exclusion zone around the large vessel to be declared and monitored by 'VTS during the operation – a notice to mariners will be issued;
- Both vessels to maintain a 24 hour continuous listening watch on vhf channel 12 for the duration of time that they or either is at anchor; and
- Agents to submit 'notice of intentions to load, unload or transfer bulk liquids' for each operation.

11. Emergency Management

The aim of this section is to provide guidance to the port community about initial response procedures to dangerous incidents, emergencies, terrorist acts and disasters.

11.1 Authorities

MSQ's emergency procedures are prepared under the provisions of the <u>Transport</u> <u>Operations (Marine Safety) Act 1994</u> and the <u>Transport Operations (Marine Pollution) Act 1995</u>.

11.2 Roles and responsibilities

The roles and responsibilities of the combating/lead response agency authorities for all threats are as follows:

Threat	Lead response agency	Support agency
Port security Level 1 – low Level 2 – medium Level 3 – high	Normal port operations PBPL Port security	MSQ QPS QAS QFES
Marine incident (see also search and rescue)	MSQ	AMSA PBPL QPS QAS QFES
Fire	Queensland Fire and Emergency Service (QFES)	MSQ PBPL QAS QPS
Explosion	QFES	MSQ PBPL QAS QPS
Chemical/hazardous substance incident	QFES (Haz/Mat unit)	MSQ PBPL QAS QPS
Oil pollution	MSQ	Refer to QCCAP arrangements on MSQ website
Search and rescue	QPS – Queensland Water Police	MSQ JRCC(Canberra) QAS

Table 19 - Emergency - Roles and Responsibilities

11.3 Emergency Contact Numbers

Organisation	Telephone
Police	000
Water Police (Whyte Island)	+61 7 3895 0333
Ambulance	000
Fire	000
VTS	+61 7 3623 3900 (24 hrs) VHF 16, 12, (secondary 14, 13, 10, 9, 8, 6, 67, 63 and 73)
Security – Port of Brisbane	+67 3258 4601 / + 61 410 506279
Regional Harbour Master	+61 7 3632 7500
Department of Agriculture - Biosecurity (Canberra)	1800 020504
Department of Agriculture - Biosecurity (Brisbane)	+61 7 3268 8273
Australian Border Force (Brisbane)	+61 7 3835 3444
Volunteer Marine Rescue Mooloolaba (VMR 406)	+61 7 5444 3222
Marine Radio Moreton Bay	+61 7 3396 2778
Volunteer Marine Rescue Seaway Tower (VMR 414)	+61 7 5591 2948
Hospital (Brisbane General)	+61 7 3636 8111
Brisbane City Council	+61 7 3403 8888

Table 20 - Emergency Contact Numbers

11.4 Actions in the event of an emergency

11.4.1 Port community responsibilities

As a responsible member of the maritime community, any person witnessing an incident which was/or is capable of becoming an emergency is obliged to report the matter to VTS and/or the emergency response agencies of Police, Fire or Ambulance.

11.4.2 VTS Centre responsibilities

VTS is operated on a 24 hour, seven days a week basis. In the event of being notified of an emergency, VTS will act as an initial notification and communications facility that will activate the appropriate response agencies.

11.5 Marine pollution

The <u>Transport Operations (Marine Pollution) Act 1995 (TOMPA)</u> is designed to protect Queensland's marine and coastal environment by minimising deliberate and negligent discharges of ship sourced pollution. Discharges of oil, noxious liquid substances,

packaged harmful substances and sewage and garbage (MARPOL Annexes I, II, III, IV and V) from ships are prohibited in Queensland coastal waters and pilotage areas.

Maritime Safety Queensland has the authority to detain any vessel suspected of causing marine pollution and to intervene where there is imminent danger to the coastline.

Ships should dispose of all waste ashore using waste reception facilities. The service is available in Brisbane for the collection of tank washing slops, oily bilge water, and oily mixtures containing chemicals, oil sludge, garbage and sewage. The service is provided by Transpacific Industries Group Ltd.

Phone: +61 7 3489 4100

Email: enquiries@transpac.com.au
Web: www.transpacific.com.au

11.5.1 Reporting

Section 67 of the <u>Transport Operations (Marine Pollution) Act 1995 (TOMPA)</u> requires the master of a ship to report a discharge or probable discharge without delay to the Harbour Master.

The Regional Harbour Master (Brisbane) can be contacted via VTS at any time on VHF channels 16 and 12 or phone: 3623 3900.

The following details should be provided in a report of marine pollution:

- Date/time of incident;
- Location (latitude, longitude and physical site);
- Report source and contact number;
- Nature, extent and estimated quantity of spill;
- Type of oil or description;
- Spill source and point of discharge from source;
- Identity and position of nearby ships or name of alleged polluter;
- Nature and extent of spill and movement and speed of spill;
- Local weather/tide/sea conditions:
- Whether a sample of the substance spilled has been collected; and
- Any additional information that relates to the spill.

VTS will complete <u>Form F3968 – Marine Pollution Report</u> based on the above information and fax to the relevant authorities.

11.5.2 Environmental incident reporting

Incidents with potential to cause or which have caused 'environmental harm' as defined in the <u>Environmental Protection Act 1994</u> within the port including land and facilities under the control of port authority must be reported to the authority as soon as reasonably practicable. Failure to report an incident that impacts adversely on the environment is an offence.

Port users, owners, masters and organisations are reminded it is their responsibility to notify the Queensland Environmental Protection Agency and/or Brisbane City Council

where the incident is of the nature that requires notification under the <u>Environmental</u> <u>Protection Act 1994</u> and environmental protection policies.

11.6 Marine incidents

Under the <u>Transport Operations (Marine Safety) Act 1994 (TOMSA)</u>, a marine incident is classified as an event causing or involving:

- The loss of a person from a ship;
- The death of, or grievous bodily harm to, a person caused by a ship's operations;
- The loss or presumed loss or abandonment of a ship;
- A collision with a ship;
- The stranding of a ship;
- Material damage to a ship;
- Material damage caused by a ship's operations;
- Danger to a person caused by a ship's operations;
- Danger of serious damage to a ship; and
- Danger of serious damage to a structure caused by a ship's operations.

11.6.1 Marine incident reporting

A marine incident must be reported to a shipping inspector within 48 hours of the incident unless there is a reasonable excuse. Shipping inspectors include marine officers (located at Maritime Safety Queensland marine operations bases), officers of Queensland Water Police and Queensland Boating and Fisheries Patrol. If you are unable to access one of these offices, contact a shipping inspector by phone, they will advise you what to do next.

The report must be made on the approved <u>Form 3071 - Marine Incident Report</u> for all Queensland Registered vessels. For all domestic commercial vessels and foreign trading vessels, the form <u>AMSA 592</u>, available at AMSA website must be used.

Form 3071 is also available from Department of Transport and Main Roads customer service centres, Maritime Safety Queensland regional offices, Queensland Boating and Fisheries patrol and Water Police offices.

11.6.1.1 Reports to other government agencies

For all domestic commercial vessels and foreign trading vessels, the AMSA <u>Form 18</u> and <u>Form 19</u>, available at <u>AMSA website</u> must be used. Under the *Transport Accident Investigation Act 2003*, this extends to responsible persons with further details available on the <u>ATSB website</u>.

11.6.1.2 Assistance to vessels involved in a Marine Incident

Section 124 of the <u>Transport Operations (Marine Safety) Act 1994 (TOMSA)</u> requires ships masters to assist if a marine incident involves two or more ships. The master of each ship involved in the marine incident must, to the extent that he can do so without danger to his ship or persons on board his ship:

• Give the other ship involved in the incident, its master and persons onboard the ship the help necessary to save them from danger caused by the marine incident;

- Stay by the other ship until no further assistance is required; and
- Give the master of the other ship reasonable particulars adequate to identify the ship and its owner.

11.6.1.3 Reporting Navigation Hazards

Section 129 of the <u>Transport Operations (Marine Safety) Act 1994 (TOMSA)</u> requires the master of a ship to promptly report dangers to navigation including, an abandoned ship, a damaged aid to navigation, severe weather conditions and so on.

11.6.2 Procedures subsequent to serious marine incidents

In the case of a vessel grounding or if structural damage has occurred, the vessel is to be removed to a position of safety. Immediate advice from the Regional Harbour Master should be sought in this instance and the vessel surveyed by the appropriate authority (Australian Maritime Safety Authority or classification society) to ensure the seaworthiness of the vessel before it leaves port limits.

11.6.3 Environmental incident reporting

Incidents with potential to cause or which have caused 'environmental harm' as defined in the <u>Environmental Protection Act 1994</u> within the port including land and facilities under the control of port authority must be reported to the authority as soon as reasonably practicable. Failure to report an incident that impacts adversely on the environment is an offence.

Port users, owners, masters and organisations are reminded it is their responsibility to notify the Queensland Environmental Protection Agency and/or Brisbane City Council where the incident is of the nature that requires notification under the *Environmental Protection Act 1994* and environmental protection policies.

11.7 Extreme Weather Event

Port of Brisbane can experience extreme weather events at any time but with increased frequency during October to May. This can include severe thunderstorms, flooding, high winds, hazardous surf conditions and Tsunami. These conditions can develop at short notice and all members of the port community should maintain a frequent review of the weather conditions relative to their operations, through the <u>Bureau of Meteorology</u>.

Potential impacts from extreme weather can result in additional movement restrictions, reduced movements and evacuation or closure of the port.

Port evacuation will be considered on a case-by-case basis for each vessel taking account of the risk with the vessel, the risk associated with the departure manoeuvre and where the vessel will likely be relocated to.

In response to extreme weather, operational limitations will be developed to ensure safety of the port and re-establishment of critical supply chains.

VTS will forward weather impact advice that may potentially impact port operators via email to terminal operators and agents and via VHF channel 12. Noting vessels may not be actively monitoring VHF during cargo operations, it is requested that agents and terminals ensure their respective vessels are aware of the forecasted weather. Further information is available on the MSQ website.

11.7.1 Mooring Considerations

If vessels are unable to safely depart, it is recommended that early action is taken to increase mooring forces through additional lines, long lines on a bight, anchor walked to the seabed and other opportunities depending upon available vessel equipment and terminal infrastructure. Information related to restrictions will be communicated by the Regional Harbour Master, through VTS.

11.7.2 Extreme Weather Events Operational Limitations

During weather events, there may be operational limits imposed at short notice to ensure safety across the port. These can be associated with manoeuvring limitations, such as additional tugs or berth direction. They may also be associated with environmental limits such as light conditions, current and additional UKC requirements. These will be advised through VTS and as the event transitions to the recovery phase be updated regular as the Port returns to normal operations.

11.7.3 Communications during Extreme Weather Events.

For trading ships within Port of Brisbane, communication will be provided through VTS. This will include emails, SMS alerts and VHF broadcasts. All ships are to maintain a listening watch on VHF channel 12 during extreme weather events. Further information in regional Extreme Weather Event plans on the MSQ website.

11.7.4 Port Evacuation

In the event of extreme weather, in particular riverine flooding, there may be the requirement to evacuate trading vessels over 50m LOA. Contingency planning guidelines are available at 15.10.5 Port Evacuation Guidelines.

12. Security

12.1 General

The International Ship and Port Facility Security Code (ISPS) is administered in Australia by the <u>Department of Infrastructure, Transport, Regional Development and Local Government</u> (DITRDLG). The Port of Brisbane Pty Ltd has an approved Maritime Security Plan as required under the *Maritime Transport and Offshore Facilities Security Act 2003*.

A ship's master, prior to entering the port of Brisbane, must report directly to Port of Brisbane Pty Ltd or via their respective ship agency the following:

- ISPS compliance number;
- Current ship security level or any change to the ship security level whilst in port;
- Ship security officer contact details;
- List of expected visitors/contractors/nominated provedore;
- Crew list and identification; and
- Any security incident (as defined under the ISPS code or Maritime Transport Security legislation) whilst in port.

12.2 Port security procedures

The federal government determined, and will declare when necessary, three (3) security levels.

Level 1 – minimum appropriate protective security measures will be maintained at all times

Level 2 – appropriate additional protective security measures will be enacted because of heightened risk of a security incident

Level 3 – further specific protective security measures maintained for limited times when a security incident is probable or imminent, although it may not be possible to identify the specific target. Ships at a port facility must await instructions from the Department of Infrastructure, Transport, Regional Development and Local Government (DITRDLG) and are to follow their instructions as required.

Unless otherwise advised the port will operate on level 1.

Responsibility for the implementation of the additional security measures will be agreed via a 'Declaration of Security' between the ship and port authority or the port facility operator. If between the ship and the port facility operator, the port security officer must be consulted and agree with the security measures proposed to be implemented.

12.2.1 Access to ships and port facilities

Port security officers conduct mobile patrols on both land and water at all times. All persons wishing to access the port must be able, when requested, to demonstrate they have official business in the port. All crew members leaving a security controlled berth/terminal must show appropriate identification for example, a seafarer's book or a copy of their passport in order to gain re—entry. All visitors and service providers to vessels must be included on the agent's list of authorised visitors and must be able to provide proof of identity.

Port access by members of the public is prohibited.

A number of cameras are stationed around the port to assist security officers monitoring the operations. The vision from these cameras can, if required, be passed on to third parties for their use in investigating incidents. Third parties include but are not restricted to Australian Border Force, Police, and other State government departments. It is an offence to enter or leave the port area by any means other than a designated entrance or exit.

All security breaches, or potential activities that may breach security or cause harm, should be immediately reported to the port security officer.

12.3 Port security contacts

Port security manager telephone: +61 7 3258 4601 (24 hours).

12.4 National security

In line with the federal government's recent publications to do with the reporting of any possible terrorist activity, contact the national security 24-hour hotline if you have any information of possible terrorist activity or have seen or heard something suspicious that may need investigating by the security agencies.

24 hour hot line: 1800 123 400

Email: hotline@nationalsecurity.gov.au

13. Port State Control Inspections

13.1 Inspections

The Australian Government is committed to the protection of life and property at sea and to the preservation of the marine environment. The Port State Control program is administered by AMSA. More information can be found at the <u>AMSA website</u>.

14. Port Services

14.1 Bunkering, Fresh Water

Bunker, fresh water and waste services are available by a variety of means at berths. The Port of Brisbane Shipping handbook, on the Port of Brisbane website (Media Tab) provides further information and up to date contacts.

Please note the requirement of handling bulk liquids as referred to in <u>9.2.5 Notification of handling of bulk liquids</u>.

14.2 Shipping Agencies and Liner Services

There is a variety of agencies and liner services that support the Port of Brisbane. These can be found in the Port of Brisbane Shipping Handbook and online Business directory at www.portbris.com.au.

