Harbour Master’s Directions

Sydney Harbour
&
Botany Bay

July 2016
The directions contained in this document are issued by the Harbour Master under section 88 of the Marine Safety Act 1998 no 121.

This publication is produced by the Harbour Master under section 13WA of the Maritime Services Act 1935 no 47.

This version is issued and effective from 20th July 2016 and replaces all other versions. Please be aware of the high number of amendments made to this version, major amendments are indicated by a line on the side of the paragraph.

This publication will be updated regularly. It is an online document and no printed copies will be made available.

The Port Authority of NSW website www.portauthoritynsw.com.au should be checked for the latest version.
Contents

Definitions

Part 1 – Information
1.1 Authority to issue directions
1.2 Authority to publish directions
1.3 Masters Responsibilities
1.4 Penalty Provisions
1.5 Pilot Boarding Place
1.6 Legislation

Part 2 – Harbour Masters Directions
2.1 Vessel Traffic Service
2.20 Directions to Arriving Vessels
2.30 Directions to vessels moving within the ports
2.60 Directions regarding berths in Sydney Harbour
2.70 Directions regarding berths in Botany Bay
2.80 Directions to vessels alongside, on buoys or at anchor
2.100 Directions regarding tugs
2.110 Directions to vessels departing the ports
Definitions
For the purpose of this publication the following interpretations apply

**Approved** means approved by the Harbour Master or a person holding a delegation from the Harbour Master under s86 of the Marine Safety Act 1998 no 121

**Area Alpha** is the traffic regulation area off the port of Sydney Harbour bounded by a line drawn in a direction 090°(T) from North Head; the entrance leads in line 294°(T), and encompassed by an arc of a circle radius four nautical miles centred on Hornby Light.

**Area Bravo** is the traffic regulation area off the port of Sydney Harbour bounded by the entrance leads in line 294°(T); a line drawn in a direction 130°(T) from Hornby Light, and encompassed by an arc of a circle radius four nautical miles centred on Hornby Light.

**Area Charlie** is the traffic regulation area off Botany Bay bounded by a line drawn in a direction 090°(T) from Cape Banks; the Entrance leads, in line 312°(T), and encompassed by an arc of a circle radius four nautical miles centred on Henry Head (Endeavour) Light.

**Area Delta** is the traffic regulation area off Botany Bay bounded by the Entrance leads, in line 312°(T), and a line drawn in a direction 180°(T) from Cape Solander and encompassed by an arc of a circle radius four nautical miles centred on Henry Head (Endeavour) Light.

**Authority** means the Port Authority of New South Wales

**Botany Bay port limits** means the waters of Botany Bay and all bays, rivers and their tributaries connected or leading to Botany Bay bounded by mean high water mark and by, as upstream boundaries, the eastern side of the Endeavour Bridge in Cooks River and the eastern side of the Captain Cook Bridge in Georges River together with that part of the Tasman Sea below mean high water mark enclosed by the arc of a circle of radius four nautical miles having as its centre the navigation light at Henry Head.

**Charter vessel** means a vessel to which the Marine Safety (Domestic Commercial Vessel) National Law Act 2012 applies normally engaged in tourist, passenger charter or related activities

**Commercial vessel** means a vessel to which the Marine Safety (Domestic Commercial Vessel) National Law Act 2012 applies normally engaged in non passenger carrying activities

**Exempted Vessel** is a vessel exempted from compulsory pilotage under s75 of the Marine Safety Act 1998 no 121. Exempted vessels are:

a) a vessel whose Master is the holder of a marine pilotage exemption certificate under the Act that applies to that port and vessel;

b) a vessel whose master is the holder of a certificate of local knowledge under the Act that applies to that port and vessel;

c) a recreational vessel;

d) a vessel of less than 30 metres in length;

e) a seaplane;

f) a vessel of any class declared by the regulations to be an exempt vessel;

g) a particular vessel declared to be an exempt vessel by order of the Minister given to the owner or Master of the vessel

**Ferry** means a vessel which seats more than 8 adult persons, and includes a vessel of any class prescribed by the regulations for the purposes of this definition

---

**July 2016 Amendment**
**Harbour Master** means a person appointed by the Minister to exercise the functions detailed in marine legislation. The general powers of the Harbour Master are described under *s88 of the Marine Safety Act 1998 no 121*.

**Head out clear ahead departure**
A departing vessel is not clear ahead when the distance to another vessel or obstruction ahead of the vessel is less than the twice the length overall (LOA) of that vessel or 400 metres whichever is greater.

**In radio communication** means to keep, at all times, effective communication by radio equipment with Sydney Ports VTS.

**Length** means Length Overall (LOA) which is the maximum length of a vessel's hull, measured parallel to the waterline.

**Marine Legislation** means any of the following Acts and the regulations and other instruments made under any of these Acts.
- *Maritime Services Act 1935*
- *Ports and Maritime Administration Act 1995*
- *Marine Safety Act 1998*
- *Marine Pollution Act 2012*

**Marine Pilot** means the person who has conduct of the vessel but who does not belong to the vessel. A marine pilot is licensed by the Harbour Master to provide pilotage services to vessels in Sydney Harbour and Botany Bay.

**Participating Vessels** means all vessels of LOA 30m or over and vessels towing or pushing a tow, where the combined length of the tug and tow is equal to or greater than 30m. These vessels are required to participate in the Vessel Traffic Service.

**Prohibited area** means an area of water in which movement of any vessel, except those exempted by direction of the Harbour Master, is strictly forbidden.

**Radio equipment** means a VHF marine band radio transceiver fitted with the required channels and maintained in efficient working condition.

**Recreational vessel** means a vessel other than a commercial vessel. It is used solely for recreation and which is not used or allowed or authorised to be used in the course of any business or in connection with any commercial transaction.

**Reporting position** means an imaginary line drawn between points nominated by the Harbour Master, to establish the position of a vessel.

**Seagoing Ship** means a vessel of more than 45.72 metres in length that is used or intended to be used to carry cargo or passengers for hire or reward and that normally operates on voyages between ports.

**Sydney Cove** means the whole of that portion of Sydney Harbour which lies to the south of a line drawn from the position of the fixed red beacon on Dawes Point to the position of the fixed red beacon on Bennelong Point.

July 2016 Amendment
**Sydney Harbour port limits** means the waters of Sydney Harbour and of all tidal bays, rivers and their tributaries connected or leading to Sydney Harbour bounded by mean high water mark together with that part of the Tasman Sea below mean high water mark enclosed by the arc of a circle of radius four nautical miles having as its centre the navigation light at Hornby Lighthouse.

P&MAR Sc1 6

**Sydney Ports VTS** means the vessel traffic service operated by the Authority for the ports of Sydney Harbour & Botany Bay

**Vessel Traffic Service** means a vessel traffic service as a navigational service implemented under a law of the Commonwealth or of a State or Territory and in accordance with guidelines for vessel traffic services adopted by the International Maritime Organization on 27 November 1997 to improve the safety and efficiency of vessel traffic and to protect the environment, as in force from time to time.

**VTS Centre** means the location from where Sydney Ports VTS is provided.

July 2016 Amendment
PART 1 – INFORMATION

1.1 Authority to issue Directions
1.2 Authority to publish Directions
1.3 Master’s Responsibilities
1.4 Penalty Provisions
1.5 Pilot Boarding Place
1.6 Legislation
Part 1. Information

1.1 Authority to issue Directions
1.1.1 The directions contained in this document are issued by the Harbour Master under section 88 of the *Marine Safety Act 1998 no 121*.

1.2 Authority to publish Directions
1.2.1 This publication is produced by the Harbour Master under section 13WA of the *Maritime Services Act 1935 no 47*.
1.2.2 This version was issued on 1st July 2016 and replaces all other versions.
1.2.3 This publication will be updated regularly. It is an online document and no printed copies will be made available.
1.2.3 The Authority website should be checked for the latest version.

1.3 Masters responsibilities
1.3.1 The Master of any vessel within the Ports of Sydney Harbour and Botany Bay shall:
   1. comply with these directions and any other direction which may be given by the Harbour Master
   2. comply with the requirements of Marine Legislation
   3. navigate in accordance with the *Marine Safety (General) Regulation 2009: Schedule 2 of the said regulations being the International Regulations for Preventing Collisions at Sea*

1.4 Penalty provisions
1.4.1 The Master of any vessel who refuses or neglects to comply with any direction which may be given by the Harbour Master or any person who holds a delegation from the Harbour Master, shall, under section 91 of the *Marine Safety Act 1998 no 121*, be liable for a maximum penalty of 100 units.

1.5 Pilot Boarding Place
1.5.1 The Pilot Boarding Place is 4.15 nautical miles east of Cape Solander (34º 01.02'S 151º 18.88'E).
1.5.2 Disembarkation is at the Pilot Boarding Place off Botany Bay
1.5.3 By prior arrangement, Pilots may board or disembark four nautical miles east of Hornby Light (33º 50.05'S 151º 21.68'E).

July 2016 Amendment
1.6 Legislation

1.6.1 Directions in this publication that repeat or are derived from legislation include a reference to that legislation as follows:

- Dangerous Goods General Regulations (DGR)
- Marine Safety Act (MSA)
- Marine Safety General Regulations (MSGR)
- Maritime Services Act (MSEA)
- Management of Waters and Waterside Lands Regulations (MWWLR)
- Ports and Maritime Administration Act (P&MA)
- Port and Maritime Administration Regulations (P&MR)

1.6.2 Dangerous Goods (General) Regulation 1999 – Part 11

1.6.3 Maritime Services Act 1935

1.6.4 Management of Waters and Waterside Lands Regulations

1.6.5 Marine Safety Act 1998

1.6.6 Marine Safety General Regulation 2009

1.6.7 Marine Pollution Act 2012

1.6.8 Ports and Maritime Administration Act 1995

1.6.9 Ports and Maritime Administration Regulation 2012

1.6.10 The Spit Bridge opening times are available from the RMS website at:

1.6.11 Masters of vessels intending to pass through the Spit Bridge must refer to the RMS publication at:

1.6.12 Guidelines on the operation of Superyachts are available on the RMS website at:

1.6.13 Full details of naval waters can be found at:


July 2016 Amendment
PART 2 – HARBOUR MASTER’S DIRECTIONS

Sydney Ports Vessel Traffic Service

2.1 Vessel Traffic Service
2.20 Arrival messages and Communications
2.21 Traffic Regulations
2.22 Pilot Ladder Requirements
2.23 Approaches to the ports
2.24 Tugs with Tows
2.25 Dangerous Goods – Entry into Port

Directions to arriving vessels

2.30 Pilotage
2.31 Reports of Disability or Fire
2.32 Bridge Manning – port transits
2.33 Vessels Rounding Bradleys Head
2.34 Prohibited areas for general navigation
2.35 Navigation marks, bridges and wharves to be kept clear
2.36 Cable and Pipeline areas
2.37 Clear Shipping Channel
2.38 Passage of Seagoing Ships and Naval Vessels
2.39 Passing dredgers, floating plant or construction sites
2.40 Tug handling of lighters or barges
2.41 Minimum permissible draft
2.42 Under Keel Clearance
2.43 Disturbance of the beds of the ports
2.44 Diving Operations
2.45 Communications
2.46 Passage of vessels through bridges
2.47 Mortlake to Putney vehicular ferry
2.48 Helicopter operations from vessels
2.49 Compass Swings
2.50 Super yacht guidelines
2.51 Bollard Pull Tests
2.52 Boarding Exercises
2.53 Maximum Draft
2.54 Operation of Remote Control Aircraft
2.55 Vessel movements within Sydney Cove

Directions regarding berths in Botany Bay

Tankers

2.70 Arrivals to Kurnell Berths
2.71 Departures from Kurnell Berths
2.72 Bulk Liquids Berths

2.74 Port Botany Crane Protocol

Directions to Vessels alongside, on buoys or at anchor

2.75 Directions to Vessels alongside, on buoys or at anchor

2.78 Vessels to be kept in manoeuvring condition

Bunkers

2.79 Work Agreements

Anchoring with boats or objects attached

Berthing of charter vessel commercial vessels or ferries

Working cargo onto lighters and barges

Lights to be exhibited on lighters or barges

Misshap to lighters or barges

Discharging of timber or floatable cargoes

Distances between vessels

Vessels at White Bay or Glebe Island berths

Storm Protocol – Botany Bay

Storm Protocol – Sydney Harbour

Tender operations

Directions regarding tug usage

Recommended tug usage

Minimum tug usage in average weather conditions

Clear ahead berths

Shift along straight wharf

Anchoring

Securing to Buoy

Passenger vessels – Sydney Harbour

Tug types, power ratings and size

Tug meeting positions

Directions to vessels departing from the ports

Clearance to depart

Deck Cargo

Traffic Regulations

2.100

2.101

2.102

2.103

2.104

2.105

2.106

2.107

2.108

2.109

2.110

2.111

2.112

2.113

2.114

2.115

2.116

2.117

2.118

2.119

2.120

2.121

2.122

2.123

2.124

2.125

2.126

2.127

2.128

2.129
Part 2. Harbour Master’s Directions

2.1 Vessel Traffic Service

2.1.1 Sydney Ports VTS provides a continuous service to monitor the movement of participating vessels within the VTS areas of Sydney Harbour and Botany Bay in order to improve the safe and efficient movement of such vessels and to protect the environment and infrastructure of the ports from possible adverse effects of such traffic.

2.1.2 Sydney Ports VTS provides navigational advice based on information from radar, closed circuit television, a ship’s own automatic identification system (AIS) and VHF radio, and records this information as well as all communications.

2.1.3 Sydney Ports VTS is operated under the authority of the Harbour Master under section 88 of the Marine Safety Act 1998 to the standards set by the International Association of Lighthouse Authorities (IALA) for:
- VTS equipment
- VTS equipment availability
- Training and certification of VTS officers and supervisors
- Procedures for providing a VTS

2.1.4 VTS Areas

- **Sydney Harbour**
  - From Port limits to Longnose Point excluding Middle Harbour west of Dobroyd Head

- **Botany Bay**
  - From Port Limits to a line from Bonna Point to the Georges River Channel Pile

2.1.5 Participating Vessels

The Harbour Master under section 88 of the Marine Safety Act 1998 directs that all vessels of LOA 30m or over are required to participate in the Vessel Traffic Service. Vessels towing or pushing a tow, where the combined length of the tug and tow is equal to or greater than 30m are required to participate in the Vessel Traffic Service.

2.1.6 Communications

| Call Sign: | Sydney Ports VTS |
| Telephone: | 02 9296 4003 |
| Email:     | vts@portauthorynsw.com.au |
| Sydney Harbour: | VHF Channel 13 |
| Botany Bay: | VHF Channel 12 |

2.1.7 Type of Service

Traffic Organisation Service requiring participating vessels to:
- Seek clearance to enter, leave or move within the VTS areas
- Report when passing reporting points

| July 2016 Amendment |
2.1.8 Sydney Ports VTS will:
- Monitor the movement of participating vessels
- Provide vessel movement updates & information
- Direct vessels as required
- Provide an efficient communications base during any emergency situation which may develop in these ports.
- Advise mariners on the initiation, continuation and termination of activities within the port areas which may affect the safe passage of vessels.
- Provide navigational information and warnings to mariners
- Notify the appropriate organisations about vessels known or believed to be in distress and in need of assistance

2.1.9 All vessels that are required to participate in the Vessel Traffic Service shall, just prior to entering a VTS area, seek clearance from Sydney Ports VTS, to enter the area.

2.1.10 When seeking clearance to move within or enter a VTS area, masters or pilots of participating vessels are to:
- Advise position
- Advise drafts, displacement (seagoing ships only)
- Advise destination or intentions
- Advise number of persons onboard (recreational vessels only)

2.1.11 Reporting positions – Sydney Harbour
Unless fitted with AIS, a participating vessel entering, departing or moving within Sydney Harbour, shall report to Sydney Ports VTS when passing any of the following reporting position:
- Line Zulu – a line extending between Outer North Head Light and Macquarie Light.
- Sea buoy – a line extending from the Middle Head buoy through the junction buoy to the Lady Bay buoy
- Bradleys Head – a line extending from Bradleys Head Light Tower south-easterly through the safe water mark and then south-east to Point Piper
- Fort Denison – a line extending from Kurraba Point through Fort Denison to Mrs. Macquarie’s Point
- Longnose Point – a line extending between Manns Point and Longnose Point

2.1.12 Reporting Positions – Botany Bay
Unless fitted with AIS, a participating vessel entering, departing or moving within Botany Bay, shall report to Sydney Ports VTS when passing any of the following reporting position:
- Henry Head – a line extending from the Endeavour Lighthouse on Henry Head south-westwards to Inscription Point Light.
- Molineux Point – a line extending southwards from Molineux Point to the No. 2 Beacon in the entrance channel.

2.1.13 When making position reports a vessel shall add the descriptive term ‘inward’ or ‘outward’, to confirm the direction of passage.

2.1.14 All other vessels, during the period of a harbour passage shall remain in radio communication, being ready to give a position report or inform Sydney Ports VTS of the Master’s intentions and to take such direction or advice as the Duty VTS Manager may deem necessary.

2.1.15 Area Speed Limits
Participating vessels, except:
- ferries on regular passenger services or being brought into position for the provision of those services,
- a vessel operated by a police officer, or an officer or member of staff of the Maritime Authority, acting in the exercise of his or her functions.
are restricted to the speed limits listed in 2.1.16 and 2.1.17:
2.1.16 In Sydney – refer to regulations 23 to 26A in Marine Safety (General) Regulation 2009

2.1.17 In Port Botany – the area north of Molineux Point – eight (8) knots

2.1.18 No participating vessel, shall be secured to any wharf, or buoy controlled by the Authority, unless the owner or Master has obtained the permission of the Authority and such vessel is to be moored in an appropriate manner

2.1.19 All participating vessels except ferries and charter vessels on passenger carrying services shall seek clearance to move from Sydney Ports VTS 15 minutes before being removed from a berth, buoy or anchorage within the VTS areas.

2.1.20 Participating ferries & charter vessels on passenger carrying services, if not running to scheduled time, shall seek clearance to move from Sydney Ports VTS just prior to moving from their berth, King Street Wharf or Circular Quay

2.1.21 Sydney Ports VTS broadcasts information on:
- navigational warnings and weather forecast
- seagoing ship movements expected for the next two hours
- current weather, wave height and tidal conditions
  - at approximately 0105, 0305, 0505, 0705, 0905, 1105, 1305, 1505, 1705, 1905, 2105, 2305 for Sydney Harbour on VHF Channel 13 and
  - at approximately 0005, 0205, 0405, 0605, 0805, 1005, 1205, 1405, 1605, 1805, 2005, 2205 for Botany Bay on VHF Channel 12

2.1.22 Sydney Ports VTS, as Coast Radio Sydney, broadcasts navigational and weather warnings on VHF Channel 67; and monitors VHF 16 for distress urgency and safety messages. Coast Radio Sydney is part of the State and Territory Coast Radio Network servicing the recreational boating community.

2.1.23 Responsibility for all search and rescue operations in New South Wales is directed by the New South Wales Police Force.

2.1.24 Sydney Ports VTS is, at all times, under the control of a Duty VTS Manager, who is responsible for the management of vessel movements within the VTS areas.

2.1.25 The Duty VTS Manager is delegated by the Harbour Master to exercise the powers, authorities, functions and duties of the Harbour Master under sections 88, 89, 91 of the Marine Safety Act 1998, whilst on duty. Under this delegation the Duty VTS Manager may direct the navigation of vessels in Sydney Harbour and Botany Bay. In this capacity the Duty VTS Manager authorises:
- traffic clearance /denial of entry or departure of vessels, and vessel movements to anchorages or moorings, within the VTS areas;
- passing relevant information to vessels moving within the ports to assist with the safe navigation of such vessels;
- warnings to vessels within the ports when they may affect the security of such vessels;

2.1.26 When expressing time, any vessel communicating with Sydney Ports VTS shall use 24 hour notation in Australian Eastern Standard Time (UTC + 10); or Australian Eastern Daylight Saving Time (UTC + 11) at the appropriate times of the year.

2.1.27 Sydney Ports VTS uses IMO Standard Marine Communications Phrases, as contained in IMO Resolution A918 (22).
2.1.28 The following procedural terms shall be used by pilots, and masters of participating vessels in the appropriate circumstances:
- leaving any berth or anchorage – ‘departing/departed’;
- reaching a reporting point – ‘passing/passed’;
- coming to anchor – ‘anchored’;
- when fast to a berth or buoy – ‘arrived’.
In giving assent to a request from a vessel, Sydney Ports VTS shall use the word ‘clearance’, and where permission for such a request is refused shall use the word ‘hold’.

2.1.29 Where any vessel required to participate in the Vessel Traffic Service and operating within Sydney Harbour or Botany Bay has grounded, or been involved in a collision with another vessel, navigation mark, wharf, or structure, or has been in serious danger of grounding, or in a close-quarters situation with another vessel, the Master shall immediately report such incident to Sydney Ports VTS.

2.1.30 In complying with the above direction the Master of every vessel involved in such reported collision or incident shall:
- obey any direction(s) from Sydney Ports VTS
- if required, make themselves available to furnish a verbal report to the Duty Harbour Master;
- within 24 hours, notify the Duty Harbour Master (Harbormaster@portauthoritynsw.com.au) in writing of the circumstances of the collision or incident by providing a copy of the Incident Report required by RMS or AMSA

2.1.31 Note: Pilots, tug Masters or other persons if involved or who witnessed the incident shall also comply with the above requirements.

2.1.32 Reports to Sydney Ports VTS
Vessels are required to report to Sydney Ports VTS in the following circumstances:
- notification of ETA;
- when five miles from the Pilot Boarding Place;
- when requiring clearance to enter;
- when passing a reporting position;
- when anchored or arrived;
- if disabled, leaking, on fire or has been on fire;
- if involved in collision, grounding, close quarters situation;
- notification of removal;
- notification of departure;
- when requesting clearance to depart;
- when requesting clearance to proceed;
- when commencing and completing bunker operations;
- when commencing and completing work that requires a work agreement;
- when port safety or the environment may be compromised or the Master considers a report is warranted

2.1.33 Masters Responsibilities
Masters and persons in charge should note that they are not relieved from responsibility for the conduct and navigation of the vessel merely because the vessel is subject to vessel traffic management arrangements.

Despite any law of the State, the owner or master of a vessel navigating in circumstances where vessel traffic management arrangements are required to be complied with under such a law is answerable for any loss or damage caused by the vessel, or by a fault of the navigation of the vessel, in the same manner as the master or owner would be if those vessel traffic management arrangements were not required to be complied with.
Directions to Arriving Vessels

2.20 Arrival messages and communications

2.20.1 Masters are advised that Sydney Ports VTS is responsible for the VTS areas in the Ports of Sydney Harbour and Botany Bay.

2.20.2 Masters should confirm the local time with their agent prior to advising the ETA. Due to daylight saving, local time in Sydney can differ from Brisbane during the summer months.

2.20.3 Vessels under the conduct of a pilot, and exempted vessels are required to briefly test their thrusters (if fitted) and engines astern before entering Port limits.

2.20.4 The Duty Harbour Master will accept testing of the ships main engines astern within 24 hours of their entry provided such testing can be supported by a main engine data logger readout.

2.20.5 Seagoing ships approaching Sydney Harbour or Botany Bay shall provide 4 hours notice of ETA by email to: VTS@portauthoritynsw.com.au

The message must include:
- Estimated Time of Arrival at pilot boarding place
- Drafts Forward and Aft for arrival
- Displacement on arrival
- Confirmation that bow thrusters, if fitted is 100% operational
- Information on any defects
- Length Over All

2.20.6 On receipt VTS will advise pilot boarding time and pilot ladder information by return email as follows:

Sir,
Your 4 hour notice of ETA has been received.
Your pilot boarding time is ..........Local Time
Local Time is UTC + 10/11 hours
You are requested to call Sydney Ports VTS on VHF Channel 12 when 2 hours from the pilot Boarding Area

Arrival Information

1) Engine test
- Engines are to be tested astern before the pilot boards if they have not been tested in the last 24 hours

2) Pilot ladder
- Pilot ladders are to be rigged in strict accordance with Solas Regulation V/23
- Pilot ladder to be rigged on the lee side to the swell when approaching the pilot boarding place, 2.5 / 3.0 metres above the water.
- Two proper manropes without knots or monkeys fists must be provided.
- No tripping lines are to be attached to the pilot ladder below the lowest spreader.
- Where the freeboard of the vessel exceeds nine metres and the use of a combined accommodation ladder and pilot ladder is necessary, the lower platform of the accommodation ladder should be about six metres above the waterline and, together with the pilot ladder and manropes, be secured to the ship’s side.
- Pilot hoists are not acceptable as an alternative to a combination ladder
- Failure to comply may delay pilot boarding

July 2016 Amendment
3) **Anchoring**
- There are no recommended safe anchorages off the coast for vessels waiting to enter Sydney Harbour or Botany Bay.
- Anchoring is at the discretion of the Master, however it is highly recommended that vessels remain at least 3 nautical miles from the coastline and outside port limits.

2.20.7 Seagoing ships shall then confirm their position to Sydney Ports VTS when two (2) hours and one (1) hour from the Pilot Boarding Place.

2.20.8 Seagoing ships shall report to Sydney Ports VTS on VHF Channel 12 when they are five (5) nautical miles from the Pilot Boarding Place.

Seagoing ships directed to use the Sydney Pilot Boarding Place (refer section 1.5.3) shall report to Sydney Ports VTS on VHF Channel 13 when they are five (5) miles from the Sydney Pilot Boarding Place

2.20.9 Sydney Ports VTS provides navigational, weather, tidal and shipping movement information at approximately five minutes past each hour. Refer to Section 2.1.21 Masters are to monitor these broadcasts while approaching the port to familiarise themselves with local traffic movements.