14.3 Port Community

14.3.1 Mission to Seafarers

Address: 2 Seafarer Street, Port of Brisbane, QLD 4178

Postal Address: PO Box 9260, Wynnum Plaza, QLD 4178

Telephone: +61 7 3895 1181 Mobile: +61 448 640 080

Facsimile: +61 7 3895 1855

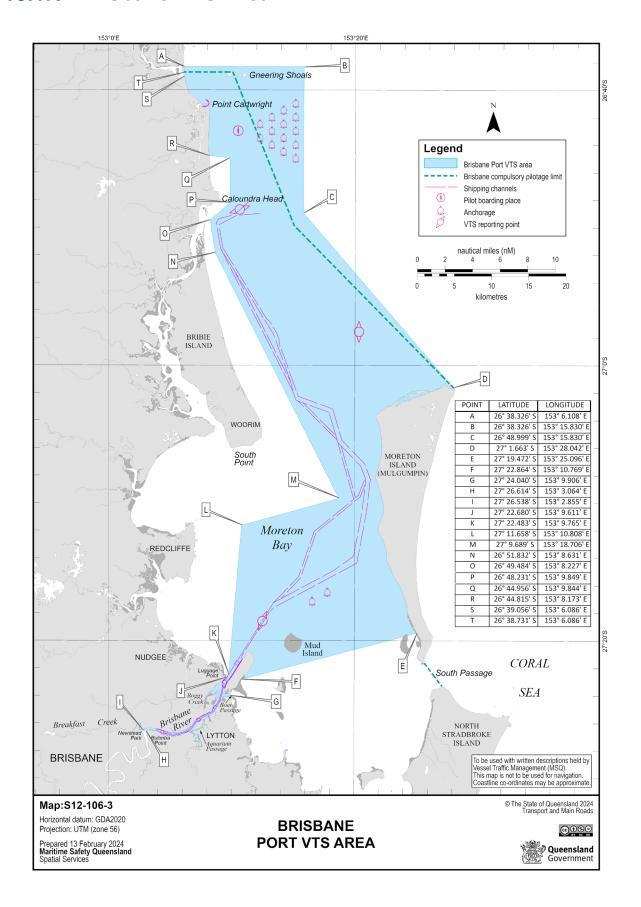
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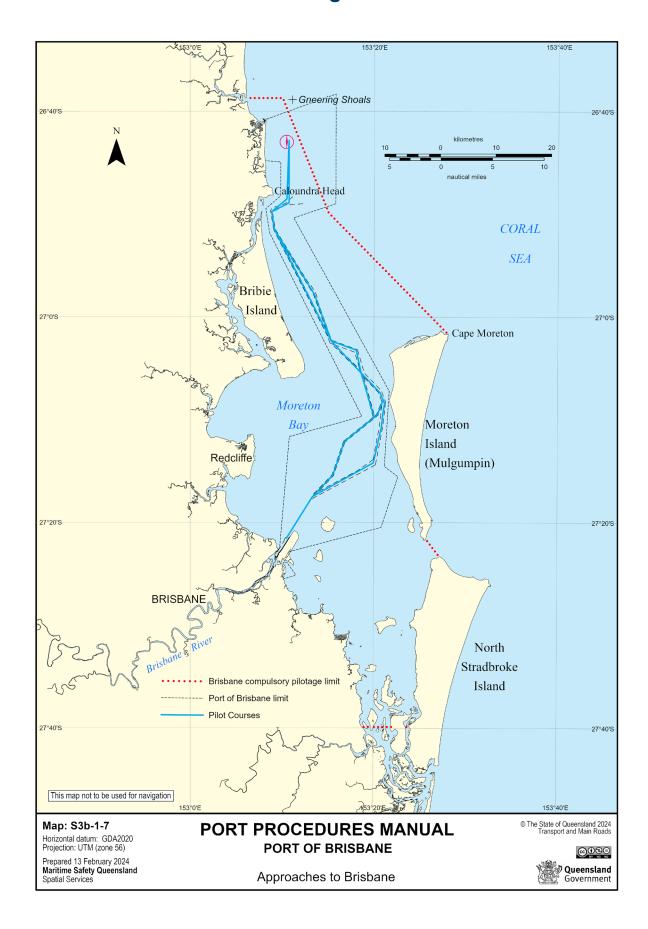
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15.1 Brisbane Port, Pilotage and VTS Limits

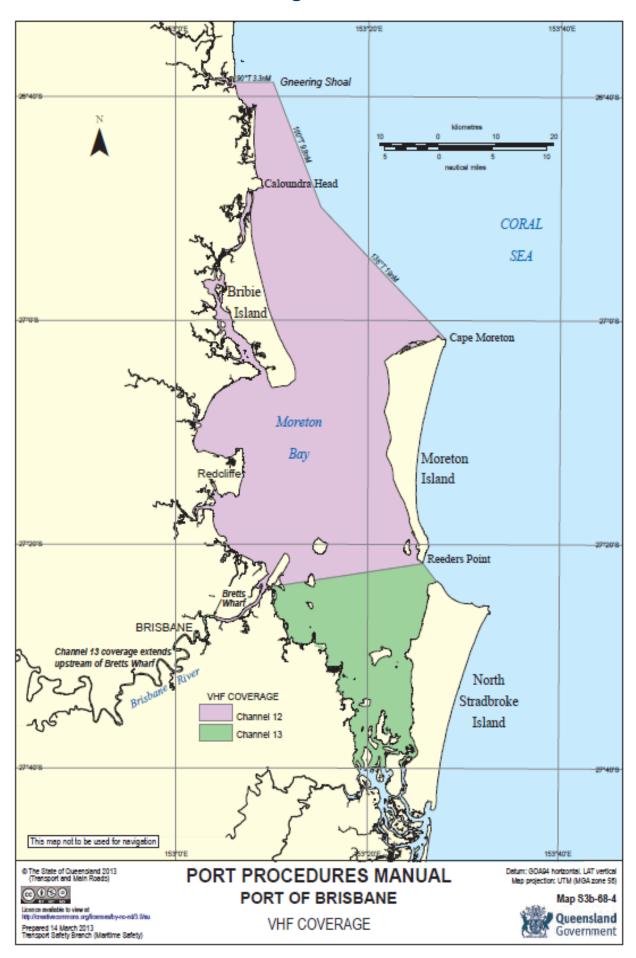
15.1.1 Brisbane VTS Area



15.1.2 Brisbane Port and Pilotage Limits

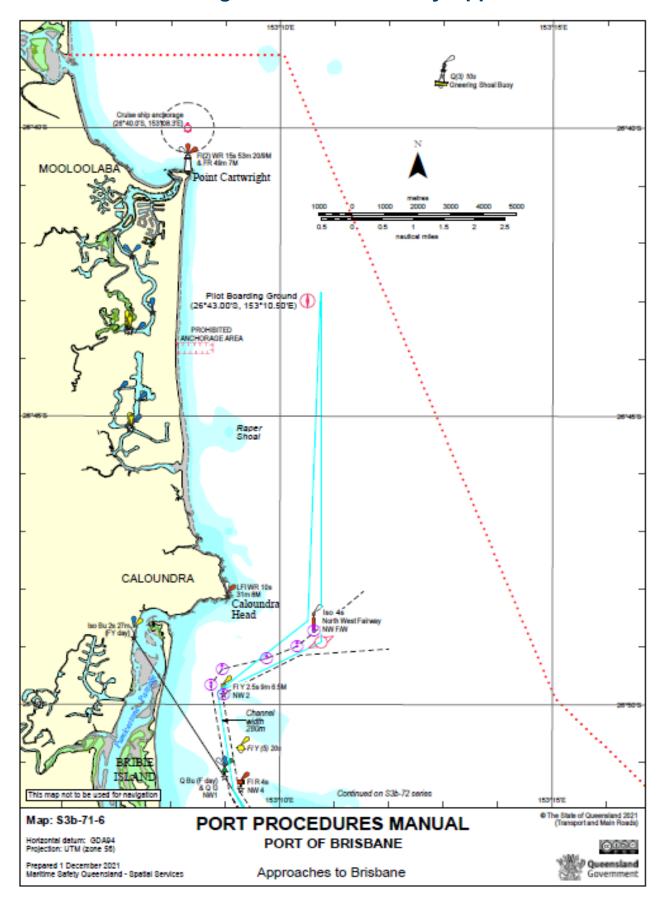


15.1.3 Brisbane VHF Coverage

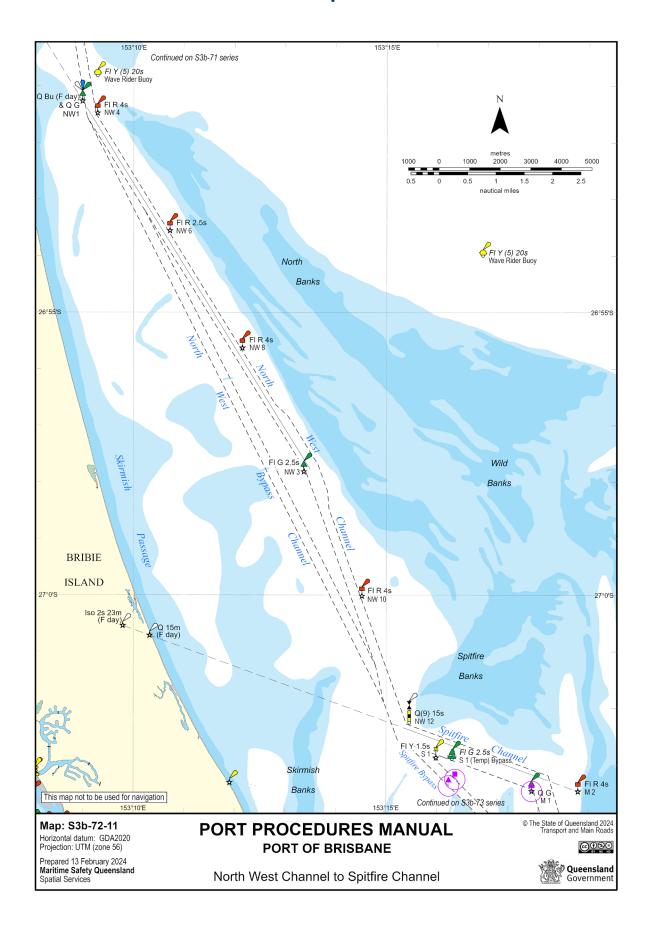


15.2 Chartlets - Main Shipping Channels

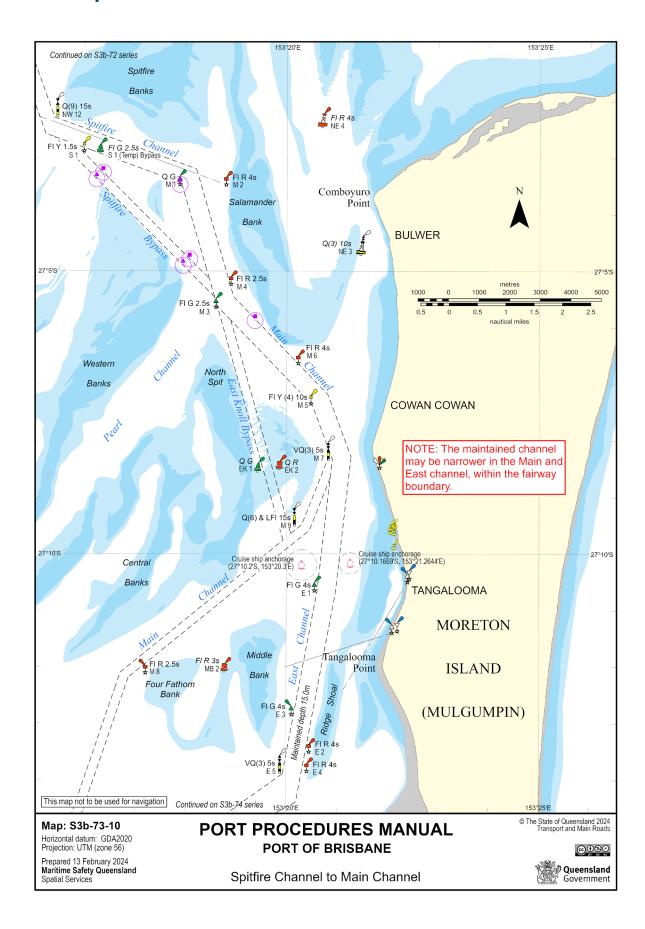
15.2.1 Pilot Boarding Ground and Fairway Approach



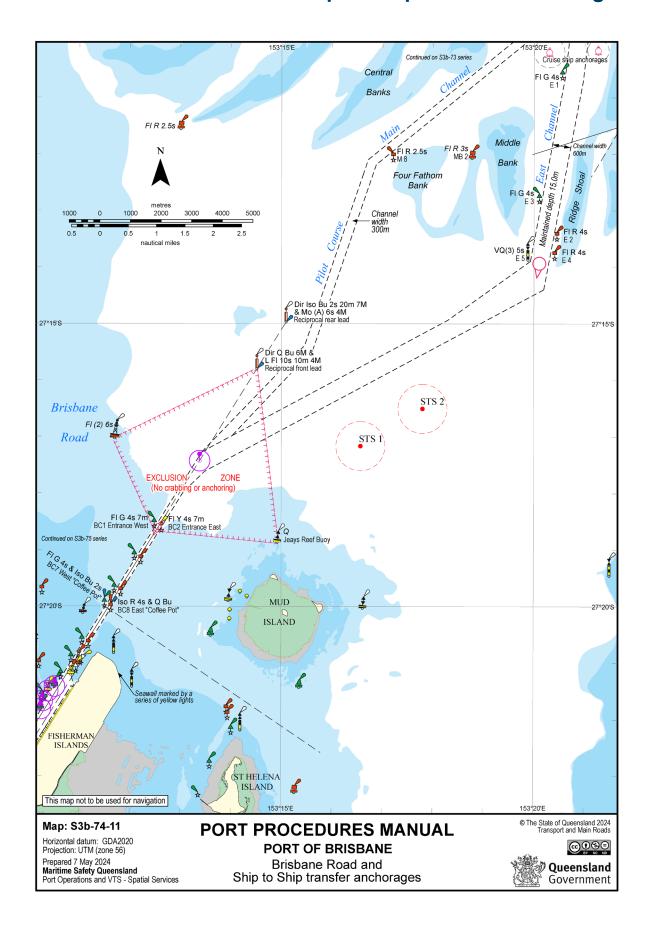
15.2.2 North West Channel to Spitfire Channel