2.20.10 The pilot, prior to boarding, will initially establish radio contact on VHF Channel 12 or 13 with the vessel, then use Channel 6 as the working channel for boarding instructions and for the boarding operation.

2.20.11 The pilot (or in the case of an exempted vessel, the Master) shall obtain from Sydney Ports VTS, clearance to enter port, a communication channel for tugs and receive any specific information regarding port entry.

2.21 **Traffic regulations**

2.21.1 Participating vessels entering Sydney Harbour should keep north of the main entrance leads, within Area Alpha, well clear of the separation zone delineated by the leads and the outward traffic Area Bravo.

2.21.2 Participating vessels entering Botany Bay should keep to the north of the entrance, in Area Charlie, remaining well clear of the separation zone delineated by the leads and the outward traffic Area Delta.

2.22 **Pilot ladder requirements**

2.22.1 Pilot ladders are to be rigged in strict accordance with Solas Regulation V/23.

2.22.2 Pilot ladder is to be rigged on the lee side to the swell when approaching the pilot boarding place, 2.5 to 3.0 metres above the water. Sydney Ports VTS will advise required height above the waterline when responding to the 4 hours notice of ETA message

2.22.3 To avoid possible delays, Masters should take note of the following requirements:
- Two proper manropes without knots or monkeys fists must be provided at all times.
- No tripping lines are to be attached to the pilot ladder below the lowest spreader.
- Where the freeboard of the vessel exceeds nine metres and the use of a combined accommodation ladder and pilot ladder is necessary, the lower platform of the accommodation ladder should be about six metres above the waterline and, together with the pilot ladder and manropes, be secured to the ship’s side.

2.22.4 Pilot hoists are not acceptable as an alternative to a combination ladder.

July 2016 Amendment
2.23 Approaches to the ports

2.23.1 A vessel manoeuvring to embark a pilot for Sydney Harbour or Botany Bay shall maintain a speed of between seven (7) and nine (9) knots and steer a course which puts the prevailing swell on the opposite quarter to the side on which the pilot ladder is rigged.

2.23.2 The Master of an arriving vessel shall ensure sufficient sea-room is maintained to allow manoeuvres to provide a lee for the pilot cutter. Because of the frequent presence of swell, and its changing pattern close to the entrances, no arriving vessel should proceed inshore of the Pilot Boarding Place without the approval of the pilot or Sydney Ports VTS.

2.24 Tugs with tows

2.24.1 Due to local conditions at the pilot boarding place and the inability of tugs to rig a pilot ladder in accordance with IMO requirements, tugs with tows will only be boarded during daylight hours.

2.24.2 Tugs without tows will be assessed on a case by case basis.

2.25 Dangerous Goods – entry into Port


2.25.2 At least 24 hours prior to a vessel’s proposed time of entry or the proposed time of delivery of goods to a berth, the Master, his agent or their representative must lodge details of dangerous goods being carried or intended for carriage on the vessel with the Authority.

2.25.3 Applications for approval to enter port and handle dangerous goods are made via ShIPS.

(DGR 11/263)

(DGR 11/264)

July 2016 Amendment
Directions to vessels moving within the ports

2.30 Pilotage
2.30.1 Under Part 6 of the Marine Safety Act 1998 no 121, pilotage is compulsory for all vessels, unless exempted under section 75 of the Act.

2.30.2 During daylight hours, a vessel under the conduct of a pilot is to fly the International Code Flag “H” where it can best be seen.

2.30.3 During daylight hours a vessel under the conduct of a person who holds a current marine pilotage exemption certificate will fly a white flag 600mm square, where it can best be seen.

2.30.4 The following vessels must be under the conduct of a person who holds a current Marine Pilotage Licence, Marine Pilotage Exemption Certificate or a Certificate of Local Knowledge

- A vessel, except a recreational vessel, 30 metres or more in length
- A vessel pushing where the combined length of the vessel pushing and the vessel being pushed is 30 metres or more in length
- A vessel towing where the combined length of the vessel towing and the vessel being towed is 30 metres or more in length
- A vessel towing alongside where the distance from the bow of the vessel being towed to the stern of the towing vessel is 30 metres or more

2.31 Reports of disability or fire
2.31.1 The Master of any vessel shall forthwith advise Sydney Ports VTS if any or a combination of any of the following circumstances exist:

- such vessel is, or is believed to be, in a disabled or leaking condition;
- any part of such vessel or its cargo is on fire;
- in the case of a vessel entering the port, if a fire has occurred in such vessel during the passage to Sydney Harbour or Botany Bay (MWWLR 78)

2.32 Bridge manning – port transits
2.32.1 Prior to port transits, seagoing ships, unless exempted from compulsory pilotage, shall, in addition to other requirements, undertake a Master/pilot information exchange (MPX).

2.32.2 Whilst undertaking port transits, the Master of a seagoing ship shall ensure that:

- appropriate and efficient Bridge Resource Management is practiced;
- the Master and at least one deck officer is in attendance on the bridge at all times;
- the vessel is steered by a helmsman

2.33 Vessels rounding Bradleys Head
2.33.1 The buoy in position bearing 143º(T), 350 metres from Bradleys Head Lighthouse is a safe water mark.

2.33.2 The positioning of this buoy does not relieve masters of the obligation under the International Regulations for the Prevention of Collisions at Sea to keep to starboard side of the channel.

2.33.3 All participating vessels navigating in the vicinity of this safe water mark, shall pass so as to keep the buoy on their port side
2.34 Prohibited areas for general navigation

2.34.1 Sydney Harbour
- The waters of Sydney Cove including Campbell’s Cove.
- Waters within 50 metres from a tanker secured at Gore Bay, White Bay or Glebe Island.
- 60 metres clearance from any security regulated passenger ship, berthed at the Overseas Passenger Terminal, Circular Quay or White Bay Cruise Terminal, White Bay 5
- 100 metres from the wharf face of the terminal in Gore Cove at any time (MSGR 21(2)(b))

2.34.2 Botany Bay
- The waters of the embayment between the airport runways.
- The waters east of a line
  from the inner end of Molineux Point to No. 5 Beacon to No. 12 Buoy to the starboard hand boat channel buoy to the starboard hand boat channel buoy to the starboard hand boat channel beacon to the boat ramp
- Waters within 50 metres of any tanker secured at No.1, 2 and 3 Kurnell.
- 100 metres from the wharf face of the jetty at Kurnell at any time (MSGR 21(2)(b))
2.34.3 Vessels considered to be authorised to enter the areas detailed in section 2.34.1 and 2.34.2 are Port Authority vessels, those on scheduled/designated ferry routes, seagoing ships and their attending vessels and vessels assigned permanent moorings within the prohibited area.

2.34.4 Pilot vessels, tugs and lines boats shall have access to provide contracted services in berthing or unberthing operations.

2.34.5 Authorised vessels navigating within these waters shall do so only for the specific purpose granted by the authorisation.

2.35 **Navigation marks, bridges and wharves to be left clear**

2.35.1 No vessel shall be secured to:
- any buoy, navigation aid, or any part of a bridge;
- any floating plant.

2.35.2 No vessel shall anchor within:
- 100 metres from the following bridges: Glebe Island, Anzac, Iron Cove, Gladesville, Ryde, Silverwater, Fig Tree, Pyrmont or The Spit;
- 100 metres from any wharf operated by the Authority.

2.36 **Cable and pipeline areas**

2.36.1 No vessel shall anchor or drop anchor within any area of Sydney Harbour and Botany Bay listed in Appendix 1(A).

2.36.2 Numerous cables carrying telecommunications or power, pipelines for water, sewage or oil, are laid across the seabed.

2.36.3 No vessel shall anchor or drop anchor within 200m of the submarine cables or pipelines listed in Appendix 1(B).

2.37 **Clear Shipping Channel**

2.37.1 When a pilot or exempt Master considers that a vessel’s size and or manoeuvring characteristics are such that it cannot pass another vessel in the shipping channel safely, he shall request a ‘Clear Shipping Channel’.

2.37.2 A clear channel will be provided by Sydney Ports VTS when requested by a pilot or exempt master.

2.37.3 Types of vessels that may require a ‘Clear Shipping Channel’ include but are not limited to:
- large tankers in Sydney Harbour
- tankers with draft greater than ten metres in Sydney Harbour
- container ships with LOA greater than 261m and draft 12m or more in Botany Bay
- tankers in Botany Bay
- large vehicle carriers or passenger ships
- aircraft carriers
- disabled vessels

July 2016 Amendment
2.38  Passage of Seagoing Ships and Naval Vessels
2.38.1 Vessels are not to impede the passage of seagoing ships, vessels under the conduct of a pilot or exempt master or naval vessels inside the shipping channel or fairway.

2.38.2 Seagoing ships of LOA 100m or greater are escorted by Authority vessels, displaying flashing red and blue lights.

2.38.3 Vessels are not to pass between the escort and the vessel being escorted.

2.38.4 Vessels are to keep at least 30m from the seagoing ship being escorted

2.38.5 Due to her restricted manoeuvring capabilities, the sailing vessel “James Craig” is considered to be a seagoing ship. She will indicate this status by flying a white flag 600mm square, where it can best be seen.

2.39  Passing dredgers, floating plant or construction sites
2.39.1 A vessel shall not be navigated on any navigable waters at a speed in excess of four knots within 100 metres from:
   • any dredger or floating plant; or
   • any construction or any works in progress.

2.39.2 This requirement does not apply to and in respect of a seagoing ship or commercial vessel if it is shown that that ship could not with safety comply with the requirement and that its course and speed were reasonable in the circumstances.

2.40  Tug handling of lighters or barges
2.40.1 A tug working a lighter or barge in Sydney Harbour, in any position west of Bradleys Head, unless exempted by the Duty Harbour Master shall be lashed alongside such lighter or barge.

2.40.2 No tug shall tow or push more than two lighters or barges alongside, unless exempted by the Duty Harbour Master.
   (MWWLR 86)

2.40.3 No tug shall tow timber or floatable materials within the port without the permission of the Duty Harbour Master and in such case:
   • the timber or floatable material shall not be more than 60 metres in length overall nor more than 15 metres in width;
   • if the material consists of more than one item, such cargo shall be secured into a single raft and towed as one unit; and
   • unless exempted by the Duty Harbour Master the tow shall be on a line not more than 15 metres in length
   (MWWLR 87)

2.41  Minimum permissible draft
   • Less than 100,000 tonnes displacement
     Forward draft 2 per cent of LOA – Aft draft 3 per cent of LOA;
   • Greater than 100,000 tonnes displacement
     Forward draft 3 per cent of LOA – Aft draft 4 per cent of LOA.

July 2016 Amendment
2.42 Under Keel Clearance (UKC)

2.42.1 Except as detailed in sections 2.42.2 and 2.42.3 all seagoing ships navigating within port limits are required to maintain the following UKC unless approved.

2.42.1.1 Botany Bay
- 10% of the vessel’s deepest draft for the harbour transit to the seaward limit of Brotherson Dock, Hayes Dock or the berth box for BLB and Kurnell Berths.
- 0.5 metres in Brotherson Dock or Hayes Dock
- 0.5 metres to sail or berth in the berth box and at all times whilst alongside.

2.42.1.2 Sydney Harbour
- 10% of the vessel’s deepest draft for the harbour transit to the seaward limit of the berth box
- 0.5 metres to sail or berth in the berth box and at all times whilst alongside

2.42.2 For Passage Planning tankers in Sydney Harbour are required to use 10% of deepest draft + 0.2 metres UKC. This can be reduced to 10% of deepest draft if the tide does not make to the predicted level.

2.42.3 Tankers berthed at the Kurnell berths are required to maintain 1.0m UKC at all times

2.43 Disturbance of the beds of the ports

2.43.1 No vessel fitted with drags, grapples or any other apparatus, is to be used to lift or lower any object or material from or to the bed of Sydney Harbour or Botany Bay, or otherwise disturb the beds of such ports in any way, except with the written permission of the Harbour Master and in strict accordance with the terms of such permission.

2.44 Diving operations

2.44.1 No diving operations are to be undertaken within 100 metres of any fairway or channel except with the permission of the Duty Harbour Master.

2.44.2 Such diving operations are to be accompanied by a vessel, showing the appropriate flag signal.

2.44.3 This vessel is required to be in radio communication with Sydney Ports VTS throughout the operation, and provide Sydney Ports VTS with a mobile phone number as an alternate means of communication

2.44.4 Sydney Ports VTS is to be notified of the following:
- on arrival at the site and the commencement of the diving operations;
- on completion of the operation and when exiting the area.