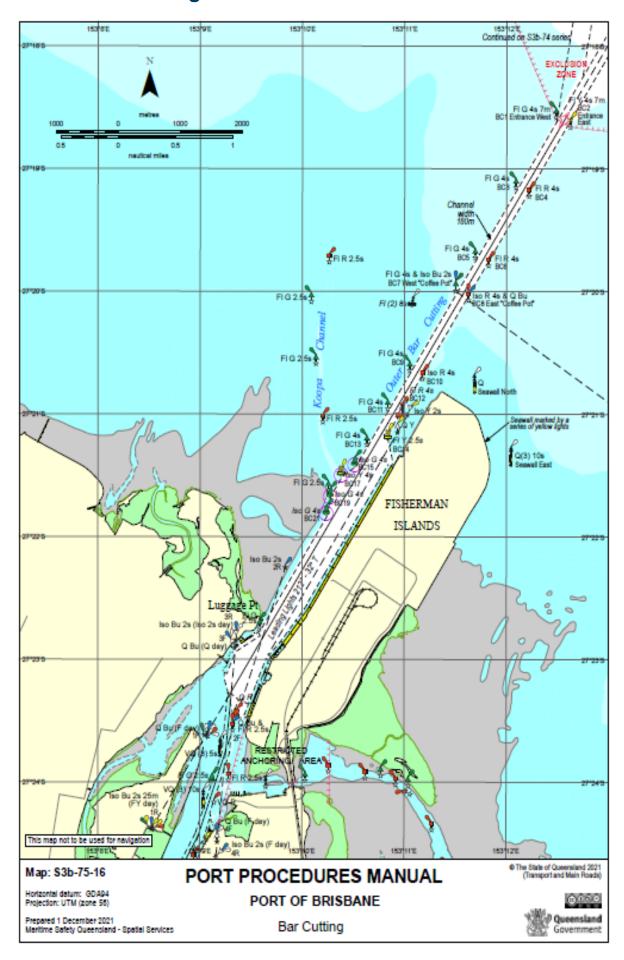
15.2.3 Spitfire Channel to Main Channel



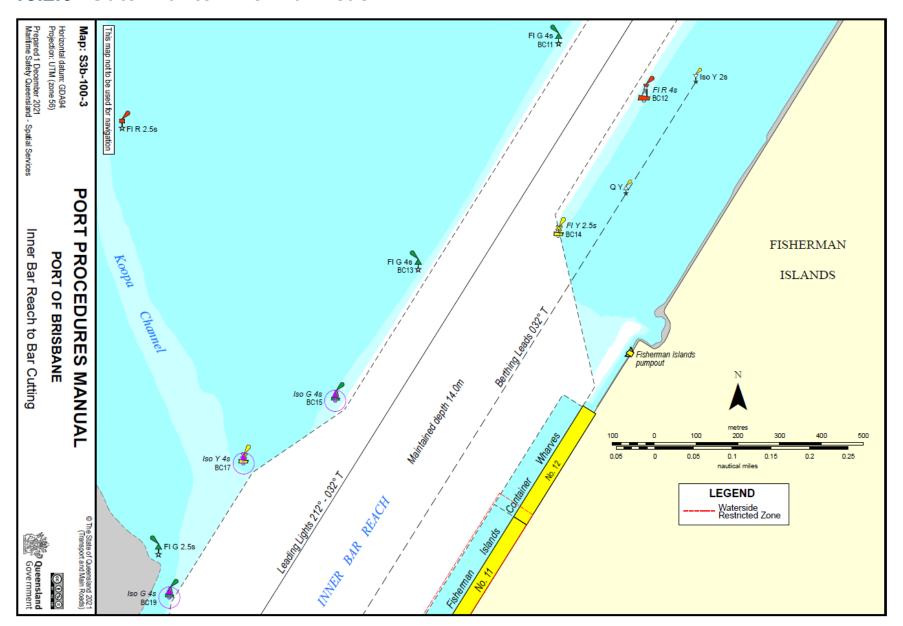
15.2.4 Brisbane Roads and Ship to Ship transfer anchorages



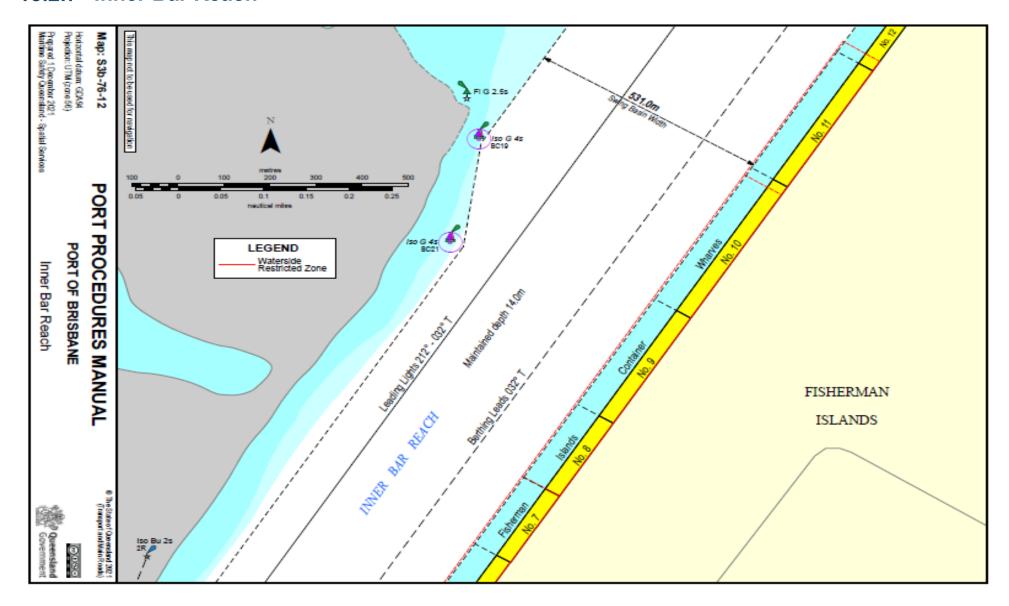
15.2.5 Bar Cutting



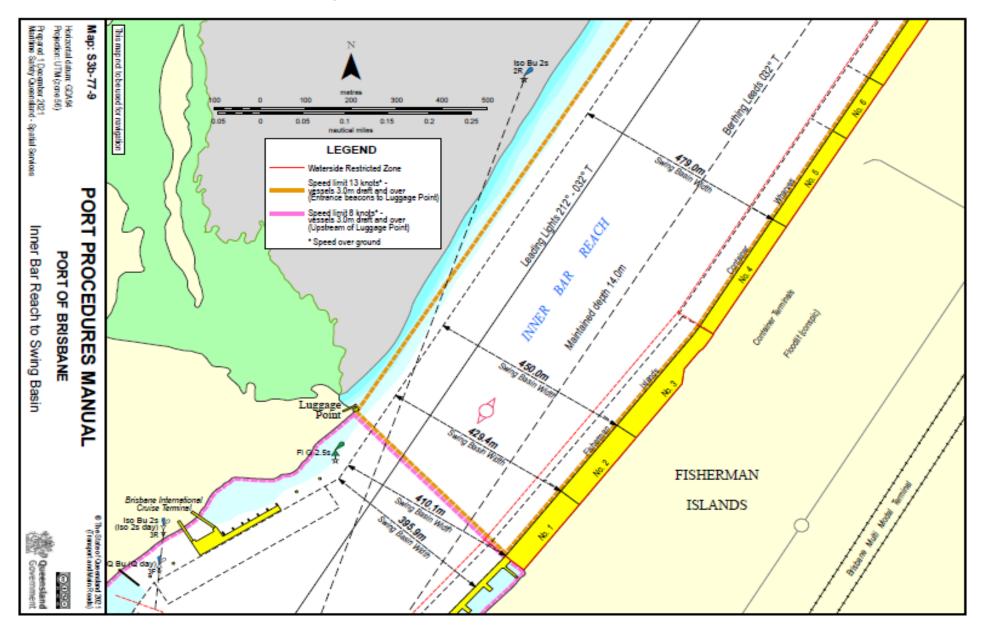
15.2.6 Outer Bar to Inner Bar Reach



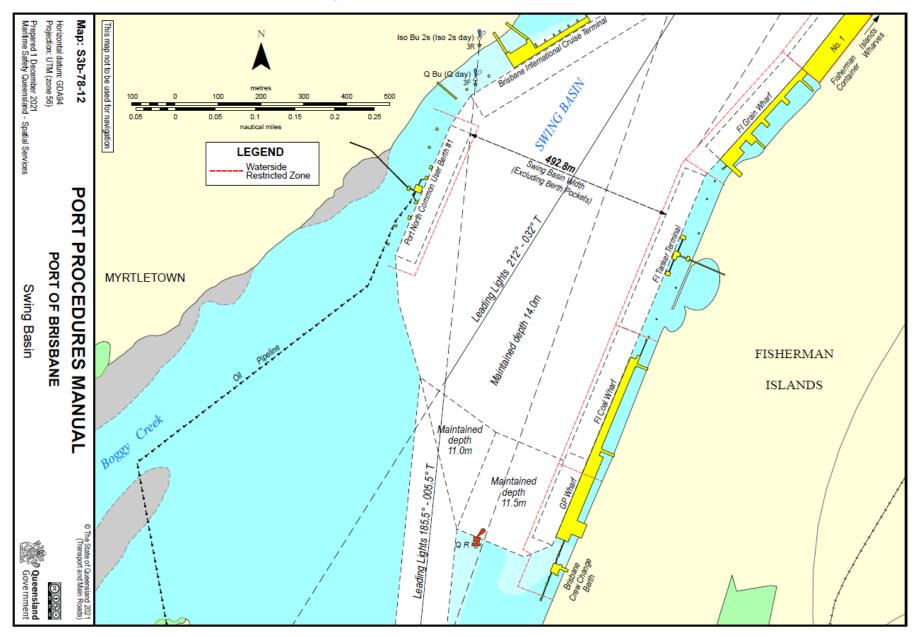
15.2.7 Inner Bar Reach



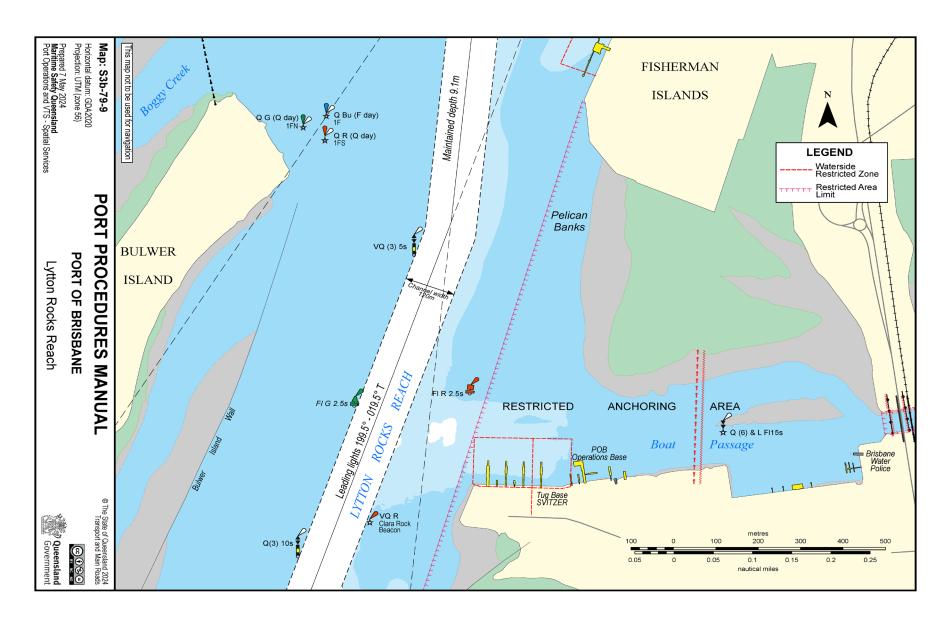
15.2.8 Inner Bar Reach to Swing Basin



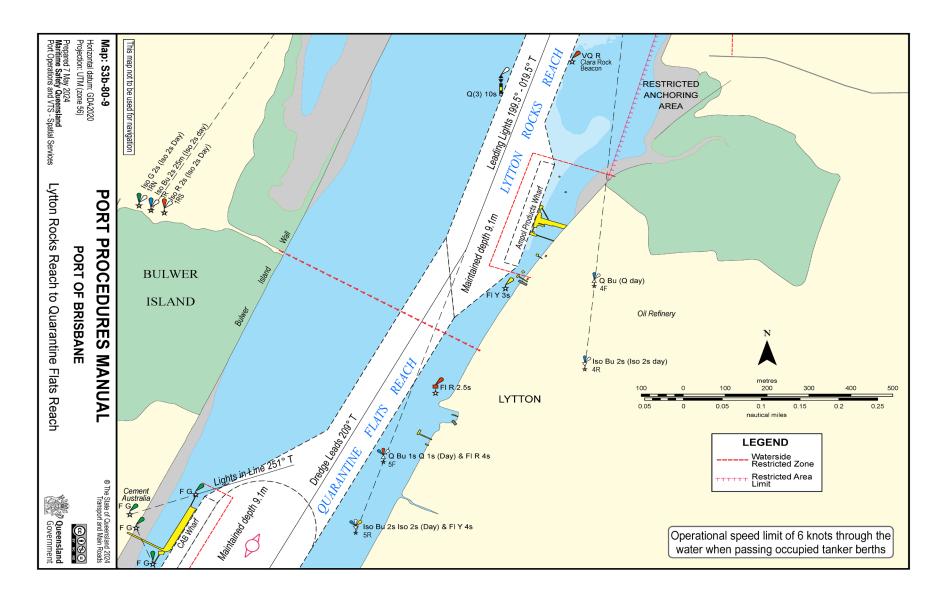
15.2.9 Fisherman Islands Swing Basin



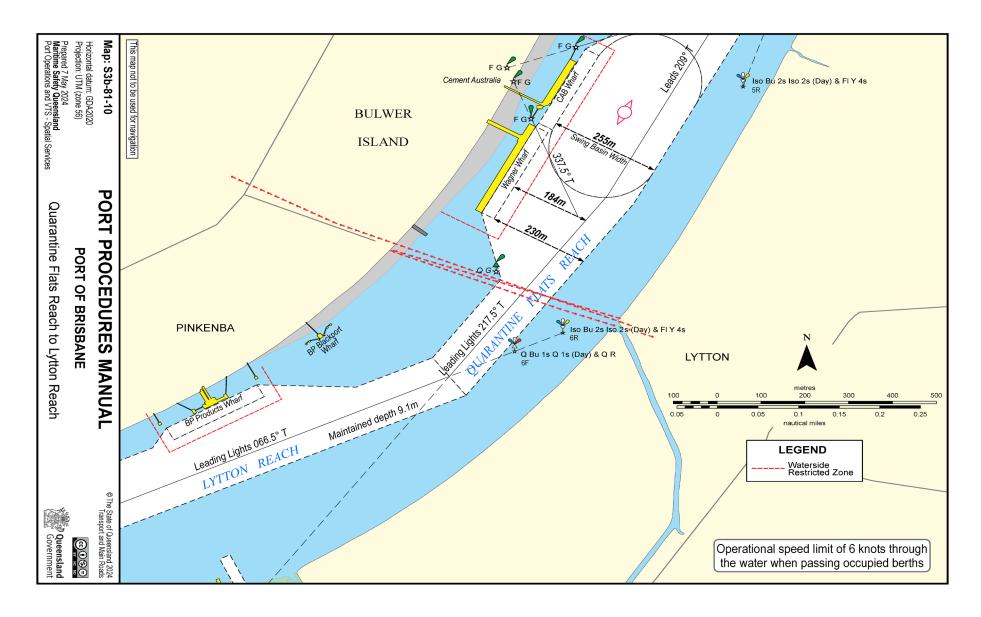
15.2.10 Lytton Rocks Reach



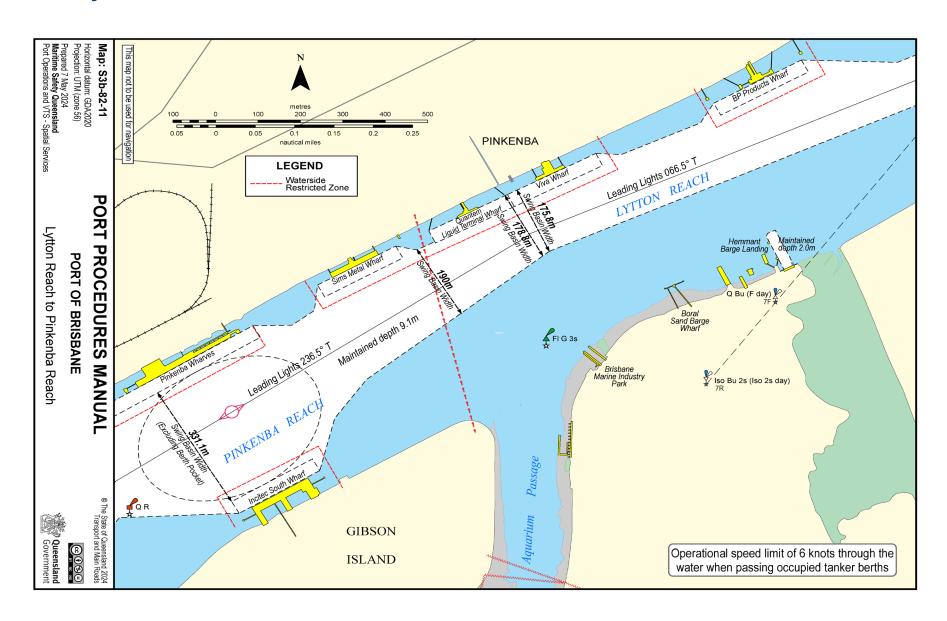
15.2.11 Lytton Rocks Reach to Quarantine Flats Reach



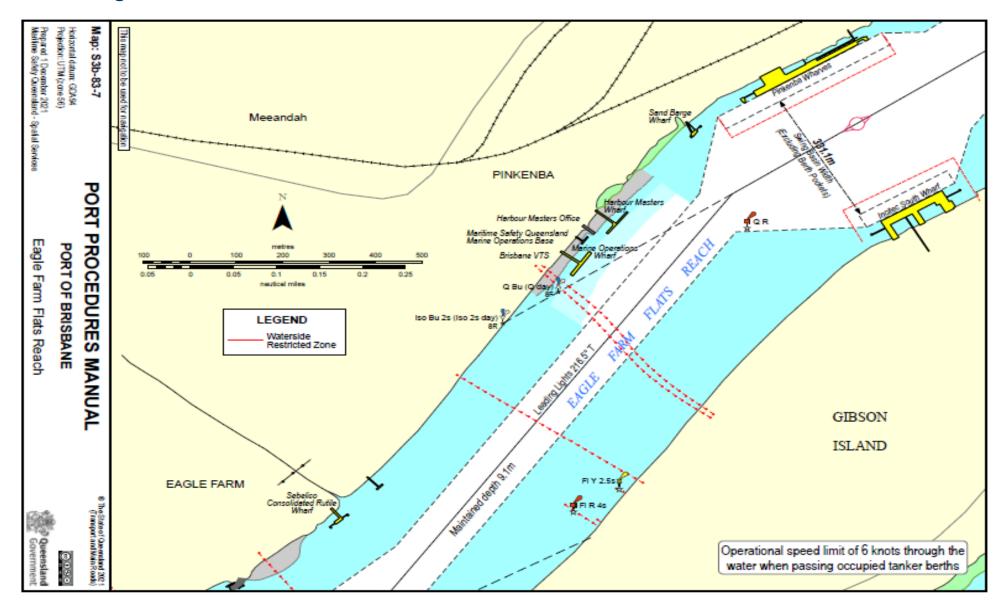
15.2.12 Quarantine Flats Reach to Lytton Reach



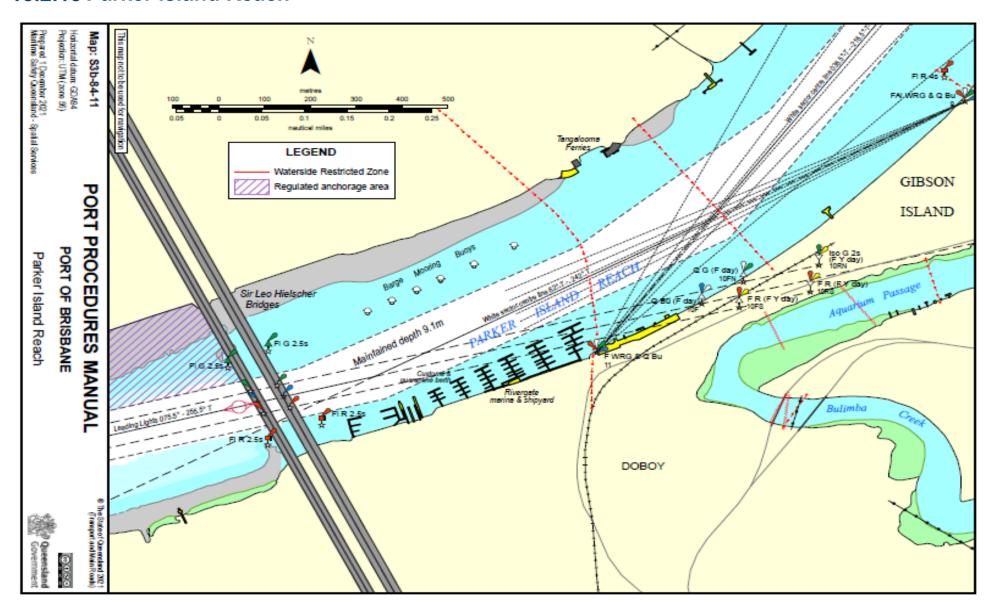
15.2.13 Lytton Reach to Pinkenba Reach



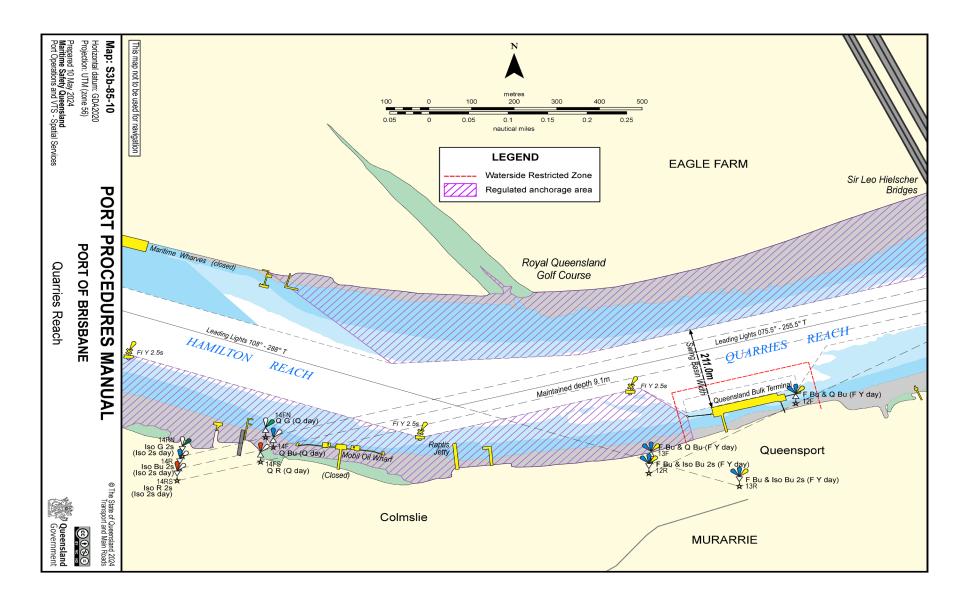
15.2.14 Eagle Farm Flats Reach



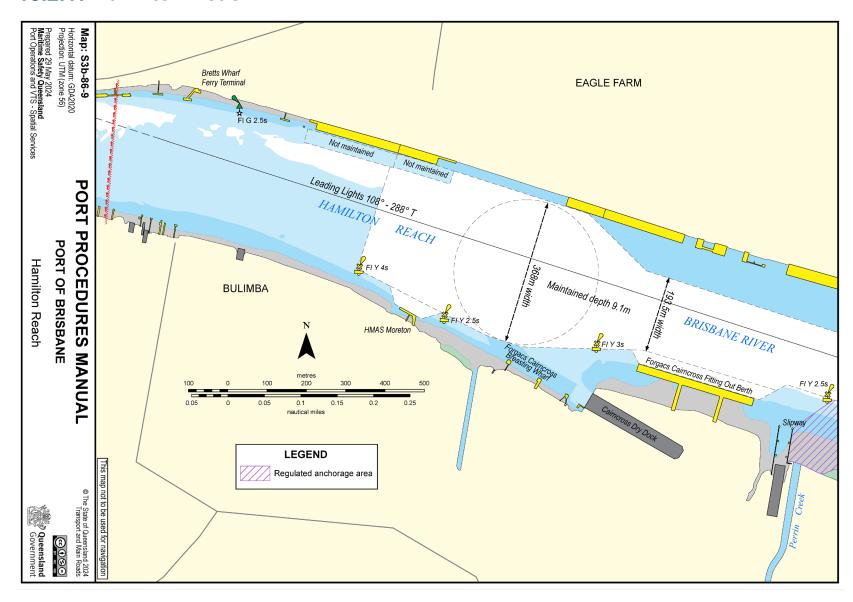
15.2.15 Parker Island Reach



15.2.16 Quarries Reach



15.2.17 Hamilton Reach



15.3 Wharf and berth information

Wharf / berth name latitude &longitude	Distance from Entrance Beacon (Nautical Miles)	Wharf owner* operator #	* Length of berth # length of wharf H height above LAT (m)	Berth pocket Design width & depth at LAT (m)	Services E = electricity DO = diesel oil FO = fuel oil T = telephone W = water	Usage (Refer to Port of Brisbane Shipping Handbook for details of cargo equipment and facilities)
Fishermans Islands No 12 27° 21.50' S 153° 10.82' E	3.25	* PBPL #Hutchison Ports BCT	* 310m # 310m H 6.05	55m 14.0m	E -T - W	Containers
Fishermans Islands No 11 27° 21.64' S 153° 10.72' E	3.43	* PBPL #Hutchison Ports BCT	* 350m # 350m H 6.05m	55m 14.0	E -T - W	Containers
Fishermans Islands No 10 27° 21.82' S 153° 10.60' E	3.63	* PBPL # Patrick Terminal	* 395.5m # 395.5m H 5.70 – 6.05m	55m 14.0m	E -T - W	Containers
Fishermans Islands No 9 27° 21.98' S 153° 10.48' E	3.82	* PBPL # Patrick Terminal	* 317.2m # 317.2m H 5.07 - 5.70m	55m 14.0m	E -T - W	Containers
Fishermans Islands No 8 27° 22.11' S 153° 10.39' E	3.96	* PBPL # Patrick Terminal	* 220.3m # 220.3m H 4.65– 5.07m	55m 14.0m	E -T - W	Containers
Fishermans Islands No 7 27° 22.20'S 153° 10.33' E	4.08	* PBPL # DP World Brisbane	* 200m # 200m H 4.23 – 4.65m	55m 14.0m	E –T – W	Containers
Fishermans Islands No 6 27° 22.28' S 153° 10.27' E	4.17	* PBPL # DP World Brisbane	* 150m # 150m H 4.00 - 4.23m	55m 14.0m	E - W	Containers
Fishermans Islands No 5 27° 22.38' S 153° 10.21' E	4.28	* PBPL # DP World Brisbane	* 250m # 250m H 4.00m	55m 14.0m	E - W	Containers
Fishermans Islands No 4 27° 22.50' S 153° 10.11' E	4.43	* PBPL # DP World Brisbane	* 301.5m # 301.5m H 4.00m	55m 14.0m	E -T - W	Containers,
Fishermans Islands No 3 27° 22.64' S 153° 10.02' E	4.59	* PBPL # AAT	* 298.7m # 298.7m H 4.00m	45m 14.0m	E -T - W	Containers, Ro/Ro, motor vehicles and general cargo
Fishermans Islands No 2 27° 22.74' S 153° 09.92' E	4.72	* PBPL # AAT	* 200m # 200m H 4.00m	45m 14.0m	E -T - W	Containers, Ro/Ro, motor vehicles and general cargo
Fishermans Islands No 1 27° 22.83' S 153° 09.85' E	4.83	* PBPL # AAT	* 197m #197m H 4.00m	45m 14.0m	E-W	Containers, Ro/Ro, motor vehicles and general cargo