2.44.5 Recreational diving on the wreck of the Kurrajong requires compliance with the following additional conditions:
- No diving during daylight hours due to normal harbour traffic.
- No seagoing ship movements in Sydney within 60 minutes after dive commences
- Ferry services have ceased
- Dive group to contact Sydney Ports VTS some 12 hours before the proposed dive to confirm diving window is available.
- Dive group to contact Sydney Ports VTS before proceeding to site to confirm dive window is still available.

July 2016 Amendment
2.45 Communications
2.45.1 All vessels at anchor or secured to a buoy, shall at all times maintain a listening watch on VHF channel 13 in Sydney Harbour or VHF Channel 12 in Botany Bay.

2.45.2 The Master of a vessel fitted with a VHF radio must ensure that:
   • VHF Channel 13 is continuously monitored when navigating within Sydney Harbour
   • VHF Channel 12 is continuously monitored when navigating within Botany Bay for transmissions by Sydney Ports VTS.

2.46 Passage of vessels through bridges
2.46.1 Vessels passing under the Harbour Bridge must maintain a minimum of 2 metres clearance under the bridge or 1 metre clearance under the maintenance gantries.

2.46.2 A vessel must not be navigated through the channel in the opened span of a bridge unless such vessel is propelled by its own power, or towed or pushed by a power driven vessel.

2.46.3 Masters of vessels intending to pass through the Spit Bridge must refer to the RMS publication at: www.maritime.nsw.gov.au/docs/publications/trafficseparation.pdf

2.46.4 A vessel seeking passage through the Spit Bridge should arrive in the vicinity about 10 minutes prior to the scheduled opening time, or specially arranged opening, and manoeuvre close to the structure in such a way that the operator cannot mistake the intention.

2.46.5 Traffic flow is controlled by Marine Traffic Lights. Vessels facing a red light, shall keep clear of the channel through the bridge and not hamper the passage of any vessel proceeding through the opened span.

2.46.6 The Glebe Island Bridge shall remain in the open position for the passage of a vessel unless exempted by the Harbour Master and supported by a Notice to Mariners to that effect.

2.46.7 Mariners should approach the Bridge with extreme caution when intending to navigate through the bridge structure.

2.46.8 The eastern side of the bridge is open to traffic. The orange flashing lights indicate a large vessel is approaching the bridge. When they are operating all traffic approaching the bridge is to wait well clear of the channel until the large vessel has passed.

2.46.9 The western channel is closed to all seagoing, commercial and recreational traffic over 15 metres in length.

2.47 Mortlake to Putney vehicular ferry
2.47.1 Vessels navigating in the Parramatta River, in the vicinity of the Mortlake to Putney vehicular ferry, must exercise great caution.

2.47.2 Between sunset and sunrise the ferry shall display, at each end of the vessel, an all-round red light and when under way above such light at the fore-end of the vessel, to indicate the direction of travel, an all-round green light. Such lights shall be visible for a range of at least one kilometre.

2.47.3 A passenger ferry, a vessel of more than 20 metres in length or a tug pushing a barge, wishing to cross the wires of the Mortlake to Putney ferry when it is at a landing on either side of the river shall, about 500 metres distant from the ferry, sound a long blast on the whistle or siren. On hearing such a signal from an approaching vessel, the ferry shall remain at the landing until the vessel has passed. (MWWLR 23)
2.48 Helicopter Operations from vessels

2.48.1 Vessel based helicopter operations involve helicopters landing onto, or taking off from, a vessel underway.

2.48.2 Such vessels will indicate that helicopter operations are underway by displaying a high intensity flashing magenta light.

2.48.3 Helicopter operations from any vessel except naval vessels requires clearance from the Civil Aviation Safety Authority (CASA), NSW Maritime and the Duty Harbour Master. The following are the Harbour Master's requirements:

- Statement from the master (on VHF radio) or copies held in the VTS Centre that the vessel has:
  - CASA and NSW Maritime approval for helicopter operations.
  - Certificate of Currency (or similar) for insurance cover that includes aviation hull and 3rd party liability.

2.48.4 The following areas can be used for vessel based helicopter operations.

- Area 1 Seaplane area in Rose Bay
- Area 2 Between Shark Island and an arc of a circle radius 250m centred on position 33º51.374’S 151º15.496’E
- Area 3 Within a circle radius 250m centred on position 33º 51.068’S 151º14.327’E off Athol No 4 Buoy
- Area 4 Within the area bounded by 33º 51.2407’S 151º 13.7208’E, 33º 51.2792’S 151º 14.3650’E, 33º51.3486’S 151º 13.7115’E, 33º51.3872’S 151º14.3557’E – between Fort Denison and Bradley’s Head

2.48.5 Helicopter operations are to be suspended whilst there are vessels within 100m of a vessel engaged in helicopter operations.

2.48.6 A notification on which area is in use will be included in the hourly information message broadcast by Sydney Ports VTS on VHF Channel 13.

2.49 Compass swings

2.49.1 The following are the requirements for compass adjustment swings:

a) Experience has shown that 2 complete swings will be required, if not three, thus up to a 3 hour window is required.

b) the operation will be dependent upon weather conditions (wind<15knots)

c) the number of tugs required for swinging as detailed in the vessel's tug assessment in ShlPS or section 2.101.2 (a) and (b) if there is no tug assessment

d) other vessel movements are not affected

e) additional pilotage charge (at the pilot stays on board charge) will be applied

f) separate on water transfer arrangements for the compass adjuster

g) In Botany Bay the preferred location is Yarra Bay with the turning basin being the smooth water option

h) In Sydney the preferred location is Athol Bight

2.49.2 With regards to 2.49.1(d) the Harbour Master expects that if another vessel requests to move within the window, the compass swing should either be cancelled, or the costs of delay to other vessels should be borne by the vessel conducting the swing.

2.50 Super Yacht Guidelines


| July 2016 Amendment |
2.51 **Bollard Pull Test**

2.51.1 There is a bollard in Port Botany and Sydney Harbour that can be used to conduct bollard pull tests for tugs. The following are the requirements for conducting bollard pull tests:
   a) application and application form submitted a minimum 7 days prior to the test
   b) application for the bollard in Port Botany shall be sent to NSW Ports
   c) test is not to interfere with the movement of seagoing ships
   d) all costs involved are borne by the vessel conducting the test

2.52 **Boarding Exercises**

2.52.1 The Authority is pleased to assist agencies with boarding training consistent with maintaining the safety of operations. The following are the requirements for these exercises:
   a) Confirmation that “target” vessel master and agent have agreed to be part of the exercise
   b) Confirmation that Australian Customs have been advised
   c) It is preferable to conduct exercise on inward passage after the pilot boards
   d) Exercises not to interfere with pilot boarding or disembarkation operations
   e) Advise Sydney Ports VTS (9296 4003) prior to conducting exercises
   f) Liaise with Duty Pilot (9296 4959) regarding ship to be boarded
   g) Exercise vessel is to contact the “target” vessel on VHF 13 after the pilot has called ‘pilot on board’ and prior to commencing the boarding exercise
   h) Exercise must be completed before tugs are secured
   i) If the exercise being conducted on an outward passage then the exercise to commence after tugs are dismissed

2.53 **Maximum draft**

2.53.1 The maximum draft for Sydney Harbour is 13.7 metres

2.54 **Operation of remote control aircraft**

2.54.1 Remote control aircraft (drones) cannot be operated over Sydney Harbour or Botany Bay without the approval of the Duty Harbour Master and RMS Maritime

2.54.2 Any approval from the Duty Harbour Master will be subject to the following conditions
   - The operator to seek approval from Sydney Ports VTS
   - In seeking approval from VTS the operator must declare that there are no objections from RMS Maritime
   - Drones are not to fly over any boat or ship.
   - Drones are not to fly under the harbour bridge.
   - Drones are not to operate near any vessel such that the master of such vessel considers that the vessel has to take avoiding action

2.55 **Vessel movements within Sydney Cove**

2.55.1 Refer to section 2.63 for details on restrictions to seagoing ship movements

2.55.2 Refer to regulation 26A of *Marine Safety (General) Regulations 2009* for details on speed restrictions within Sydney Cove

2.55.3 Refer to regulation 41E and Schedule 3A of *Marine Safety (General) Regulations 2009* for details on the requirements for operating within Sydney Cove

July 2016 Amendment
Directions regarding berths in Sydney Harbour

2.60 Tankers
2.60.1 Gas tankers are not permitted in Sydney Harbour.

2.60.1 Seagoing ships cannot pass a vessel secured at Gore Cove No.1 Berth if the sum of the two beams is greater than 63 metres.

2.60.2 Tankers undertaking oil transfers at Gore Cove berth 1 are to be appropriately boomed.

The operator of the Gore Cove Terminal (the Terminal) will provide booming for oil tanker discharging the following cargo:

- Diesel or similar grade products
- Heavy fuel oil.

The Terminal will require oil tanker agent to make notation in arrival movement booking in Ships to advise if:

- “BOOMING IS REQUIRED” or
- “No BOOMING REQUIRED”.

2.60.3 Tankers at Gore Cove berths must not turn their propellers in preparation for departure without prior approval from Sydney Ports VTS

2.61 Arrivals to Gore Cove
2.61.1 Large tankers (LOA greater than 230 metres and or beam greater than 40 metres or vessels with a displacement greater than 60,000 tonnes) may enter at any time provided:

- The tidal flow at Balls Head does not exceed 0.5 knots.
- The Under Keel Clearance is greater than 10 per cent of deepest draft throughout.
- The pilot boarding time at Sydney boarding place is later than 0.5 hour before sunrise and earlier than 1.5 hours before sunset. Boarding times will be one (1) hour earlier if boarding at the Botany Bay boarding place.

Two A Class tugs are in attendance at Line Zulu

Note: The vessel is deemed to be ‘off Balls Head’ 1.5 hours after the pilot boarding time at Sydney boarding place.

2.61.2 Two mooring boats are required for running mooring lines at Gore Cove

2.62 Departures from Gore Cove
2.62.1 Large tankers, with a draft that is greater than ten metres may depart at any time provided:

- The tidal flow at Balls Head at the booked departure time does not exceed 0.5 knots.
- The Under Keel Clearance is greater than 10 per cent of the deepest draft throughout.
- The booked departure time is later than 0.5 hour before sunrise and earlier than 1 hour before sunset.

2.62.2 Large tankers, with a draft that is ten metres or less may depart at any time provided:

- The tidal flow at Balls Head at the booked departure time does not exceed 0.7 knots.
- The Under Keel Clearance is greater than 10 per cent of the deepest draft throughout.
- The booked departure time is later than 0.5 hour before sunrise and earlier than 1 hour before sunset.

2.62.3 A mooring boat is required to release mooring lines at Gore Cove

July 2016 Amendment
2.63 Berthing at Overseas Passenger Terminal (OPT)

2.63.1 Due to the turbulence created during the berthing operations of passenger vessels at the Overseas Passenger Terminal (ShIPS: SCPT) in Sydney Cove the following restrictions apply:

- Seagoing ships should by preference berth starboard side to.
- Seagoing ships with LOA 320m or more shall berth port side to, unless approved.
- Seagoing ships must not berth with the bow further south than -30m mark or the stern further south than -15m mark.
- Where it is necessary for vessels to berth port side to, then the harbour transit shall be planned to ensure the vessel is secured at the Terminal 30 minutes prior to any closure time.
- A seagoing ship (except bunker vessels) shall not be navigated in Sydney Cove between 0645 hours and 0930 hours or 1630 hours and 1830 hours Monday to Friday.
- Bunker vessels can be navigated within these hours provided:
  - It is servicing a seagoing ship at the Overseas Passenger Terminal.
  - It is navigated on a northerly or southerly course within Sydney Cove.
  - It is not swung within the confines of Sydney Cove.
- A seagoing ship when being navigated to or from the Overseas Passenger Terminal, shall not be swung within the confines of Sydney Cove.
- Seagoing ships shall not single up and/or disengage shore gangways until and unless advised by the vessel’s marine pilot.

2.63.2 A mooring boat is required for running mooring lines.

2.64 Chowder Bay, Point Piper and Athol buoys

2.64.1 Arrivals

2.64.1.1 Chowder Bay: - during daylight hours.
2.64.1.2 Point Piper and Athol Buoys - anytime

2.64.2 Departures permitted at any time.

2.64.3 Vessels must berth starboard side to (head in) at Chowder Bay, unless approved.

2.64.4 Vessels whose displacement is greater than the displacement limit for the buoys (refer to Sydney Ports publication “berths and channels”) are required to moor using their anchors and the stern being secured to the buoy.

2.64.5 Vessels that secure to the buoys using anchors and stern lines will be moored to suit the forecast wind, that is, as close as possible to bow or stern aligned with the wind.

2.64.6 Every effort will be made to leave the vessel at the buoy uninterrupted, however significant changes in the weather during the stay will likely mean the vessel has to reposition (resecure to the buoy on a different heading) at some stage.

2.64.7 When secure, the ship should be approx. 40m from the buoy with 6 shackles on deck on each anchor, with three mooring lines on bights to the buoy and heading approx. 045 (Point Piper) 225 or 180 (Athol). The position for Athol will be decided within 24 hours of the scheduled mooring using the weather forecast.