Wharf / berth name latitude &longitude	Distance from Entrance Beacon (Nautical Miles)	Wharf owner* operator #	* Length of berth # length of wharf H height above LAT (m)	Berth pocket Design width & depth at LAT (m)	Services E = electricity DO = diesel oil FO = fuel oil T = telephone W = water	Usage (Refer to Port of Brisbane Shipping Handbook for details of cargo equipment and facilities)
Fishermans Islands Grain 27° 22.93' S 153° 09.75'E	5.0	* PBPL # Graincorp	* 285m # 285m H 4.00m	45m 14.0m	E -T - W	Grain, woodchip, cotton seed and motor vehicles
Fishermans Islands Tanker Terminal 27° 23.11' S 153° 09.63'E	5.2	PBPL	* 400m # 100.2m dolphin to dolphin H 5.3m	50m 14.3m	E -FO - W	Crude and product oil discharge
Brisbane International Cruise Terminal 27° 22.85' S 153° 09.46'E	5.2	PBPL	*440m #208m H 4.25m	60m 14.0m		Passenger Vessels
Port North Common User Berth #1 27° 23.02' S 153° 09.28'E	5.3	*PBPL #ATOM	* 329m # 135.7m dolphin to dolphin H 5.64m	50m 14.3m	w	Crude oil discharge, load/discharg e petroleum products
Fishermans Islands Coal 27° 23.29' S 153° 09.55' E	5.4	* PBPL # Queensland Bulk Handling	*317m #240m H 4.00m	50m 14.0m	E -T - W	Bulk coal, bulk clinker, gypsum slag
Fishermans Islands General Purpose 27° 23.42' S 153° 09.48' E	5.5	* PBPL	* 215m #213m H 4.00m	50m 11.5m	E-W	Dry bulk and break bulk
Ampol Products Wharf 27° 24.39' S 153° 09.09' E	6.6	Ampol Refineries Ltd	* 285m # 82.2m dolphin to dolphin H 4.98	35m 10.3m	DO – FO - E - W	Petroleum Products
Cement Australia Wharf 27° 24.84' S 153° 08.57'E	7.2	Cement Australia Ltd	* 220m # 128m H 5.0m	35m 9.7m	E -T - W	Bulk clinker, fly ash, gypsum
Wagners Wharf 27° 24.97' S 153° 08.49'E	7.3	Wagners Holding Company Ltd	* 254.8m # 254.8m H 5.75m	32m 10.3m		Bulk clinker, fly ash, gypsum
BP Products Wharf 27° 25.29' S 153° 08.09'E	7.9	*BP Oil Australia #ATOM	* 235m # 89.5m dolphin to dolphin H 5.18m	35m 10.9m	DO - W	Petroleum Products and discharge LPG
Hemmant Barge Landing	81		Barge landing	35m		Small ship facility
Viva Energy Wharf	8.2	Viva Energy	* 234m	35m	E	Petroleum

Wharf / berth name latitude &longitude	Distance from Entrance Beacon (Nautical Miles)	Wharf owner* operator #	* Length of berth # length of wharf H height above LAT (m)	Berth pocket Design width & depth at LAT (m)	Services E = electricity DO = diesel oil FO = fuel oil T = telephone W = water	Usage (Refer to Port of Brisbane Shipping Handbook for details of cargo equipment and facilities)
27° 25.42' S 153° 07.80'E		Australia	# 75.2m H 5.18m	10.9m		Products
Quantem Liquids Terminal 27° 25.48' S 153° 07.68'E	8.3	Quantem	* 208m # 55m H 5.18m	35m 10.5m	W	Bulk flammable liquids
SIMS Metal Wharf 27° 25.55' S 153° 07.52' E	8.5	SIMS Metal Ltd	* 210m #123.5m dolphin to dolphin H 4.47m	35m 10.0m	E-W	Bulk liquid and dry bulk fertiliser
Incitec South Wharf 27° 25.87' S 153° 07.41' E	8.7	Incitec Ltd	* 220m # 152.2m H 4.57m	35m 10.4m	E-T-W	Bulk liquid and dry bulk cargoes,
Pinkenba Wharf 27° 25.69' S 153° 07.26'E	8.7	*#PBPL # Graincorp # Puma Energy	* 407m # 314m dolphin to dolphin H 5.18m	10.4m	E-T-W	Dry bulk, general, petroleum products
Pacific Tug Base	9.6	Pacific Tug Group				Small ship facility
Bhagwan	9.8	Bhagwan Marine PTY LTD				Small ship facility
Queensland Bulk Terminal 27° 26.89' S 153° 05.71'E	10.6	Wilmar Gavilon	* 270m # 158m H 5.0m	35m 10.0m	E-T-W	Bulk cargoes
Forgacs Cairncross Fitting Out Wharf 27° 26.80' S 153° 04.64' E	11.5	LendLease	* 320m H 5.4m	Consult VTS for latest depth	E -T - W	Ship repair
Hamilton 4 Wharf 27° 26.59' S 153° 04.54' E (closed)	11.7	*EDQ #QUBE Logistics	* 240m # 240m H 5.18m	35m 10.3m	E -T - W	General Cargo, Containers, Bulk Cargo
Brisbane Cruise Terminal (Portside) Hamilton 1 Wharf 27° 26.47' S 153° 04.10' E	12.1	Brisbane Cruise Terminal	* 387m # 237m H 5.18m	35m 8.8m	E -T - W	Passenger vessels

Table 21 – Wharf and Berth Information

15.4 Swing basin and swing areas Brisbane River

Area	Minimum depth	Minimum diameter	Without berth pocket	With berth pocket	Include opposite berth
				Maximum	LOA
Hamilton Reach Swing Basin	9·1	368	230	-	
Fitting Out Berth	9-1	252·6	158	180	202
Queensland Bulk Terminal	9.1	211.0	_	132	
Pinkenba Swing Basin	9·1	331·1	207	229	-
Incitec South	9.1	331·1	207	229	-
SIMS Metal	9·1	234.6	_	147	
Quantem Liquids Terminal	9-1	178-8	_	112	
Viva	9-1	175-8	_	110	
BP Products	9-1	196-9	_	123	
Cement Australia Swing Basin†	9·1	255-1	166	186	
Wagner †	9.1	230.0	-	166	
Ampol Products	9.1	183.7		115	
Fisherman Islands Swing Basin	14.0	492-8	308††	-	-
Fisherman Islands Grain Terminal	14.0	395-9	_	247	
Fisherman Islands No 1	14.0	410·1		256	
Fisherman Islands No 2	14.0	429-4		268	
Fisherman Islands No 3	14.0	450.0	_	281	
Fisherman Islands No 4	14.0	479.0	_	300	
Fisherman Islands No 5	14.0	479-0	_	300	
Fisherman Islands No 6	14.0	479.0	_	300	
Fisherman Islands No 7	14.0	479-0	_	300	
Fisherman Islands No 8	14.0	479-0	_	300	
Fisherman Islands No 9	14.0	479.0		300	
Koopa Swing Basin	14.0	531m	350	-	-
Fisherman Islands No 10	14.0	479.0		300	
Fisherman Islands No 11	14.0	479.0		300	
Fisherman Islands No 12	14.0	479.0		300	

Table 22 - Swing Basin and swing areas Brisbane River

- * Passenger vessels accepted to 270m LOA on a case by case basis providing no vessel beyond BCT and HAM4 berths.
- † This LOA will be determined on a case by case basis by the Regional Harbour Master.
- †† Due to high risk with NGF tanker alongside this LOA will be determined by the Regional Harbour Master on a case by case basis.
- # This LOA will require further investigation.

15.5 Air draft/bridge heights

Bridge/power lines	Height above highest astronomical tide (HAT)
Sir Leo Hielscher Bridges Known as <i>Gateway Bridge</i> (see note)	57.4 metres (centre) 54 metres (edge of navigation envelope)
Bulimba power lines	41.4 metres
Story Bridge	30 metres
Kangaroo Point Green Bridge	12.3 metres
Captain Cook Bridge	12·7 metres
Goodwill Bridge	13·25 metres
Neville Bonner Bridge	11.8 metres
Victoria Bridge	11·4 metres
Kurilpa Bridge	11·4 metres
William Jolly Bridge	12 metres
Merivale Railway Bridge	11·5 metres
GoBetween Bridge (Hale Street)	11·4 metres

Table 23 - Air draft/bridge heights

15.5.1 Sir Leo Hielscher Bridges

Vessels with an air draft >48 metres are required to obtain permission from the Regional Harbour Master. Vessels with air drafts between 53.5 metre and 56.4 metre will be subject to tidal and transit restrictions.

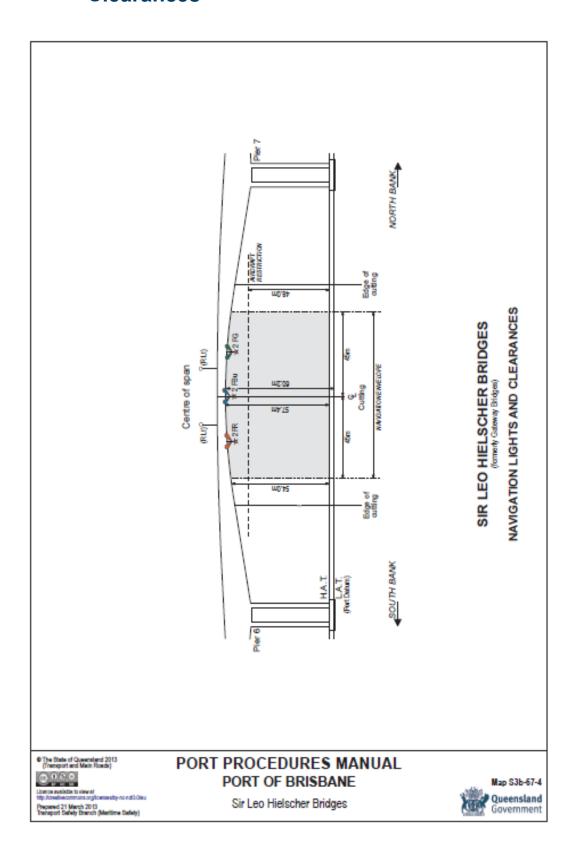
15.5.2 Bulimba power lines

The height under the Energex wires at Bulimba is 47.9 metres less the electricity authority safety allowance of 4.6 metres. Masters of ships with air draft >38 metres must obtain written permission from the Manager (Vessel Traffic Services) before proceeding.

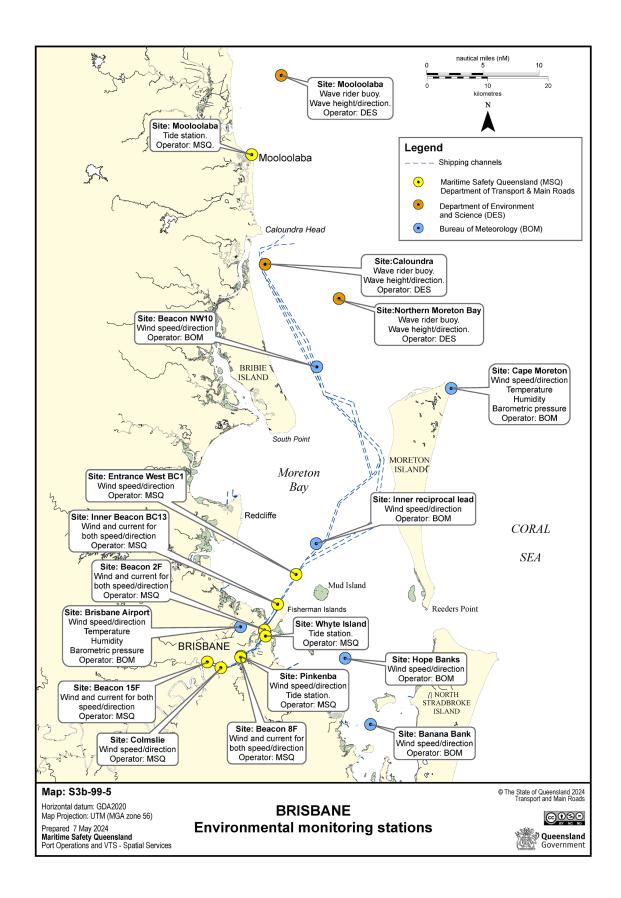
15.5.3 Story Bridge

Vessels with an air draft >28 metres are required to obtain permission from the Regional Harbour Master.

15.5.4 Sir Leo Hielscher Bridges – Navigational Lights & Clearances



15.6 Weather Stations



15.7 Static Under Keel Clearances Requirements

15.7.1 Moreton Bay and Brisbane River

Channel		North West		North West Bynass	91.9		Spitfire Bypass	• · · · · · · · · · · · · · · · · · · ·	Fasi	East Knoll Bypass	Main M9–M8	Bar Cutting	River
	NW Fwy	NW 2- 3	NW 3- 12		NW 12	M2		E1	E5			EBCN	Above Pelican Banks
Depth @ LAT	15.0¹	15.0	15.0	9.2	15.0	15.0	12.0	15.0	15.0 ³	6.0	10.0	14.0	9.10
UKC	1.8	2.30	2.1	1.6	1.5	1.5	1.4	1.5	1.5	1.4	1.8	1.46	0.60

¹ NW Channel depth 15 metres –

width 280 metres

² Spitfire Channel depth 15 metres –

width 600 metres

³ Western half of the East Channel depth 15 metres –

width 300 metres

Table 24 - UKC Moreton Bay and Brisbane River

15.7.2 Tides – UKC required for Brisbane River

Draft	UKC	Tide height required	Draft	UKC	Tide height required	Draft	UKC	Tide height required
8.50	0.60	0.00	9.74	0.61	1.25	10.20	0.81	1.91
8.60	0.60	0.10	9.78	0.62	1.30	10.24	0.82	1.96
8.70	0.60	0.20	9.82	0.64	1.36	10.28	0.82	2.00
8.80	0.60	0.30	9.86	0.66	1.42	10.32	0.83	2.05
8.90	0.60	0.40	9.89	0.68	1.47	10.36	0.84	2.10
9.00	0.60	0.50	9.91	0.69	1.50	10.41	0.85	2.16
9.10	0.60	0.60	9.94	0.72	1.56	10.45	0.86	2.21
9.20	0.60	0.70	9.97	0.72	1.59	10.49	0.87	2.26
9.30	0.60	0.80	10.01	0.74	1.65	10.53	0.87	2.30
9.40	0.60	0.90	10.05	0.75	1.70	10.57	0.88	2.35
9.50	0.60	1.00	10.09	0.77	1.76	10.61	0.89	2.40
9.60	0.60	1.10	10.12	0.78	1.80	10.65	0.91	2.46
9.70	0.60	1.20	10.16	0.79	1.85	10.69	0.91	2.50

UKC required - all berths - 0.30 metre

Note – Valid NCOS windows override SUKC requirements

Table 25 - Tides UKC for Brisbane River

15.8 Wind Limits

15.8.1 How to use the Table

- 1. This table is to be read in conjunction with Section 5 and Section 8 of the Port Procedures Manual. Where there is a discrepancy or conflict between the table below and respective PPM section, the PPM section takes precedence, with any issue highlighted to the RHM at the earliest opportunity.
- 2. When reading the table, the follow colours and outcomes are listed below.

Standard operating parameters
Heightened Risk with additional assessment required
Movement not normally conducted – refer to VTS/DHM

- 3. To ensure a balanced and supportive approach to assessment for areas of heightened risk, the following responsibilities are outlined.
 - a) For scheduling purposes, VTS is responsible for assessment, using the BOM forecast, in conjunction with the agent and supported by the RHM.
 - b) For pilotage planning and execution process, based on the BoM Forecast and real-time weather, the Pilot and Master are responsible for assessment and supported by VTS/RHM
- 4. When conducting the additional assessment for heightened risk, the following should be considered.
 - a) Environmental Conditions: wind gusts vs steady value / current strength and direction
 - b) Vessel Characteristics: Propulsion, steering and thruster system characteristics / Mooring and anchoring systems / Defects, crew competency
 - c) Port Resources: Towage resources
 - d) Manoeuvre Characteristics: Windage / loaded condition / berthing direction / draft / UKC / size of vessel relative to available manoeuvring space
 - e) Commercial / operational considerations

15.8.2 Below Pelican Banks, including Fisherman Island Precinct

Vessel	Wind Range Steady	Tugs	Remarks
All vessels <105m	->20	0	
	20 ->	1	No BT substitution
	35+		
All vessels 105- 150m	->20	1	Efficient BT can substitute for tug
	20 ->	2	No BT substitution
	35+		
Container and General Purpose Vessels 150- 300m	->20	2	Efficient BT can substitute for tug if:<80K displacement, 12m daft, 280m LOA
	25 ->	2	No BT substitution
	35+		
Container 300-350m	20	2 / 3 (swing)	Swing at slack water Max 1 kt current for favourable direction berthing / unberthing. No BT substitution
Tankers and Bulk carriers 200m +	->20	2/3	No BT substitution Berthing direction - loaded condition and current dependant (normally swing in lighter condition). Suez Max / UKC restricted to berth at slack water.
	20 ->	2/3	
	30+		
Tankers and Bulk carriers 150 -200m	-> 20	2	Efficient BT can substitute for tug
	20 ->	2	
	30+		
Vehicle carriers	->20	2	Efficient BT can substitute for tug >230m Min 1500HP BT
	20 ->	2	No BT substitution

Cruise Ships (with enhanced manoeuvring systems)	->25	+308m swing at KSB or HU arrival 1 tug (unless both tanker berths unoccupied and can swing at FISB 2 tugs) <308m swinging at FISB minimum 1 tug All sizes – no tug for HD departure
	25 ->	Assessment of manoeuvring systems (Azipod vs twin screw and so on), Consider benefit of additional tug vs environmental conditions
	35+	

Table 26 - Wind Limits Below Pelican Banks, including Fisherman Island Precinct

15.8.2.1 FI – relevant wind sources

- 1. Inner Bar, FISB and KSB BC13 and 2F.
- 2. Entrance Channel BC13 and BC1.
- 3. Planning of towage allocation / BT Replacement BOM Moreton Bay forecast / wind maps and NCOS FI Wind (high res).

15.8.3 Above Pelican Banks

Vessel	Wind Range Steady	Tugs	Remarks
All vessels <105m	->20	0	
	20 ->	1	No BT substitution
	30+		
All vessels 105-150m	->20	1	Efficient BT can substitute for tug
	20 ->	2	No BT substitution
	30+		
All vessels 150 -200m	->20	2	
	20 ->	2	No BT substitution
	30+		
Vehicle carriers / high	->15	2*	No BT substitution
windage (limited to 200m LOA)	20 ->	2*	
,	25+		
Bulk carriers / tankers 200- 230m (LR1 to Pinkenba and Panamax to QBT)	->15	2/3*	No BT substitution QBT – HDI and swing at Hamilton - Depart daylight and slack water at Pelican Banks. PNK – HUI at slack water - Depart slack water 3 tugs if draft exceeds 10.0m
	20 ->	2 / 3*	(* 2 Tugs must escort from / to Luggage Point) Gusts not to exceed 25 knots
	25+		

Table 27 - Wind Limits Above Pelican Banks

15.8.3.1 Upstream of FI – relevant wind sources

- 1. Downstream of Gateway Pinkenba and 2F.
- 2. Upstream of Gateway Colmslie, Pinkenba and 2F.
- 3. Planning of towage allocation / BT Replacement BOM Moreton Bay forecast / wind maps and NCOS FI Wind (high res).

15.8.3.2 Berth Specific Operational Limitations

- 1. AMPOL Products Refer to PPM 5.9.1 for berthing direction, current and draft manoeuvring restrictions.
- 2. WAGNER Refer to PPM 5.9.2 for berthing direction, current and draft manoeuvring restrictions.

15.9 Vessel Traffic Management Forms

15.9.1 VTIS A1 – Booking Form

Link to fillable PDF		
Queensland Government		Booking Request
Port code Port name		
Arrival		
Ship's name	LOA Voyage num	ber
Please choose from the following:		
Is a Pilot required?		
Do you have a Pilot exempt certificate? P	lease complete Exempt Master and Exempt Ma	ster's name below
IMO number	Exempt Master Exempt Master's name	
Invoicing body	Agency Agent Contact	
Reason for visit Ship's defects		
Land Code and the land of the Code and the C		
ISPS Code - security level ISSC number pr	T	
Last port	Next port	
Berth code Direction	Pilot on arrival	
Pilot Boarding Ground		
Date Time		
/ /		
	ETA berth:	
Date Time	Date Time	
Tug(s) request number Thrusters: Bow	Stern Dual	
Tug company		_
rog company		
Draft Fwd Draft Aft Air Draf	t	
Linesmen request:		
Company name		
Launch request number Company name		
Dangerous Goods: Yes No		
Tanker NGF: Tanker GF:		

VTIS A1 Booking Request continued... page 2 of 2

Departure		
	ETD:	
Berth code Di		Time
	/ /	
Please choose from the f	following:	
Is a Pilot required?		
-	_	xempt Master and Exempt Master's name below
Exempt Master Exempt	Master's name	
Tug(s) request number	Tug company	
Draft Fwd Draft	Aft Air Draft	
Dialitrud	Air Dialit	
Launch request number	Company name	
Dangerous Goods: Yes	□ No □	
Tanker NGF: Tanker GF:		
]	
Permit(s)		
	Date/Time from:	Date/Time to:
Hot work:	, ,	, ,
Immobilise:	/ /	1 1
Overside work:	/ /	1 1
Boat drills:	/ /	1 1
Tank wash:	1 1	1 1
Engine trials:	I I	I I
Bulk liquid transfer:	1 1	1 1
Agent only checklist: VTIS A1 VTIS A2	VTIS A3 GF Certificate	
Agent's signature		

Page 2 of 2 LTSR Forms Area Form F5359 CFD V02 Mar 2023

15.9.2 VTIS A2 Vessel details form VTIS A2 – Booking form (Removals)

Link to fillable PDF



Booking Request (Removals)

Government			
Removal			
Ship's name		Agency C	Contact
Exempt Master Exempt Master's name			
From booth	Dissetion	Dete	
From berth	Direction	Date / /	Time
To berth	Direction	Date	Time
		/ /	
Tugs from:		Tugs to:	
Number Company		Number	Company
Lines launch from/to: Company			
/			
Departure Draft:			
Fwd Aft Airdraft			
Tanker status Dangerous goods	Thrusters available		
Barrand			
Removal			
From berth	Direction	Date	Time
		/ /	
To berth	Direction	Date	Time
		/ /	
Tugs from:		Tugs to:	
Number Company		Number	Company
Lines launch from/to: Company			
/			
Departure Draft:			
Fwd Aft Airdraft			
Tanker status Dangerous goods	Thrusters available	_	
Agent's signature		_	
	\neg		

LTSR Forms Area Form F5361 CFD V02 Mar 2023

15.9.3 VTIS A3 Vessel Details Form

. SAME.

Link to fillable PDF - Please return to VTSBrisbane@msq.qld.gov.au

Queensland Government			Vessel Details
Port Code		Port Name	
Ship's name			Agency Agent
			ISS
IMO/Lloyd's number			Call sign
Principal agent			MMSI number
Ship type			Flag
CDT			
GRT	NRT	DWT	
LOA	Page 1	LBPP	
Lon	Beam	LBPP	
Summer draft	Sea speed	Bow to bridge	Bow to manifold
Thrusters			
-TBC kW			
Previous name		Other changes	
Remarks			

Please email completed form to your regional VTS.

LTSR Forms Area F5362 CFD V01 Mar 2023

15.9.4 VTIS A4 Form - Tug and Tow Advice

Link to fillable PDF



VTS Tug and Tow Booking Request

		Port name	
Arrival			
Ship's name		LOA	Voyage number
IMO Number	Exempt Master		
Invoicing body	Contact details		Ship's defects
Pilot to board:	ETA berth:		
Date Time	Date	Time	
1 1	1	1	
Last port	Next port		
	, , , , , , , , , , , , , , , , , , ,		
Berth code Direction			ı
Discussi			
Dona Fund			
Draft Fwd Draft Aft			
Support Tug(s) Request number Tug com	pany		
Dangerous Goods: Yes No			
Departure			
ETD:			
Date Time	Berth code	Voyage number	
1 /	1]	
Exempt Master	Contact details		
Exempt master	Contact details		1
Support Tug(s) Request number Tug com	nany		ı
Cupport rug(s) request number rug com	parry		
Draft Fwd Draft Aft			
Dialitrid			
Dangerous Goods: Yes No No			
Barge details			
Name			
LOA Beam Type)		
Draft Fwd Draft Aft			
Length of tow:			
Sea Shortened up	_		

continued page 2... Page 1 of 2 LTSR Forms Area Form F5363 CFD V01 Mar 2023

VTS Tug and Tow Booking Request continued page 2 of 2 Remarks
Other information

15.9.5 UKC® Vessel particulars request

Link to fillable PDF



NCOS Vessel Particulars

It is requested the master of this vessel completes this form with the following information basis the vessel's deep arrival/departure at Brisbane.

Once this information is received we will forward this to the Harbour Master to assess and calculate your berthing/sailing window.

Thank you for your co-operation.

mann you for your to operation.		
Name of vessel		IMO
Hull type:		
Bulk carrier Tanker Container		
Beam		LBP
	m	m
LOA		
	m	
Owner/Line		Summer Draft
DWT for transit		Displacement for transit
	t	
Draft:	_	
Fore Mid	Aft	_
m n	n m	
GM:		
Centre of Gravity to Metacentre	with corrected figure app	olied
Solid, GM(s)	Corrected GM(f)	
m		m
KG:	KM:	
Keel to Centre of Gravity	Keel to Metacentre	
m		m

15.9.6 Gas Free Status Declaration

Link to fillable PDF



Gas Free Status Declaration

Declaration required prior to acknowledgement of 'Gas Free' status											
Master to declare											
Has your ship any flammable liquid or gas cargo on board in bulk? Yes No											
Have your empty cargo tanks been washed, vented and inspected for flammable residue? Yes No No											
Are your slop tank/s, pump room/s, and cargo pipe/s free of flammable residue? Yes No											
Is your combustible gas indicator working and calibrated correctly? Yes No											
Has the atmostphere in each pump room, cargo tank or residue space been tested with a combustible gas indicator and a zero reading obtained? Yes No											
Can the atmosphere in each pump room, cargo tank or residue space be maintaned with a zero gas reading? Yes \(\subseteq \) No \(\subseteq \)											
Have you a current 'International Safety Guide for Oil Tankers and Terminals' (ISGOTT) manual on board? Yes \[\sum \] No \[\sum \]											
Master/Agent's Name Master/Agent's Signature Date											
1 1											
Ship's Stamp											
Privacy Statement: The Department of Transport and Main Roads is collecting the information on this form under the provisions of the Transport Operations (Marine Safety) Act 1994. The department may disclose this information to authorised departmental officers and officers of Queensland port authorities. Your personal											
Information will not be disclosed to a third party without your consent unless required or authorised to do so by law.											
TRB Forms Area Form F5202 CFD V01 Oct 2017											

Master / Agent

To be lodged to the VTS Centre at least 48 hours prior to ship's ETA pilotage area.

15.9.7 'Permission to Immobilise Main Engines' - Sample

Applications for approval by the Regional Harbour Master must be submitted via the QSHIPS programme.

Port of Brisbane



Immobilise Engines

MV QSHIPS II IMO: 9000111 ICANCU Ship Name: Call Sign: Maritime Safety Queensland (Brisbane) James Dean Agency: Agent: Fisherman Island No 10 (Berth) Location: Start: 05/12/2014 15:00 End: 05/12/2014 22:00 Permit Issued: 05/12/2014 Bv: System Administrator Permit#: 3749

Activity description:

- 1. The ship's crew is required to cal Brisbane VTS on VHF Channel 12 prior to the commencement of and following the completion of the engine(s) immobilisation.
- 2. The ship is to fly signal flags "R" over "Y"
- 3. The master of the ship complies with the berth operators requirements.
- 4. The ship's moorings are to be tended at all times.
- 5. The engine(s) are to be mobilised at least one (1) hour prior to the scheduled departure of the ship.
- 6. The engine(s) may only be immobilised during favourable weather conditions.
- 7. Vessel at anchorage, anchored position is to be monitored at all times.
- 8. Monitor the weather conditions.

Local weather forecasts and marine warnings can be obtained at any time from the following numbers:

SE Queensland Marine Forecast1300 360 428 Marine Warnings1300 360 427

15.9.8 'Notification to Conduct Lifeboat Drills' - Sample

This activity is subject to approval by ABF, with notification to the Regional Harbour Master via the **QSHIPS** programme.

Port of Brisbane



Lifeboat Drills

Ship Name: MV QSHIPS II IMO: 9000111 Call Sign: ICANCU Maritime Safety Queensland (Brisbane) Agency: Agent: James Dean Location: Fisherman Island No 10 (Berth) Start: 05/12/2014 14:00 End: 05/12/2014 15:00 Permit Issued: 05/12/2014 System Administrator Permit#: 3747 By: Activity description:

- 1. Maritime Safety Queensland acknowledges the request for this activity to occur however it is the responsibility of the ship's agent to obtain the necessary approvals from the Australian Customs Service before the activity can proceed.
- 2. Application to the Australian Customs Service must be lodged on FORM 44 which is available on their website via the below address:

http://www.customs.gov.au/site/page4288.asp

- 3. The ship is to contact Brisbane VTS on VHF channel 12 prior to the commencement of the drill and at the completion of the drill once the lifeboat is secured back on board.
- 4. Any conditions imposed by the Australian Customs Service are adhered to.