2.64.8 If the forecast is for winds greater than 25 knots (average) from any direction except right ahead or astern of the planned heading the agent for a vessel using anchors to secure to either buoy is to book tugs as required by the Duty Harbour Master, and a pilot, for the period she is secured to the buoy. The tugs will be used to ease the load on the buoy and mooring lines.

July 2016 Amendment
2.64.9 When a vessel is secured to a buoy by anchors and stern lines:
- When winds reach 20 knots (average) from any direction except ahead, a tug and pilot to be dispatched to the vessel by VTS.
- When winds reach 25 knots (average) from any direction except ahead, pilots and Duty Harbour Master will assess situation

2.64.10 Agents of vessels with LOA over 200m and moored to Point Piper Buoy without anchors are to include 2 “expected” harbour removals with a tug and pilot in the booking to allow for the vessel to be swung to clear the channel for outbound movements

2.64.11 General requirements for vessels using the buoys
- Vessel to maintain bridge watch and maintain listening watch on VHF 13
- Bunkering to be on the opposite side to passenger operations
- Bunkering and passenger operations to be scheduled separately if on the same side
- Passenger operations are to cease when winds are greater than 15 knots
- Light to be utilised to illuminate mooring lines between vessel and buoy
- Refer to section 2.82 for bunkering requirements
- Refer to section 2.94 for requirements for tender operations
- Refer to section 2.105 for tug requirements

2.65 Anchorages

2.65.1 Vessels participating in the Vessel Traffic Service i.e. all vessels 30m or over, are not permitted to anchor without clearance from the Duty VTS Manager.

2.65.2 There are four declared anchorages in Sydney Harbour:
- Triangle Anchorage
- Watsons Bay Anchorage
- Bank Anchorage 1
- Bank Anchorage 2

2.65.3 The following are the requirements for the use of these anchorages:
- Anchor using a minimum of 3 shackles in the water
- Vessel to maintain bridge watch and maintain listening watch on VHF 13
- Bunkering to be on the opposite side to passenger operations
- Bunkering and passenger operations to be scheduled separately if on the same side
- Passenger operations are to cease when winds are greater than 15 knots
- Watsons Bay Anchorage is not to be used for bunkering vessels
- Pilots may use an anchorage other than the one booked to suit prevailing or expected weather conditions in consultation with the Duty VTS Manager.
- When booking vessels to Bank 1 and Bank 2, agents are to include 2 “expected” harbour removals with a tug and pilot in the booking to allow for the vessel to be swung clear of the channel for other movements.
- Refer to section 2.82 for bunkering requirements
- Refer to section 2.94 for requirements for tender operations
- Refer to section 2.104 for tug requirements

2.65.4 Refer to the Port Authority publication “Berths and Channels” for detailed information on the anchorages

July 2016 Amendment
2.66 Captain Cook Dock
2.66.1 Vessels dock head in unless specifically required to berth head out
2.66.2 Maximum length 345m, maximum breadth 37m, maximum draft 11.0m at zero tide
2.66.3 A minimum of two (2) A class tugs required unless approved.
2.66.4 A maximum wind speed of 15 knots.
2.66.5 Vessels with high windage will be restricted to maximum wind speed of 10 knots as directed by the dock master and / or marine pilot

2.67 Bailey’s Marine Fuels – White Bay
2.67.1 Baileys Marine Fuels operate a bunkering facility at the eastern end of the quay at White Bay. A large range of vessels from small recreational craft to ferries and charter vessels are bunkered at the site.
2.67.2 Vessels required to participate in the Vessel Traffic System are to seek approval to proceed to and move from the facility. (refer to section 2.1.7)
2.67.3 Vessels are expected, where possible to approach the facility from the east and berth starboard side alongside.
2.67.4 On leaving vessels are to cross to the southern side of the channel before proceeding east.
2.67.5 Masters and skippers are to check with the facility or VTS about seagoing ship movements to or from the White Bay or Glebe Island berths and if within 30 minutes prior to or 30 minutes after such movements, seek clearance from Sydney Ports VTS to move from the facility

2.68 Glebe Island Exhibition Centre Ferry Terminal
2.68.1 The ferry terminal servicing the Glebe Island Exhibition centre can only be used when the Exhibition Centre is in use.
2.68.2 Ferry movements to and from the ferry terminal are not to interfere with or obstruct the movement of seagoing ships to or from Glebe Island or White Bay berths.
2.68.3 Within 30 minutes after a scheduled departure of a seagoing ship from Glebe Island or White Bay berths, the master of a ferry at the ferry terminal must seek clearance from Sydney Ports VTS before leaving.

July 2016 Amendment
2.69 Glebe Island Berth 7 and 8

2.69.1 A vessel berthed at Glebe Island Berth 7 could impact on a vessel arriving and/or departing Glebe Island Berth 8. This is due to the configuration of the berths and the proximity of vessels alongside White Bay berth 2.

2.69.2 In the interest of fair play to all parties the following procedures will apply:

2.69.2.1 General Booking Guidelines apply.

2.69.2.2 Agents to advise ETA’S and ETD’s of their vessels as far in advance as possible in the ShIPS system.

2.69.2.3 The respective agents to communicate with each other and if possible schedule their vessels to avoid disruptions.

2.69.2.4 If a vessel is not conducting cargo operations it must either depart the berth or reposition to allow the other vessels to berth/depart.

2.69.2.5 In circumstances where a working vessel at Glebe 7, affects the safe and efficient manoeuvring of a vessel to/from Glebe 8, the following protocol is to be observed:
   - If the vessel working at Glebe 7 has less than 4 hours of cargo work to complete and depart, the vessel scheduled for/from Glebe 8 will delay her move until the berth is clear.
   - If the vessel working at Glebe 7 has more than 4 hours of cargo work to complete, then that vessel will be required to shift eastward or depart the berth, to facilitate the safe and efficient manoeuvring of the vessel bound to/from Glebe 8. The shifted vessel can subsequently move back to her working position at Glebe 7. Note: pilot and Towage requirements as directed by the Duty Harbour Master.

2.69.2.6 The Harbour Master has directed that a vessel berthing or departing Glebe 8 requires 50 to 70 metres clearance; subject to vessel particulars, vessels at White Bay 2, and weather.

2.69.2.7 Vessels to assist each other in cases where the mooring lines may be fouled.

2.69.2.8 The costs of shifting (if any) and/or additional tugs are to be borne by the arriving/departing vessel requiring the other vessel to move.

2.69.3 Berth 7 must be clear when vessels berthing or departing Glebe 8 require 2 A class tugs to manoeuvre. This is due to the restricted nature of the manoeuvring area at berth 8.

2.69.4 Refer to section 2.91 for further information on the requirement whilst berthed at White Bay or Glebe Island berths.

July 2016 Amendment
Directions regarding berths in Botany Bay

2.70  Tankers
2.70.1 Vessels berth head out at Kurnell, port side to at Berth No.1 and starboard side to at Berth No. 2.

2.70.2 To secure to Berth No. 3, a vessel uses her port anchor (vessels are required to have a minimum of 12 shackles on each anchor), a line to a buoy at the bow, swamped mooring lines forward, ship's lines and swamped mooring lines made fast to four buoys at the stern.

2.70.3 When tending mooring lines of a tanker at any berth in Botany Bay a responsible officer is required to advise the terminal/wharf operator prior to making adjustments to the mooring.

2.71  Arrivals to Kurnell berths
2.71.1 Berths No’s 1, 2 and 3
The wave height at the berth is to be less than one metre.

2.71.2 Maximum LOA
<table>
<thead>
<tr>
<th>Berth 1:</th>
<th>Berth 2:</th>
<th>Berth 3:</th>
</tr>
</thead>
<tbody>
<tr>
<td>250 metres</td>
<td>200 metres</td>
<td>280 metres</td>
</tr>
</tbody>
</table>

2.71.3 Berths No. 1 and 2
If the maximum draft exceeds 9.8m or displacement exceeds 35,500 tonnes, then pilot boarding time is restricted to one hour before predicted HW/LW to ensure berthing at slack water.

Daylight berthing is defined as:
- Pilot boarding time must not be earlier than ½ hour before sunrise. The vessel shall not pass Henry Head before sunrise.
- Pilot boarding time to be no later than 1 ½ hours before sunset.

Night berthing is allowed provided:
- The pilot boarding time is restricted to one hour before predicted HW/LW to ensure berthing at slack water.
- LOA less than 200 metres
- The wharf is to be fully illuminated. For No.1 Berth (ShIPS: KUR1) confirmation that the sector light is operating.
- No.3 Berth Nos. 2 & 3 swamp line pimple buoys are to be clear of the swing area. If not, a lines boat is to be available to indicate their positions.
- Berthing in above average wind conditions is on a case-by-case basis

2.71.4 Berth No. 3
Pilot boarding times are between low water and two hours before high water provided that:
- pilot boarding time is a minimum of three hours before sunset;
- the vessel does not pass Henry Head before sunrise;
- there is less than one metre height in the berth;
- tugs are in attendance at Cape Banks

2.71.5 It is likely that movements in winds exceeding 30 knots will be cancelled, because of safety concerns of mooring personnel and craft operating in these conditions.

July 2016 Amendment
2.72 Departures from Kurnell berths
2.72.1 Berth No. 1 and 2
Departures permitted at any time

2.72.2 Berth No. 3
Departure is permitted during daylight hours only and to commence no later than 1.5 hours before sunset.

2.73 Bulk Liquids Berths
2.73.1 Vessels are to berth port side to at the Bulk Liquids Berth 1 & 2 unless approved.

2.73.2 Maximum LOA and Displacement
BLB1
Maximum LOA 230m to use any loading arm
Maximum LOA 244m on application to NSW Ports and Duty Harbour Master
Maximum displacement 90,000t for normal bookings
90,000 to 105,000t on application to NSW Ports
BLB 2
Maximum LOA 270m

2.73.3 One lines boat is required for vessels with LOA less than 100m if mooring lines are to be run to the back shore wall. One lines boat is required for the departure of such vessels

2.73.4 Two lines boats are required for vessels with LOA greater than 100m

2.74 Port Botany Crane Protocol
2.74.1 Safe Crane Positions

2.74.2 The stevedore supervisor will ensure that:
- Cranes are positioned boom up amidships and/or clear of vessel bow/stern as detailed in 2.74.1.
- For berthing no crane movements will occur within the vessels planned berth box until the vessel is made all fast
- For sailing no crane movements will occur within the vessels berth box until the vessel has moved clear of the berth
- For berthing all cranes within the berth box remain unmanned whilst the vessel is berthing.
- For sailing all cranes within the berth box remain unmanned until the vessel has moved clear of the berth

2.74.3 The stevedore supervisor will contact Sydney Ports VTS by VHF Channel 12 or 9296 4003 immediately if the conditions in sections 2.74.1 or 2.74.2 cannot be complied with.
2.74.4 Ships must not be berthed or sailed from berth 6 Brotherson Dock unless there is at least 1m clearance from the highest point on the ship to the lowest point of the stowed boom.
Directions to vessels alongside, on buoys or at anchor

2.80 Directions to vessels alongside, on buoys or at anchor

2.80.1 Masters shall at all times ensure their vessels are properly secured. During periods of adverse weather additional lines should be run and sufficient crew should be on standby for the vessel to proceed to sea if required. Refer to sections 2.92 and 2.93 for further information on the storm protocol.

2.80.2 All tankers must be kept in such trim and at sufficient draft to permit safe navigation at all times.

2.80.3 Weather warnings are broadcast by Sydney Ports VTS on VHF Channel 12 and 13.

2.80.4 A seagoing ship or commercial vessel secured alongside a wharf, at anchor, or secured to a buoy, shall maintain on board a duty person or persons with knowledge of the vessel and its safety equipment.

2.80.5 A seagoing ship that has dangerous goods onboard must have:
- An officer onboard at all times
- Sufficient crew onboard to operate fire fighting equipment at all times
- Sufficient crew to move the vessel at all times
- International Code of Signals Flag “B” displayed between sunrise and sunset
- An all round red light displayed between sunset and sunrise

2.80.6 Every vessel secured to a shipping berth shall be so positioned and managed that every part of the vessel shall be clear of all cranes, railway lines and any other plant or equipment on or adjacent to such berth, whether or not such equipment is in use.

2.80.7 Where the Harbour Master has directed or approved that a vessel shall be secured alongside another vessel which is secured to a shipping wharf, the inner of the two vessels shall provide free and uninterrupted passage for the transfer of persons or goods to or from the vessel secured alongside.

2.80.8 A vessel secured alongside a wharf shall have fixed, at all times, and properly lit during the hours of darkness, a safe gangway from such vessel to the wharf and suspended beneath the gangway an adequate safety net.

2.80.9 The washing of cargo tanks including crude oil washing is not permitted without the written agreement of the Harbour Master via a work agreement. Applications are to be made via ShIPS

2.80.10 A seagoing ship or commercial vessel shall not allow entry into a tank or any confined space area without the agreement of the Harbour Master via a work agreement. Applications are to be made via ShIPS.

2.80.11 The Master of a seagoing ship shall not permit any lifeboat, painting raft or any other craft, to be lowered from the vessel into the waters of the ports, unless approved by an appropriate officer of the Australian Customs Service AND the Harbour Master. Applications are to be made via ShIPS

July 2016 Amendment
2.80.12 The direction in section 20.80.11 shall not restrict the swinging-out of its lifeboats by a tanker, or any other vessel so directed, to comply with safety requirements of the Harbour Master.

2.81 Vessels to be kept in manoeuvring condition

2.81.1 The Master of a seagoing ship shall not, except with the permission of the Harbour Master,

- permit the main engines or any auxiliary equipment to be immobilised so as to interfere with the ability of such vessel to manoeuvre at short notice if required; or
- permit the main engine to be tested or turn-over the propeller(s) while secured to any berth, buoy or anchorage, except for routine pre departure checks.

2.81.2 Applications for vessels to immobilise main engines must be made via ShIPS.

2.82 Bunkers

2.82.1 The Duty Harbour Master’s agreement is required for all bunker operations including discharge of sludge/slops. Applications for bunker approvals are made via ShIPS.

2.82.2 The Authority’s marine operations staff may attend to ensure the bunker operation is carried out safely and in compliance with the conditions stipulated in the bunker approval.

2.82.3 Where a dumb barge is used to bunker any vessel in Sydney Harbour at a buoy or anchorage east of Fort Denison, or in Botany Bay at any berth, the barge shall be attended by a tug throughout the operation.

2.82.4 Bunker operations can continue after sunset provided:

- The bunker operation was underway at sunset
- The hose, connections and drip tray / save-all are well lit
- The hose and connections are constantly monitored by personnel on both vessels

2.82.5 The following conditions apply to vessels bunkering at the buoys or at anchor

- Wind less than 15 knots
- Swell less than 1m
- Bunker operations to start at least 1 hour before sunset

2.82.6 Bunkering operations should be undertaken, when practical, during daylight hours (between sunrise and one hour before sunset).

(DGR 11/306)

2.82.7 If bunkering at alongside a terminal there may be additional requirements specific to that terminal and vessel should consult the terminal operator for further advice / approval.

July 2016 Amendment
2.83 Work Agreements
2.83.1 The Duty Harbour Master’s agreement is required for any work carried out onboard vessels that could compromise the safety of the port or its environment. Such works includes but are not limited to the following:

- engine immobilisation
- engine trials
- hot work (DGR 11/276)
- underwater inspections;
- propeller polishing;
- lifeboat drills
- tank washing or pre washing; (DGR 11/273)

- work carried out on fire-fighting systems.
- Entry into enclosed spaces (DGR 11/274)

2.83.2 Applications for approval are made via ShIPS.

2.83.3 The Authority’s marine operations staff may attend to ensure the operation is carried out safely and in compliance with the conditions stipulated in the agreement.

2.84 Anchoring with boats or objects attached
2.84.1 Between sunset and sunrise, no seagoing ship, commercial or recreational vessel, anchored, shall have attached to it:

- any boat the nearest part of which is more than 5.5 metres from the vessel; or
- riding astern, any deeply laden boat, lighter log or other floating object. (MWWLR 75)

2.85 Berthing of charter vessels, commercial vessels and ferries
2.85.1 Where a charter vessel, commercial vessel or ferry has been approved to occupy a berth controlled by the Authority by for a specified period, both the owner and the Master of such vessel shall ensure:

- the vessel arrives and secures to the berth only during that period;
- that Sydney Ports VTS is advised when the vessel arrives at and departs from the berth.

2.86 Working cargo onto lighters and barges
2.86.1 The Master of a vessel in Sydney Harbour or Botany Bay, engaged in the working of cargo, bunkers or stores, to or from lighters or barges alongside such vessel, shall not permit more than two lighters or barges to be secured abreast of each other outboard of the vessel.

2.87 Lights to be exhibited on lighters or barges
2.87.1 Lighters or barges, either manned or unmanned, and timber or other floatable cargo, when lying alongside vessels or wharves between sunset and sunrise shall exhibit the following lights:

- on the outer edge, at both the fore and after ends, a lantern which shows an all-round white light visible at a distance of at least one kilometre;
- however where a number of lighters or barges are grouped closely together they may be lit as one vessel. (MWWLR 90A)

2.88 Mishaps to lighters or barges
2.88.1 The owner of any lighter or barge, shall forthwith report to the Duty Harbour Master all circumstances where such vessel has sunk, capsized or been-wholly or partly submerged, or been involved in any of the situations described in 2.51. (MWWLR 90)
2.89 Discharging of timber or floatable cargoes

2.89.1 The Master of a vessel shall not permit timber or other floatable cargo from the vessel to be unshipped into the waters of Sydney Harbour or Botany Bay without the permission of the Duty Harbour Master. Where permission is given, such timber or other floatable cargo is not to extend more than 15 metres outboard from the vessel.

(MWWLR 84)

2.89.2 The owner of such timber or other floatable cargo, is required to remove the material from alongside the vessel from which it was discharged as soon as practicable after unshipment, if necessary, making arrangements with the Authority for a wharf location where such cargo may be temporarily secured.

(MWWLR 85)

2.90 Distances between vessels

2.90.1 At all berths, clearance of 20 metres must be allowed at each end of an arriving vessel, except at No. 10, Brotherson Dock, where clearance to the inner end of the dock must never be less than 32 metres unless approved.

2.90.2 After berthing – clearance between vessels may be reduced to 10 metres and, in special cases; a further reduction may be possible in consultation with the pilots and Duty Harbour Master.

July 2016 Amendment
2.91 **Vessels at White Bay or Glebe Island berths**

2.91.1 Agents and masters are to note that the berths at White Bay and Glebe Island are adjacent to residential areas and the Authority expects all measures to be taken to minimise the impact to neighbours/residents whilst in port.

2.91.2 Announcements from open decks are not permitted. Testing of ships horns / whistles prior to sailing or safety drill alarms or announcements are permitted.

2.91.3 Masters are to ensure that their ship uses the minimum of generators and minimum deck lighting consistent with safe operations.

2.91.4 Masters are to ensure that their ship’s generators/engines are maintained and operating efficiently to reduce noise and air emissions while in port.

2.91.5 The Port Authority of NSW monitors noise and air quality in the port precinct.

2.91.6 Cruise ships must comply with the emission limits and timeframes set under Marpol 73/78 (Marine Air Pollution 1973/1978) and the Technical Code on Control of Emissions of Nitrogen Oxides from Marine Diesel Engines and NSW regulations.

2.91.7 All deck announcements and music from open decks is not permitted. Safety drill announcements are permitted to all decks prior to departure. All music and non-safety related announcements must be kept to internal ship areas until well clear of the berth.

2.91.8 A Port Authority of NSW representative (Duty Cruise Operations Manager) will be onsite at the White Bay Cruise Terminal for the day when passenger ships are alongside.

2.91.9 On cruise ships all incidents, issues or queries must be referred to the Duty Cruise Operations Manager (DCOM) via Security Radios.

2.91.10 All White Bay and Glebe Island berths are “common user” berths and, except for the White Bay Cruise Terminal, operate on the principle of turn of arrival.

2.91.15 Arrival is taken as the time at port limits or in the case of a race between vessels approaching from opposing directions the time of passing 5 miles from the pilot boarding place.

2.91.16 If two vessels arrive at Port Limits, or if approaching from opposing directions at 5 miles, at the precise same time then priority goes to the vessel whose Agent created the visit first in SHIPS regardless of the booking status at that time.

2.91.17 Berth allocation will normally be the berth requested by the agent.

2.91.18 In the event of a berth being requested by two agents, the turn of arrival principle will apply ie the first ship is allocated the berth requested.

2.91.19 The Authority reserves the right to allocate another berth to the first ship, when:

| • the second ship can only use the berth requested by the first ship | AND |
| • the allocated berth will not adversely affect the cargo operations of the first ship |

2.91.20 If a breakdown or stoppage occurs for a period of more than 6 hours / or is likely to exceed 6 hours the ship and/or operating company are to notify the Sydney Ports VTS as soon as practicable. The Authority reserves the right to require the vessel to move, if another vessel is waiting to berth. The safe and efficient use of the berth will always be the primary consideration.

July 2016 Amendment
2.92 Storm Protocol – Botany Bay

2.92.1 The Duty Harbour Master and Duty VTS personnel will check the forecast for Molineux Point issued by MetraWeather daily.

2.92.2 Brotherson Dock Southern Quay (DP World)

2.92.2.1 Masters berthed at DP World berths must be aware of the location of the storm moorings for their berth.

2.92.2.2 Should the forecast indicate SE'ly to SW'ly winds greater than 35 knots (average), VTS will issue a warning to the terminal, the agents and masters of ships alongside to run mooring lines to the storm moorings and lower their inboard anchor onto the bottom of the dock, before the forecasted time for 35 knot winds.

2.92.2.3 Should the forecast indicate SE'ly to SW'ly winds greater than 40 knots (average), VTS will issue a warning to the terminal, the agents and masters of ships to run mooring lines to the storm moorings before the forecasted 35 knot time and order towage to hold the ship alongside before the forecasted time for 40 knot winds.

2.92.2.3 Should the forecast indicate SE'ly to SW'ly winds greater than 60 knots (average), VTS will issue a warning to terminal, the agents and masters of ships to prepare the ship for sea, including lashing all deck cargo so that the ship can proceed to sea before the forecasted time for 35 knot winds.

2.92.3 Brotherson Dock Northern Quay (Patrick)

2.92.3.1 Should the forecast indicate NE'ly to NW'ly winds greater than 35 knots (average), VTS will issue a warning to terminal, the agents and masters of ships alongside to order towage to hold the ships alongside and lower their inboard anchor onto the bottom of the dock, before the forecasted time for 35 knot winds.

2.92.3.2 Should the forecast indicate NE'ly to NW'ly winds greater than 50 knots (average), VTS will issue a warning to terminal, the agents and masters of ships alongside to prepare the ship for sea, including lashing all deck cargo so that the ship can proceed to sea before the forecasted time for 35 knot winds.

2.92.4 Hayes Dock (SICTL)

2.92.4.1 Should the forecast indicate NE'ly to SE'ly winds greater than 35 knots (average), VTS will issue a warning to terminal, the agents and masters of ships alongside to order towage to hold the ships alongside and lower their inboard anchor onto the bottom of the dock, before the forecasted time for 35 knot winds.

2.92.4.2 Should the forecast indicate NE'ly to SE'ly winds greater than 50 knots (average), VTS will issue a warning to terminal, the agents and masters of ships alongside to prepare the ship for sea, including lashing all deck cargo so that the ship can proceed to sea before the forecasted time for 35 knot winds.

July 2016 Amendment
2.92.6 Kurnell (Caltex)

2.92.6.1 The berths at Kurnell are all susceptible to adverse weather.

2.92.6.2 Caltex has a berth weather warning system which provides alerts to the adverse weather predictions. The Terminal procedures will determine the actions to be taken in the event of adverse weather.

2.93 Storm Protocol – Sydney Harbour

2.93.2 Ships moored to the buoys

2.93.2.1 Should the forecast indicate winds other than from ahead or astern of the vessel moored to a buoy over 20 knots (average), VTS will issue a warning to the master of the ship and agent to order towage and pilot to be at the ships by the forecasted time for 20 knot winds.

2.93.2.2 Should the forecast indicate winds other than from ahead of the vessel moored to a buoy over 30 knot (average), VTS will issue a warning to the master of the ship and agent to prepare the ship for sailing before the forecasted time for 30 knot winds.

2.93.3 Ship moored at Overseas Passenger Terminal

2.93.3.1 Should the forecast indicate NW’ly to SW’ly winds greater than 20 knots (average), VTS will issue a warning to the master ship and agent to run extra mooring lines and lower the inboard anchor to the bottom.

2.93.3.2 Should the forecast indicate NW’ly to SW’ly winds greater than 30 knots (average), VTS will issue a warning to the master ship and agent to run extra mooring lines and order towage to hold the ship alongside before the forecasted time for 30 knot winds.

2.93.3.3 Should the forecast indicate NW’ly to SW’ly winds greater than 35 knots (average), VTS will issue a warning to the master ship and agent to prepare the ship to sail before the forecasted time for 35 knot winds.

2.93.4 Ship moored at White Bay Cruise Terminal

2.93.4.1 Should the forecast indicate NE’ly to NW’ly winds greater than 20 knots (average), VTS will issue a warning to the master ship and agent to run extra mooring lines and lower the inboard anchor to the bottom.

2.93.4.2 Should the forecast indicate NE’ly to NW’ly winds greater than 25 knots (average), VTS will issue a warning to the master ship and agent to run extra mooring lines and order towage to hold the ship alongside before the forecasted time for 25 knot winds.