15.9.9 'Permission to hold Main Engine Trials' - Sample

Applications for approval by the Regional Harbour Master must be submitted via the QSHIPS programme.

Port of Brisbane



	1	Main I	Engine Trials		
Ship Name:	MV QSHIPS II	IMO:	9000111 ^{९७} ७	Call Sign:	ICANCU
Agency:	Maritime Safety Queensland (Brisbane)			Agent:	James Dean
Location:	Fisherman Island No 10 (Berth)	Start:	05/12/2014 10:00	End:	05/12/2014 12:00
Permit Issued:	05/12/2014	Ву:	System Administrator	Permit#:	3746
Activity descrip	tion:				

- 1. The ship's crew is required to cal Brisbane VTS on VHF Channel 12 prior to the commencement of and following the completion of the activity.
- 2. The ship is to fly signal flags "R" over "Y".
- 3. All cargo work is to cease.
- 4. All moorings are to be tended and manned.
- 5. The gangway is to be raised and manned.
- 6. The ship is to have personnel on the wharf to tend lines if required.
- 7. The activity is conducted in favourable weather conditions.
- 8. Ship/s berthed ahead/astern are to be advised of the activity.

15.9.10 'Notification to tank/crude oil wash' - Sample

This activity is subject to approval by PBPL, with notification to the Regional Harbour Master via the QSHIPS programme.

Port of Brisbane



		Ta	nk Wash		
Ship Name:	MV QSHIPS II	IMO:	9000111	Call Sign:	ICANCU
Agency:	Maritime Safety Queensland (Brisbane)			Agent:	James Dean
Location:	Caltex Fisherman Island (Berth)	Start:	04/12/2014 23:00	End:	05/12/2014 11:00
Permit Issued:	05/12/2014	Ву:	System Administrator	Permit#:	3745
Activity descrip	tion:				

Activity description:

Open Sea Valves: No

- 1. Maritime Safety Queensland acknowledges the request for this activity to occur however it is the responsibility of the ship's agent to obtain the necessary approvals from the Port of Brisbane Pty Ltd (PBPL) before it can proceed.
- 2. Australian Standard AS 3846-2005 (attention is drawn to paragraph 8.2.9) and ISGOTT requirements are complied with.
- 3. All requirements stated in the PBPL permit for the activity and the requirements of the berth operator are adhered to.
- 4. The ship's master is aware of and understands the safety requirements and procedures contained in the PBPL Port Notice with regard to the opening of sea valves. This may be accessed online via the web address below:

http://www.portbris.com.au/ShippingOperations/PortNotices

6. The ship is required to call Brisbane VTS on VHF Channel 12 prior to the commencement of and following the completion of the tank wash activity.

15.9.11 'Gateway Bridge Clearance form' - Sample

Applications for approval by the Regional Harbour Master must be submitted via the QSHIPS programme.

Port of Brisbane



Gateway Bridge Clearance permit

Ship Info MV QSHIPS II Name: 40248 DWT:

IMO: 9000111 LOA: 176

Call Sign: ICANCU BEAM:

31

Permit Info:

Issued: 11/12/2014 10:18 By: System Administrator #:

2905

General Info:

ETA: 25/12/2014 14:00

25/12/2014 10:00 ETD:

Managing Body: Maritime Safety Queensland (Brisbane)

James Dean Agent:

Address:

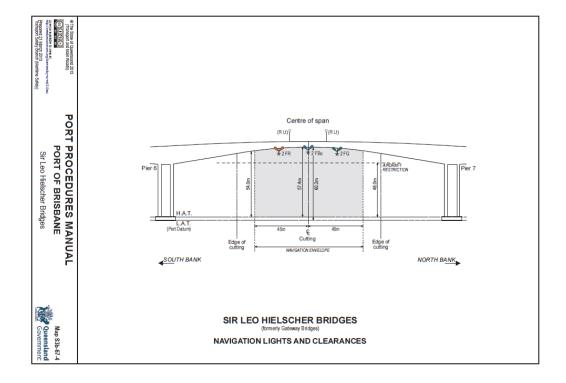
Movement description

Arrive to: Brisbane Cruise Terminal [at: Dec 25 2014 2:00PM]

The ship is permitted to transit the Gateway Bridge to and from "Brisbane Cruise Terminal" under the following conditions: Air draft not to exceed 48 metres.

It is the responsibility of the ship's agent to ensure the Master and marine pilot are aware of the conditions imposed in this

(Note - this permit is issued for the arrival movement but the prescribed conditions are also valid for the departure movement).



15.10 Navigation Data

15.10.1 Moreton Bay Distance Tables

EB	EB																
E5	8.40	E5															
E3	9.50	1.10	E3						More		•	stance		es			
E1	11.74	3.34	2.24	E1						Via I	East C	hanne	el				
M7	14.09	5.69	4.59	2.35	M7												
M5	15.29	6.89	5.79	3.55	1.20	M5											
M4	17.81	9.41	8.31	6.07	3.72	2.52	M4										
M1	20.11	11.71	10.61	8.37	6.02	4.82	2.30	M1									
NW12	22.46	14.06	12.96	10.72	8.37	7.17	4.65	2.35	NW12								
NW10	24.91	16.51	15.41	13.17	10.82	9.62	7.19	4.80	2.45	NW10							
NW3	27.41	19.01	17.91	15.67	13.32	12.12	9.60	7.30	4.95	2.50	NW3						
NW8	29.76	21.36	20.26	18.02	15.67	14.47	11.95	9.65	7.30	4.85	2.35	NW8					
NW6	32.21	23.81	22.71	20.47	18.12	16.92	14.40	12.10	9.75	7.30	48.0	2.45	NW6				
NW4	34.61	26.21	25.11	22.87	20.52	19.32	16.80	14.50	12.15	9.70	7.20	4.85	2.40	NW4			
NW2	36.32	27.92	26.82	24.58	22.23	21.03	18.51	16.21	13.86	11.41	8.91	6.56	4.11	1.71	NW2		
FWBY	38.52	30.12	29.02	26.78	24.43	23.23	20.71	18.41	16.06	13.61	11.11	8.76	6.31	3.91	2.20	FWBY	_
BG	44.52	35.12	35.02	32.78	32.78	29.23	26.71	24.41	22.06	19.61	17.11	14.76	12.31	9.91	8.20	6.00	BG

Via Main Channel

Via East Knoll ByPass

	EB							EB					
Rr/Ld	4.25	Rr/Ld					Rr/Ld	4.25	Rr/Ld				
M8	7.75	3.50	M8				М8	7.75	3.50	M8			
М9	11.36	7.10	3.60	М9			М9	11.05	6.80	3.30	М9		
М7	12.90	8.65	5.15	1.55	М7		EK2	12.15	7.90	4.40	1.10	EK2	
М5	14.10	9.85	6.35	2.75	1.20	М5	M5	13.25	9.00	5.50	2.20	1.10	М5

EB – BG via East Channel = 44.52 EB – BG via Main Channel = 43.33 EB – BG via East Knoll Bypass = 42.11

15.10.2 Moreton Bay steaming times

Leg	Distance	Speed in knots						
		8	10	12	14	16	18	20
PBG-FWBY	6	45	36	30	26	22	20	18
FWBY-NW2	2.2	17	13	11	9	8	7	6
NW2-NW4	1.71	13	10	9	7	6	6	5
NW4-NW6	2.4	18	14	12	10	9	8	7
NW6-NW8	2.45	18	15	12	10	9	8	7
NW8-NW3	2.35	18	14	12	10	9	8	7
NW3-NW10	2.50	19	15	13	11	9	8	8
NW10-NW12	2.45	18	15	12	11	9	8	7
NW Bypass	12.2	92	73	61	52	46	41	37
NW12-M1	2.35	18	14	12	10	9	8	7
M1–M4	2.30	17	14	12	10	9	8	7
Spitfire Bypass	4.37	33	26	22	19	16	15	13
M4-M5	2.52	19	15	13	11	9	8	8
M5-M7	1.20	9	7	6	5	5	4	4
M7-E1 (TLMA)	2.35	18	14	12	10	9	8	7
E1-E3	2.24	17	13	11	10	8	7	7
E3-E5	1.10	8	7	6	5	4	4	3
EAST E5-EB	8.82	66	53	44	38	33	29	26
M7–M9	1.55	11	9	8	7	6	5	5
M9–M8	3.60	27	22	18	15	14	12	11
M8-Rr/Ld	3.50	26	21	18	15	13	12	11
Rr/Ld–EB	4.40	33	26	22	19	17	15	13
M4-EK2	2.93	8	7	5	5	4	4	3
EK2-M9	1.10	8	7	5	5	4	4	3
Route 1 - PBG to EB via FWY (sth), NW, Spitfire, Main and East (Draft +10m)	47.44	5 ^h 55 ^m	4 ^h 44 ^m	3 ^h 57 ^m	3 ^h 23 ^m	2 ^h 57 ^m	2 ^h 38 ^m	2 ^h 22 ^m
Route 2 - PBG to EB via FWY(nth), NW, Spitfire, Main and East (Draft 8-10m)	46.06	5 ^h 45 ^m	4 ^h 36 ^m	3 ^h 50 ^m	3 ^h 17 ^m	2 ^h 52 ^m	2 ^h 33 ^m	2 ^h 18 ^m
Route 3 - PBG to EB via FWY(nth), NW Bypass, Spitfire Bypass and Main (Draft 5-8m)	43.25	5 ^h 24 ^m	4 ^h 19 ^m	3 ^h 36 ^m	3 ^h 05 ^m	2 ^h 42 ^m	2 ^h 24 ^m	2 ^h 10 ^m
Route 5 - PBG to EB via FWY(nth), NW Bypass, Spitfire Bypass and East Knoll Bypass (Draft <5m)	42.01	5 ^h 15 ^m	4 ^h 12 ^m	3 ^h 30 ^m	3 ^h 00 ^m	2 ^h 37 ^m	2 ^h 20 ^m	2 ^h 06 ^m

Table 28 - Moreton Bay steaming times

15.10.3 Pilotage – Brisbane River removal distances

The table below shows removal distances in nautical miles from Outer Bar Reach Entrance Beacons to berth/anchorage. Distances to BR^ anchorage to be taken from the Outer Bar Beacons to the actual anchorage position at the time

To calculate distances between berths, deduct smaller from larger figure.

Position	QSHIPS Code	Distance
Ship to Ship Transfer #2	STS2	5.30
Ship to Ship Transfer #1	STS1	4.80
Entrance Beacons	EB	0
Fisherman Island Pump Out	FIPO	2.84
Fishermans Island 12	FI12	3.25
Fishermans Island 11	FI11	3.43
Koopa Swing Basin	KSB	3.56
Fishermans Island 10	FI10	3.63
Fishermans Island 9	FI9	3.82
Fishermans Island 8	FI8	3.96
Fishermans Island 7	FI7	4.08
Fishermans Island 6	FI6	4.17
Fishermans Island 5	FI5	4.28
Fishermans Island 4	FI4	4.43
Fishermans Island 3	FI3	4.59
Fishermans Island 2	FI2	4.72
Fishermans Island 1	FI1	4.83
Fishermans Island Grain Terminal	FIGR	5.00
Brisbane Int Cruise Terminal	BICT	5.05
Fishermans Island Tanker	FITA	5.20
Port North Common User Berth 1	PNCUB1	5.30
Fisherman Island Swing Basin	FISB	5.30
Fishermans Island Coal	FIC	5.40
Fishermans Island GP Berth	FIGP	5.50
Brisbane Crew Change Berth	ВССВ	5.67
Whyte Island Tug Base	WITB	6.40
Ampol Products	AMPR	6.60
Cement Australia	CAB	7.20
Cement Australia Swing Basin	CSB	7.20

3 3				
Position	QSHIPS	Distance		
	Code			
Wagner	WAG	7.36		
BP Bunker Berth	BPBB	7.73		
BP Products	BPPR	7.90		
Hemmant Barge Landing	HBL	8.10		
Boral	BORL	8.20		
Viva Energy	VIVA	8.20		
Quantem Liquid Terminal	QLT	8.30		
Aquarium Boat Passage	ABP	8.36		
Brisbane Ship Lifts (The Yard)	BSL	8.38		
SIMS Metal	SIMS	8.50		
Incitec South	INCS	8.70		
Pinkenba 1	PNK1	8.80		
Pinkenba 2	PNK2	8.80		
Pinkenba Swing Basin	PSB	8.80		
Maritime Safety Queensland	MSQ	9.01		
Queensport	QNPT	9.85		
Pacific Tug Base	PTB	9.71		
Bhagwan Marine Base	BMB	9.83		
Holt Street	HOLT ST	9.85		
Rivergate Marina	RYM	10.08		
Queensland Bulk Terminal	QBT	10.63		
Raptis	RAP	10.99		
Austral (Brisbane Service Centre)	BSE	11.43		
Hamilton Swing Basin	HSB	11.8		
HMAS Moreton	BNWF	11.96		
Riverside (Newstead)	RTB	14.4		
Dockside Marine	DSM	16.6		
Town Reach	CITY	18.14		
SouthBank	CITY	19.06		

Table 29 - Brisbane River removal distances

15.10.4 Passage Planning

Passage through Moreton Bay, from the Pilot Boarding Ground to the Entrance Beacons (Beacons BC1 and BC2), can take a number of different routes.

The available depth of water various across numerous channels, with a summary provided below.