2.93.4.3 Should the forecast indicate NE’ly to NW’ly winds greater than 30 knots (average), VTS will issue a warning to the master ship and agent to prepare the ship to sail before the forecasted time for 30 knot winds.

2.93.5 Ship moored at Glebe Island berth 1 or 2

2.93.5.1 Should the forecast indicate NW’ly to W’ly winds greater than 20 knots (average), VTS will issue a warning to the master ship and agent to run extra mooring lines and lower the inboard anchor to the bottom.

2.93.5.2 Should the forecast indicate NW’ly to W’ly winds greater than 30 knots (average), VTS will issue a warning to the master ship and agent to run extra mooring lines and order towage to hold the ship alongside before the forecasted time for 30 knot winds.
2.93.5.3 Should the forecast indicate NW’ly to W’ly winds greater than 35 knots (average), VTS will issue a warning to the master ship and agent to prepare the ship to sail before the forecasted time for 35 knot winds

2.93.6 Ship moored at Gore Cove Berth 1

2.93.6.1 Viva has a berth weather warning system which provides alerts to the adverse weather predictions.

2.93.6.2 Viva has advised that the moorings are rated to 100t and the berth is rated to retain a ship alongside in winds up to 60 knots

2.93.6.3 Should the forecast indicate winds greater than 50 knots the Duty Harbour Master and Viva will discuss and agree on any need to remove the vessel. Any movement should be planned for when winds are less than 25 knots.

2.94 Tender Operations

2.94.1 The following conditions apply to vessels at the buoys or anchorages conducting tender operations:

- All tender operations are to comply with IMO Circular MSC 1/Circ. 1417
- Ships’ tenders are not permitted to operate to Campbell’s Cove
- Tenders are not to interfere with or impede the movement of seagoing ships
- The vessel is to control the movement of tenders.
- The vessel is to advise VTS on VHF 13 when tender operations start and finish and seek a working channel for tender operations
- All tenders are to maintain communications with the vessel on the working channel
- Sydney Ports VTS will issue a navigational warning for all vessels to keep clear of the vessel when tender operations are underway

[July 2016 Amendment]
Directions regarding tug usage

2.100 Recommended tug usage

2.100.1 Each vessel is assessed on an individual basis and tug allocation is made with the following taken into consideration:
- Handling characteristics;
- Bow thruster;
- Bow and stern thruster combinations;
- Twin screw and rudder combinations;
- Active rudder.

2.100.2 Unless advised otherwise by the Duty Pilot, the agent for a vessel fitted with a thruster, visiting for the first time should book tugs for a non-thruster ship, and request tug assessment of the vessel:
- Inwards if the vessel is swinging on arrival.
- Both inwards and outwards if the vessel is swinging on departure.

2.100.3 The foregoing does not apply to the sister ships of vessels that have already had their thruster(s) assessed. In this case, agents should supply the Duty Pilot with the details of the sister ship & confirmation that the thruster(s) is/are working.

2.100.4 A record of the assessment shall be maintained in ShIPS within the Vessel Detail File.

2.100.5 Exempt Masters and pilots may vary the combination or number of tugs used for any movement, depending on experience, prevailing conditions or special circumstances that may apply in consultation with the Duty Harbour Master.
2.101  **Minimum tug usage in average weather conditions**

2.101.1 The following directions are for minimum tug usage in average weather conditions.

2.101.2 Check against Table (a), then Table (b), as required by the vessel type. The higher requirement should be selected.

**TABLE (a) Towage based on length for all vessels except vehicle carriers, tankers to Gore Cove, vessels rounding Peacock Point and Tankers to / from No.3 Kurnell**

<table>
<thead>
<tr>
<th>ShIPS Code</th>
<th>Arrival / Departure</th>
<th>Arrival Head In</th>
<th>Departure</th>
<th>Head Out</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>less than 30 m</td>
<td>Nil</td>
<td>B/T</td>
<td>Nil</td>
<td>B/T</td>
</tr>
<tr>
<td>less than 75 m</td>
<td>C</td>
<td>Nil</td>
<td>C</td>
<td>Nil</td>
</tr>
<tr>
<td>less than 100 m</td>
<td>CC</td>
<td>C</td>
<td>CC</td>
<td>C</td>
</tr>
<tr>
<td>less than 130 m</td>
<td>BC</td>
<td>B</td>
<td>BC</td>
<td>C</td>
</tr>
<tr>
<td>less than 185 m</td>
<td>BB</td>
<td>B</td>
<td>BB</td>
<td>B</td>
</tr>
<tr>
<td>less than 225 m</td>
<td>AA</td>
<td>A</td>
<td>AA</td>
<td>A</td>
</tr>
<tr>
<td>less than 265 m</td>
<td>AAB</td>
<td>AA</td>
<td>AA</td>
<td>AB</td>
</tr>
<tr>
<td>less than 295 m</td>
<td>AAA</td>
<td>AA</td>
<td>AA</td>
<td>AA</td>
</tr>
</tbody>
</table>

Vessels of LOA greater than 295m by consultation prior to arrival

* When swinging, container vessels of LOA from 225m to less than 265m, **without an approved B/T**, may reduce to two class ‘Z’ tugs (ZZ).

**TABLE (b) Towage based on displacement for Container Vessels with displacement >60000, all Tankers & Bulk Carriers**

<table>
<thead>
<tr>
<th>Displacement tonnage at pilotage</th>
<th>Tugs required</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than 7,500</td>
<td>CC</td>
</tr>
<tr>
<td>7,501 – 10,000</td>
<td>BC</td>
</tr>
<tr>
<td>10,001 – 35,000</td>
<td>BB</td>
</tr>
<tr>
<td>35,001 – 45,000</td>
<td>AB</td>
</tr>
<tr>
<td>45,001 – 60,000</td>
<td>AA</td>
</tr>
<tr>
<td>60,001 – 85,000</td>
<td>AAB *</td>
</tr>
<tr>
<td>85,001 – 100,000</td>
<td>AAA</td>
</tr>
<tr>
<td>greater than 100,000</td>
<td>AABB</td>
</tr>
</tbody>
</table>

* Container vessels with a displacement between 60,000 & 85,000 tonnes:
  - **When not fitted with an approved B/T**, may reduce to two class ‘Z’ tugs (ZZ) for “head out, clear ahead departures”, or
  - **When fitted with an approved B/T**, may reduce to two class ‘Z’ tugs (ZZ) for “all movements”.

2.101.3 Tankers berthing/unberthing to/from BLB1, with an approved B/T, may only require 1 tug.

2.101.4 All movements to Brotherson Dock 10 will have the use of two (2) tugs

2.101.5 ZZ substitutions only apply to Container Vessels

2.101.6 Table (c), (d), (e), (f) & (g) are to be used for Vehicle Carriers, Tankers to/from Gore Cove, vessels rounding Peacock point, Tankers to / from No.3 Kurnell respectively.

July 2016 Amendment
TABLE (c) Vehicle carriers

<table>
<thead>
<tr>
<th>Ships Code</th>
<th>LOA less than 130m</th>
<th>LOA less than 160m</th>
<th>LOA less than 200m</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BB</td>
<td>AB</td>
<td>AA</td>
</tr>
<tr>
<td>1</td>
<td>Nil</td>
<td>A</td>
<td>AB</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>BB</td>
<td>BB</td>
</tr>
<tr>
<td>3</td>
<td>B/T</td>
<td>BB</td>
<td>BB</td>
</tr>
<tr>
<td>4</td>
<td>B/T</td>
<td>B</td>
<td>B</td>
</tr>
</tbody>
</table>

TABLE (d) Tankers to and from Gore Cove

<table>
<thead>
<tr>
<th>LOA</th>
<th>Displacement tonnage</th>
<th>Tugs required</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than 200 m</td>
<td>less than 80,000</td>
<td>as per Table a &amp; b</td>
</tr>
<tr>
<td>greater than 200 m</td>
<td>less than 60,000</td>
<td>AAB</td>
</tr>
<tr>
<td>greater than 200 m</td>
<td>less than 80,000</td>
<td>minimum of 135T bollard pull</td>
</tr>
<tr>
<td>greater than 200 m</td>
<td>less than 100,000</td>
<td>minimum of 150T bollard pull</td>
</tr>
<tr>
<td>greater than 200 m</td>
<td>less than 120,000</td>
<td>minimum 150t bollard pull</td>
</tr>
</tbody>
</table>

Towage providers can provide any combination of tugs, up to a total of four to provide the total bollard pull required.

TABLE (e) Vessels rounding Peacock Point

<table>
<thead>
<tr>
<th>Length</th>
<th>Vessel type</th>
<th>Tugs required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 200m</td>
<td>All</td>
<td>As detailed in table (a)</td>
</tr>
<tr>
<td>Greater than 200m and no B/T</td>
<td>All</td>
<td>AA</td>
</tr>
<tr>
<td>Greater than 200m and approved B/T</td>
<td>All except passenger</td>
<td>AB</td>
</tr>
<tr>
<td>Greater than 200m and approved B/T and azipod propulsion</td>
<td>Passenger</td>
<td>AA</td>
</tr>
<tr>
<td>Greater than 200m and approved B/T and S/T</td>
<td>All</td>
<td>A(A/A winds &gt;15 knots)*</td>
</tr>
<tr>
<td>Greater than 200m with a thrusters not at 100% capacity</td>
<td>Passenger</td>
<td>A(A/A winds &gt;15 knots)*</td>
</tr>
</tbody>
</table>

* Wind is measured at Fort Denison. In order to avoid delays when ordering a second tug, agents are advised to:
  - Seek information on the Metraweather forecast for Millers Point from Sydney Ports VTS
  - Seek confirmation from their ships that thrusters are 100% operational

TABLE (f) Vessels to Kurnell No.3 Berth

<table>
<thead>
<tr>
<th>Length</th>
<th>Displacement (tonnes)</th>
<th>Tugs Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 259m</td>
<td>Less than 100,000</td>
<td>AAA</td>
</tr>
<tr>
<td>Less than 259m</td>
<td>100,000 to 120,000</td>
<td>AAAB or ZZAB</td>
</tr>
<tr>
<td>Greater than 259m</td>
<td>120,000 to 140,000</td>
<td>ZZAB</td>
</tr>
<tr>
<td>Greater than 259m</td>
<td>Greater than 140,000</td>
<td>ZZAA</td>
</tr>
</tbody>
</table>

July 2016 Amendment
TABLE (g) Vessels from Kurnell No 3 Berth

<table>
<thead>
<tr>
<th>Length</th>
<th>Displacement (tonnes)</th>
<th>Tugs Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>Up to 60,000</td>
<td>AA*</td>
</tr>
<tr>
<td>All</td>
<td>Greater than 60,000</td>
<td>AAA or ZZ*</td>
</tr>
</tbody>
</table>

*A third tug may be ordered at the pilots discretion in strong winds or strong ebb tide

2.102 Clear ahead berths

2.102.1 Except for those berths listed below, any berth is ‘clear ahead’ when the distance to another vessel or obstruction ahead of a departing vessel, berthed ‘head out’ is not less than twice the LOA of that vessel or 400 metres whichever is greater. (An obstruction includes cranes in the clear ahead distance).

a) OPT for vessels LOA greater than 100 meters berthed head out
b) OPT for vessels LOA greater than 185 metres when departing 2330 to 0500
c) GLB2 for vessels LOA greater than 130 metres
d) WHT2 (wharf obstruction)
e) WHT4 (wharf obstruction)
f) BLB1 for vessels LOA greater than 130 metres
g) BLB2 for vessels LOA greater than 130 metres
h) KUR1 if draft greater than 9.0 metres
i) KUR2 if draft greater than 9.0 metres
j) KUR2 if KUR3 occupied.
k) BD7
l) For vessels > 260m LOA ALL Brotherson Dock Berths are not clear ahead, with the exception of BD12, and then only if ALL cranes are clear of the wharf ahead of, adjacent to & a minimum of 20m astern of the vessel.

2.103 Shift along straight wharf

2.103.1 Any shift along a wharf shall be referred to the Duty Harbour Master for approval and Sydney Ports VTS for clearance for the movement to commence.

2.103.2 The Duty Harbour Master will advise on any special requirements that may need additional consideration.

2.103.3 Where application has been made for a shift along a straight line of wharf, the services of a pilot or tugs may not be required subject to the following:

- The Master’s English is at a level to enable clear and distinct communication;
- Wind is less than ten knots and on to the berth;
- Cranes are clear of the vessel and its intended path;
- Clearance by Sydney Ports VTS to move
- One headline, one sternline, one forward spring, and one aft spring to be kept on bollards at all times
- The maximum distance to move is no greater than 70 metres

* July 2016 Amendment
2.104 Anchoring

<table>
<thead>
<tr>
<th>LOA and Draft</th>
<th>Anchoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater than 215m OR Draft greater than 10.0m</td>
<td>A</td>
</tr>
<tr>
<td>Tankers with Draft greater than 10.0m</td>
<td>AA</td>
</tr>
<tr>
<td>LOA greater than 215m AND Draft greater than 10.0m</td>
<td>AA</td>
</tr>
</tbody>
</table>

2.104.1 When booking vessels to Bank 1 or Bank 2 agents are to include 2 “expected” harbour removals with a tug and pilot in the booking to allow for the vessel to be swung to clear the channel for other movements.