Channel	Design Depth	North Entry	South Entry	Remarks
Fairway	15.0m	Fairway Beacon 26°48.8501'S 153°10.7759'E	NW Front Lead 26°51.5515'S 153°09.1943'E	Port Approaches
North West Channel	15.0m	NW Front Lead 26°51.5515'S 153°09.1943'E	Beacon NW12 27°02.4445'S 153°15.3421'E	Primary Deepwater Route
North West Bypass Channel	9.2m	NW Front Lead 26°51.5515'S 153°09.1943'E	Beacon NW12 27°02.4445'S 153°15.3421'E	Secondary Route Bypass channel for shallow draft vessels. Infrequently surveyed
Spitfire Channel	15.0m	Beacon NW12 27°02.4445'S 153°15.3421'E	Beacon M1 27°03.3352'S 153°18.0588'E	Primary Deepwater Route
Main Channel (Primary)	15.0m	Beacon M1 27°03.3352'S 153°18.0588'E	Beacon M7 27°08.3052'S 153°21.0775'E	Primary Deepwater Route
Spitfire Bypass Channel	12.0m	Beacon S1 27°02.9606'S 153°15.8825'E	Beacon M3 27°05.5706'S 153°18.7952'E	Secondary Route Bypass channel for shallow draft vessels. Infrequently surveyed
Main Channel (Secondary)	10.0m	Beacon M9 27°10.0092'S 153°19.8135'E	Beacon M8 27°12.0342'S 153°16.6618'E	Secondary Route Bypass channel for shallow draft vessels. Infrequently surveyed
East Knoll Bypass Channel	6.0m	Beacon M4-M6 (AIS) 27°06.0608'S 153°19.3414'E	Beacon M9 27°10.0092'S 153°19.8135'E	Secondary Route Bypass channel for shallow draft vessels. Infrequently surveyed
North East Channel	3.0m	Buoy NE2 26°57.0500'S 153°20.2250'E	Beacon M7 27°08.3052'S 153°21.0775'E	Entry with local knowledge only
East Channel	15.0m	Beacon M7 27°08.3052'S 153°21.0775'E	Beacon E5 27°13.8940'S 153°20.1438'E	Primary Deepwater Route

Brisbane	14.7m	Beacon E5	Beacon BC1	Primary Deepwater Route
Roads		27°13.8940'S 153°20.1438'E	27°18.6195'S 153°12.5493'E	

Table 30 - Passage Planning

The actual depth of channels can differ due to changes in the environmental conditions. Channels are regularly surveyed, though at different frequencies, depending on use. VTS can be contacted for the most up to date information or the Port of Brisbane for specific survey data.

It is the responsibility of the Master to ensure that the vessel is safe navigationally, including the use of the appropriate channels for their vessels draft.

15.10.5 Port Evacuation Guideline

15.10.5.1 Aim

It is acknowledged that every event is different including the weather, types of vessels alongside, berths occupied, available resources and time available. The aim of this document is to provide operational level guidance in planning the evacuation and subsequent recovery of Port of Brisbane to the Regional Harbour Master and wider port stakeholder network.

The purpose of any port evacuation is to protect safety of life, critical infrastructure and environment. This in turn will support ongoing wider community recovery operations following the event.

15.10.5.2 **Limitations**

These guidelines are solely focused on large vessel operations which require external support, such as towage and pilotage to safely conduct departures. It does not cover the evacuation of smaller domestic commercial vessels or recreational craft for which the master remains responsible.

15.10.5.3 Supported and Supporting Documents

This document was developed based on the historical experience gained across floods that have affected Port of Brisbane, operational procedures for the safe movement of vessels and limitations of critical infrastructure where available. This includes ongoing use of simulation, including dedicated sessions throughout 2022.

In the wider context of port activities, users are encouraged to review the Extreme Weather Event (EWE) plan (https://www.msq.qld.gov.au/safety/preparing-for-severe-weather) and their own procedures for vessel/terminal operations.

15.10.5.4 General Considerations – Information Sources

A variety of information sources are always available, which should be read collectively to provide a fused picture of how the overall event is likely to unfold, acknowledging the there is always a degree of uncertainty.

15.10.5.5 Bureau of Meteorology (BoM)

Maritime Safety Queensland (MSQ) and the wider Department of Transport and Main Roads (DTMR) maintain several key connection points with the BoM.

Forecasts and models are available at www.bom.gov.au.

There is a dedicated BoM forecaster available to the Regional Harbour Master at the State Disaster Coordination Centre (SDCC) to assist for bespoke forecast.

15.10.5.6 SEQWater

Once the flood operations centre is activated by SEQWater they will publish twice daily, both the outflow model data from the dam if releases are underway as well as a SITREP. These reports are received by VTS and forwarded on to the management team for review.

15.10.5.7 Queensland Disaster Management Arrangements

Whilst MSQ maintains a close relationship across all three levels of the QDMA, information can be sourced through both the Brisbane DDMG and the SDCC.

15.10.5.8 MSQ Sensor Suite

MSQ has a variety of sensors that can be accessed real-time as well as inputting into the wider port weather forecast targeting port operation through the Non-linear Channel Optimisation Software (NCOS).

- VTS Weather
- NCOS

Appendix A below and the PPISM for Brisbane detail the location of key weather sensors across the port.

15.10.5.9 Port Flood Models

With SEAPORT OPX, who developed NCOS, there is a series of flood simulations based on inflow rates covering a 12-hour tidal cycle. Animations are available across the upper, mid and lower port areas for spring and neap tides.

Simulation identifier	Total inflows upstream of tidal limit [m³/s]	Total inflows into estuary [m³/s]
Sim 1	0	0
Sim 2	500	750
Sim 3	1,000	1,500
Sim 4	2,000	3,000
Sim 5	3,000	4,500
Sim 6	4,000	6,000
Sim 7	5,000	7,500

Figure 3 NCOS Modelled Flows

The corresponding files for each simulation at the HW+4hr have been uploaded to SmartShip to assist manoeuvre testing and development.

15.10.5.10 Historical Assimilation of Simulations

Sim 7 – equates to conditions on 28 February 2022 (Peak of 2022 flood)

Sim 5 – equates to conditions on 3 March 2022 (resumption of limited movements at FI 2022 flood)

Sim 3&4 - equate to conditions on 17 May (May 2022 rain event and dam releases)

15.10.5.11 General Considerations – Decision Points

When deciding to evacuate the Port of Brisbane, either partially or completely, the following lists some key planning considerations which when assessed against the forecast will develop key decision points.

Port evacuation

• River flow now and over the next 24hrs, specific to berths and channels

- Overall weather considerations refer PPM Section 15.8 for wind limits
- What ships are alongside where, berth direction, swing basins, windage, draft
- Mooring arrangements and capacity of wharf infrastructure*
- Available resources pilots, tugs, lines launches, mooring gangs
- Presence of debris
- Certainty of available survey data

Providing conditions and timeliness of forecasts allow, it is expected that the port evacuation will commence in preparation and prior to the onset of extreme weather.

Vessel arrivals are to cease (above / below Pelican Banks as appropriate) prior to, and in anticipation of commencing a port evacuation.

15.10.5.12 Notes on wharf infrastructure

- Wharf infrastructure is generally designed to meet AS1170 (2002) Region B Cat
 The newer wharves at Fisherman Island are built to withstand higher forces than some of the aging infrastructure located above Pelican Banks
- Designed maximum operational wind values (average) vary between 40 to 60 knots, combined with longitudinal current speeds of between 3 to 5 knots.
- These wharf design limits should not be relied upon as an evacuation threshold.
 Previous incidents demonstrate that a vessel's mooring system is more likely to fail before the wharf design limits are reached and the wharf design limits generally exceed the environmental limits for safe manoeuvring.

15.10.5.13 Current and wind Limitations

Flood current simulations have been conducted using a minimum of 25 knots of wind, from various unfavourable directions. Refer to PPM Section 15.8 for the standard operational wind limits.

Departures from AMPR have been simulated to the equivalent current in the NCOS model SIM 4 at HW + 4hrs

Departures from QBT have been simulated to the equivalent current in the NCOS model SIM 4 at HW + 4hrs

Departures from WAG have been simulated to the equivalent current in the NCOS model SIM 5 at HW + 4hrs

Swings at Pinkenba have been simulated to the equivalent current in the NCOS model SIM 5 at HW + 4hrs

Departures and Arrivals from FITA have been tested prior to the development of the NCOS models. Current limitations were developed in the simulator on a simplified current model equating to 3.5 knots, approximated to SIM 6 at HW + 4hrs

+300m Departures and swinging at Koopa have been tested prior to the development of the NCOS models. Current limitations were developed in the simulator on a simplified current model equating to 3.5 knots, approximated to SIM 7 at HW + 4hrs

15.10.5.14 Vessel Preparedness

As soon as practicable and if not already ordered as part of earlier preparations, each vessel being prepared for evacuation should be directed to prepare to get underway. This should include the following;

- · Cease cargo operations, especially if loading.
- Bridge to be crewed and VHF channel 12 monitored
- Bring Main Engine online ready for manoeuvring including the likely use of increased speed and rapid engine orders. All auxiliary engines available for maximum power generation.
- Bow and Stern Thrusters, if fitted, ready for immediate use.
- Mooring lines to remain in place, with additional lines run if required, actively monitored and prepared for departure. Anchors ready for letting go, or recovery if deployed to the seabed.
- All pre-departure system checks complete
- Any defects reported to VTS via VHF and agent.

15.10.5.15 Sequence of Events

15.10.5.16 Above Pelican Banks

- 1. Cease Arrivals, Vessels secure cargo operations and prepare for departure.
- 2. Vessels at AMPR should be cleared first. This will reduce the risk of berth surge and potentially breakaway from passing vessels, which can be expected to pass at higher speeds, above normal operational limitation of 6 knots through the water, to maintain steerage.
- 3. Vessels above the Gateway Bridge (QBT) should follow in the second tranche to protect critical infrastructure, including the Gateway Bridge.
- 4. Vessels at Pinkenba and Incitec South should be in the third tranche, especially if there are vessels further downstream that require to swing as Pinkenba is the widest of the river swing basins.
- a. As of January 2023, Incitec South is undergoing remediation. Removal of vessels from this berth should be considered in the second tranche unless an earlier opportunity presents.
- 5. Vessels at SIMS Metal downstream to Cement Australia would be in the final tranche.

15.10.5.17 Below Pelican Banks

- 1. Cease Arrivals, Vessels secure cargo operations and prepare for departure.
- Vessel head-up that can only swing at either Koopa or Fisherman Island Swing
 Basin in particular tankers from Ports North 1 and Fisherman Island Tanker terminal
 to support future recovery operations.
- 3. Vessel subject to tidal windows which may also have high windage
- 4. +300m Container Ships if head down.

5. The final tranche would be all other vessels head-up or head down. Vessels head-up have previously remained at these berths in flood conditions with minimal movement providing moorings are adequate.

15.10.5.18 On-water Support Activities

In the event that the decision is made to evacuate, the following on-water activities may be considered;

- Utilising a smaller tug or workboat, positioned upstream of the movement to monitor debris and provide a level of protection whilst critical manoeuvres are underway;
- Inspection of the river from the target vessel downstream using MSQ workboat to locate debris already downstream as well as assessing approximate surface (freshes) currents; and
- If possible, consider the use of the deployable current meter if timing and resources are available.

15.10.5.19 Manoeuvring Considerations

A number of simulations have been conducted at SmartShip to develop manoeuvring envelopes in collaboration with Poseidon Sea Pilots and Svitzer. Outlined below is both general information as well as targeted manoeuvre information.

Note: These are not a replacement for the pilotage service providers own manoeuvring instructions within the Pilotage Operations Safety Management System but focused on supporting whole of port activities.

15.10.5.20 General Considerations

Additional tugs, beyond those allocated in the PPM, will be required. Bow and stern thruster replacement should be avoided due to the risk of debris.

- In general, three tugs are for most manoeuvres, including all above Pelican Banks;
- Smaller vessels, less than 300m and head down at Fisherman Island may only require two tugs; and
- For +300m container ships below and tankers Pelican Banks, four tugs should be assigned if swinging.

When positioning tugs simulation has proved that it is advantageous for vessels berthed head down to have the third tug lifting upstream whilst engine revolutions are built up.

That once clear of the berth either or both the tugs forward and aft may need to come in and push to hold the vessel whilst headway is increased.

Pilot assignment is critical. Where possible, a level 1 pilot who has undertaken flood simulations (either development or emergency drill training) should be assigned regardless of vessel class. A second assisting pilot, licensed for the class of vessel, should also be assigned.

Additional lines launches and mooring gang members should be considered to aid in a quicker let go operation.

15.10.5.21 Specific Berth and Swing Basin Information

Further information to support specific manoeuvres, based on simulation at SmartShip, is held by MSQ and Poseidon Sea Pilots;

- AMPR Departure;
- QBT Departure;
- Pinkenba Swing;
- Wagner Departure;
- +300m Container Ship Swing; and
- FITA Departure and Arrival.

15.10.5.22 Port Recovery

Outlined below are a number of key considerations when re-opening the port. A stakeholder working group will be brought together to assimilate information related to supply chain, port resourcing, environmental and hydrographic conditions to support informed decision making for prolonged events. This will initially consist of representatives from PBPL, Towage Operator, Pilot Service Provider and MSQ.

Wider stakeholder communication will be maintained through VTS to terminals and agents. This should include current and forecasted operational limitations, recovery priorities and environmental conditions.

15.10.5.23 Reopening of the port

The Pilotage area will not be re-opened until the RHM is satisfied that all risks have been assessed, and the Pilotage area is safe for vessels to re-enter or exit.

Brisbane VTS centre will coordinate the safe movement of vessels following the opening of the Pilotage area in accordance with normal practice. Berths will be re-opened and operations resumed when structural assessments by asset owners (if required) have been completed and wind and sea conditions are within operational limits.

RHM, in conjunction with PBPL and pilotage provider will decide how and when port will reopen. VTS will provide details to stakeholders.

15.10.5.24 Operational Limitations

Outlined below are some general considerations for developing operational limitations when reopening the port. Limitations may need to be applied separately across the three port zones, above the Gateway Bridge, below the Gateway Bridge to Pelican Banks and below Pelican Banks.

Risk	Controls
Floating Debris	Daylight operations Deployment of overwatch vessel upstream of movement
	Nil Bow/Stern Thruster tug replacement
	Tug escort in river and Entrance Channel

Risk	Controls
Strong Ebb Current	HU berth arrivals Swing and departure timed for mid-flood tide Passing vessels alongside as wide as possible Additional Tugs Nil Bow/Stern Thruster tug replacement Tug escort in river and Entrance Channel
Effects of interaction	Increase separation between passing vessels Increase separation distance between berthed vessels Increase UKC allowance at berth Avoid adjacent berthing ahead on mid ebb tide Warning vessels at adjacent berths – engines and thruster at immediate readiness, mooring stations manned Push up tug for berthed vessel when adjacent berthing ahead Advise terminals to consider risks to cargo operations
Unusual Currents	Additional Tugs Daylight operations Nil Bow/Stern Thruster tug replacement
Siltation	Utilise SUKC rules instead of NCOS Increase UKC allowances in river Post Flood survey of berths, channels and swing basins
Potential submerged debris	Nil Bow/Stern Thruster tug replacement Post Flood survey of berths, channels and swing basins Tug escort in river and Entrance Channel
Reduced Swing or Channel Basin Dimensions	Reduce LOA limitations Increase UKC allowances in river