2.105 Securing to mooring buoys

<table>
<thead>
<tr>
<th>LOA</th>
<th>On</th>
<th>Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than 75</td>
<td>Nil</td>
<td>Nil</td>
</tr>
<tr>
<td>less than 185 m</td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>less than 250 m</td>
<td>BB</td>
<td>B</td>
</tr>
<tr>
<td>greater than 250 m</td>
<td>AB</td>
<td>BB</td>
</tr>
</tbody>
</table>

2.105.1 Tankers with draft greater than 10m require 2 A class tugs (refer 2.108.2)

2.105.2 When booking vessels LOA over 200m and moored to Point Piper Buoy without anchors agents are to include 2 “expected” harbour removals with a tug and pilot in the booking to allow for the vessel to be swung to clear the channel for other movements.

2.106 Passenger Vessels – Sydney Harbour

2.106.1 All sea going passenger vessels will be required to comply with the Harbour Master’s Towage requirements according to the vessel size and intended berthing location.

2.106.2 In any event, all such vessels transiting west of Fort Denison are to have an appropriately certificated ASD tug of a minimum 45 tonnes bollard pull in attendance and secured to the ships centre lead aft, unless the following conditions in 2.106.3 are satisfied:

2.106.3 Masters are to provide a declaration to the Duty Harbour Master, at least 36 hours prior to arrival at the pilot boarding ground, stating that:

- the vessels manoeuvring and navigational systems are currently operating at 100% capability
- no incidents have occurred on board the vessel, within the previous thirty (30) day period, which have affected the vessels manoeuvring or navigational capabilities
- No significant maintenance work has been undertaken, within the previous thirty (30) day period, which may affect the vessels manoeuvring or navigational capabilities

2.106.4 Any passenger vessel which is unable to provide this declaration and believes their incident or defect no longer effects their manoeuvring, shall provide relevant information so that a towage assessment and determination can be made.

2.106.5 Any passenger vessel that experiences such an incident within Sydney Harbour may be unable to access the dispensation from engaging a tug for a period of 45 days from the incident.

2.106.6 The maiden arrival of any cruise vessel will not have access to the dispensation in 2.106.2, regardless of the recent performance of the vessel.
2.106.7 However the performance of the vessel will be reviewed following the safe arrival and a dispensation may be considered for departure.

July 2016 Amendment
2.107 Tug types, power ratings and size

2.107.1 ‘Z’ Class Tugs
Have an omnidirectional propulsion system with a bollard pull 55 – 70 tonnes.

2.107.2 ‘A’ Class Tugs
Have an omnidirectional propulsion system with a bollard pull 45 – 55 tonnes.

2.107.3 ‘B’ Class Tugs
Have a propulsion system with a bollard pull 25 – 45 tonnes.

2.107.4 ‘C’ Class Tugs
All other tugs with a bollard pull 10 – 25 tonnes.

2.107.5 When ordering tugs, unless exempted by the Duty Harbour Master, it should be noted that:
   - An ‘A’ Class may replace a ‘B’ Class tug.
   - Two ‘B’ Class tugs cannot be replaced by one ‘A’ Class tug.
   - An ‘A’ Class tug can only be replaced by two ‘B’ Class tugs or a ‘Z’ Class tug.
   - A ‘Z’ Class tug can only be replaced by two ‘A’ class tugs

2.108 Tug meeting positions

2.108.1 In Sydney Harbour tugs will meet ships at, Line Zulu, Sea Buoy or Bradleys Head

2.108.2 Tugs will meet ships at Line Zulu as follows:
   - 2 A class tugs for oil or chemical tankers when:
     - LOA is greater than 215 metres OR
     - Beam is greater than 40 metres OR
     - Displacement is greater than 60,000 tonnes OR
     - Draft is greater than 10 metres.
   - 1 A class tug will attend all other oil or chemical tankers except where such vessels are assessed to require only C class tugs, in which case a C class tug will attend.
   - Vessels bound for Chowder Bay, Anchorages, Point Piper or Athol Buoys
   - Other vessels nominated by the Duty VTS Manager to the towage provider by phone call and noted in the booking information in ShIPS

2.108.3 Tugs will meet ships at the Sea Buoy as follows
   - Vessels bound for Garden Island or Captain Cook Dock

2.108.4 Tugs will meet all other ships at Bradleys Head

2.108.5 Gas free tankers carrying only vegetable oils are exempt from the requirements in 2.108.2 and 2.108.11

2.108.6 In Botany Bay tugs will meet ships at Cape Banks or Henry Head

2.108.7 Tugs will meet ships at Cape Banks as follows:
   - oil and chemical tankers when
     - LOA is greater than 215 metres OR
     - Beam is greater than 40 metres OR
     - Displacement is greater than 60,000 tonnes
   - All other vessels bound for Kurnell berths 1,2 or 3

2.108.8 Tugs will meet all other vessels at Henry Head

July 2016 Amendment
2.108.9 On departure, the tugs will be retained, on vessels other than tankers, until east of Fort Denison in Sydney Harbour and South of Molineux Point in Botany Bay, or longer if requested by the pilot or master.

2.108.10 Outbound oil and chemical tankers will retain 2 A class tugs until in the vicinity of the Sea Buoy when:
- LOA is greater than 215 metres OR
- Draft is greater than 10 metres.

2.108.11 All other oil and chemical tankers will retain 1 A class tug until in the vicinity of the Sea Buoy.

2.108.12 Vessels from Kurnell berths 1, 2 or 3 will retain tugs until Henry Head.

| July 2016 Amendment |
Directions to vessels departing from the ports

2.110 Clearance to depart
2.110.1 A pilot shall on boarding a departing seagoing ship contact Sydney Ports VTS on the VTS channel for the port (refer 2.1.6) and confirm the vessel’s readiness to depart or otherwise, seek clearance to depart, a channel for port operations (if required) and advise the vessel’s departure draft and displacement. The vessel shall be in radio communication from this time.

2.110.2 On an exempted vessel, the Master shall contact Sydney Ports VTS on the VTS channel for the port (refer 2.1.6), 15 minutes prior to departure to confirm readiness to depart or otherwise, seek clearance to depart, a channel for port operations (if required) and to advise the departure draft. The vessel shall be in radio communication from this time.

2.110.3 Immediately prior to departing the pilot or exempt Master shall seek final clearance to depart

2.111 Deck cargo
2.111.1 Under no circumstance will vessels be allowed to sail if the deck cargo is not secured.

2.111.2 Should a Marine Pilot become aware that the deck cargo onboard the vessel that is about to sail is not secured, the pilot must report the matter to the Australian Maritime Safety Authority.

2.111.3 The vessel will remain alongside until cleared to sail by AMSA.

2.112 Traffic regulations
2.112.1 Participating vessels departing from Sydney Harbour shall keep south of the main entrance leads, within Area Bravo, well clear of the separation zone delineated by the leads and the inward traffic Area Alpha, unless approved.

2.112.2 Participating vessels departing from Botany Bay shall keep to the south of the entrance, in Area Delta, remaining well clear of the separation zone delineated by the leads and the inward traffic Area Charlie, unless approved.

July 2016 Amendment
Appendices

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix I (A)</td>
<td>Cable and pipeline areas</td>
</tr>
<tr>
<td>Appendix I (B)</td>
<td>Single cables or pipelines</td>
</tr>
</tbody>
</table>
Appendices

Appendix I (A) – Cable and pipeline areas

Sydney Harbour
1. The area enclosed by lines from Balmoral Naval Jetty to the shore at the high water mark 457 metres north of Cannae Point, North Head to Hornby Light on South Head; the obelisk at Green Point to the eastern extremity of Middle Head.

2. Between a line from the sewer siphon tower at Parriwi Point to the sewer siphon tower at Clontarf, Middle Harbour, and a line drawn parallel with distance 61 metres north-west of that first line.

3. Between a line from the Ferry Wharf at Garden Island to the Light Tower on Fort Denison and a line from the south-western extremity of Fort Denison to the western extremity of the Oil Wharf at Garden Island.

4. From a point on the shore of Nielsen Park, Vaucluse, which bears 050º(T) distance 890 metres from the flagstaff on Shark Island, extending firstly due west for 625 metres, thence due north for 366 metres thence due east for 603 metres, thence due south to the shore of Nielsen Park at Shark Point and finally by that shore generally southerly to the point of commencement.

5. The area enclosed by lines from the eastern extremity of the beacon at Bennelong Point to the south-eastern extremity of Kirribilli Point; from the north-western corner of No. 3 Berth, Darling Harbour, to the southern extremity of Blues Point; and from the south-eastern extremity of McMahons Point easterly across Lavender Bay to Milsons Point.

6. Between a line from the north-eastern corner of Goat Island bearing 036º(T) to the foreshore near West Crescent Street, North Sydney; and a line from the southern extremity of Blues Point bearing 260º(T) to Goat Island.

7. Between a line from Darling Street Balmain, bearing 005º(T) to the southern shore of Goat Island, and a line from the north-western extremity of Simmons Point, Balmain, to the south-western extremity of Goat Island.

8. The area within 200 metres of the Snails Bay dolphin berths.

9. Between the line forming the southern side of Glebe Island Bridge carriageway and a line parallel with and distance 107 metres south of that line.

10. Between a line from the western extremity of White Horse Point, 000º(T) to Cockatoo Island; thence from the south-eastern extremity of Cockatoo Island 180º(T) to the Balmain shore.

11. Between a line from a point where the extension of the south-eastern side of Church Street, Leichhardt, meets the seawall boundary of Iron Cove, south-west across the cove to the opposite foreshore and a line parallel with and distance 61 metres north-west of the first mentioned line.

12. Between a line from the south-western tip of Cockatoo Island, extending due west to Spectacle Island; and a line extending from the pile beacon off the northern extremity of Spectacle Island 083º(T) to Cockatoo Island.

13. Between a line across Parramatta River from Victoria Place, Five Dock Point to the eastern extremity of Gladesville Park, Gladesville, and a line parallel with and at a distance 61 metres south-west of the first-mentioned line.

14. Between a line across the entrance of Homebush Bay between Rhodes Point and Wentworth Point; and a line being the prolongation of the northern alignment of Gauthorpe Street, Concord, to the western shore of Homebush Bay.
15. Between a line crossing Parramatta River being the extension of the western side of Park Road, Rydalmere to the southern bank; and a line crossing the Parramatta River being the prolongation of the eastern side of Thackeray Street, Carmella, to the northern bank.

16. Within 300 meters of the Sydney Harbour Tunnel.

Botany Bay
1. Between two lines:
   I. from the water discharge canal at Bumborah Point 234º(T) 720 metres; then 222.5º(T), 650 metres to the eastern tip of Molineux Point and 750 metres from Molineux Point; thence 197º(T), 1400 metres; and 116º(T), 950 metres to the Kurnell Oil Jetty; and
   II. from 100 metres on the eastern side of Bumborah Point 180º(T), 120 metres; then 234º(T), 660 metres; 222.5º(T), 1440 metres; then 147º(T), 220 metres to the No. 5 buoy of the submarine tanker berth; then 177.5º(T), 680 metres to the north eastern end of the Kurnell Oil Jetty.

Appendix I (B) – Single cables or pipelines

Sydney Harbour
1. From a point midway along the high-water mark of Lady Martins Beach in Felix Bay to the south-western side of Shark Island, thence extending to a dolphin close to the eastern side of the island; and a line from the middle of Duff Reserve running northward for approximately 30 metres thence east-north eastwards to join the line in one above.

2. From the end of Darling Point Road to the southern end of Clark Island, thence to a dolphin close to the eastern side of the island.

3. Commencing at a dolphin situated 017º(T), distant 256 metres from the Shark Island flagstaff and bearing 193º(T) to a brick ‘sighting’ hut on the foreshore of Shark Island thence generally south-easterly skirting the eastern foreshore to a brick ‘sighting’ hut on the southern side of the Island thence bearing 106º(T), 195 metres to a dolphin south-east of the Island.

4. From Shark Point bearing 207º(T) for 610 metres thence 238º(T) to a brick hut on the north-east shore of Shark Island.

5. From Grove Street, Balmain, in a generally north-easterly direction to Yerroulbin Street, Balmain.

6. From Grove Street, Balmain, 079º(T) to No. 2 buoy, Snails Bay.

7. From Louisa Road, Long Nose Point, to the eastern extremity of Manns Point, Greenwich.

8. A line extending across Lane Cove River bearing 092º(T) from the end of Mount Morris Street, Woolwich.

9. From Lyons Road, Drummoyne, to the western end of Spectacle Island.
10. From the southern end of Spectacle Island to Snapper Island.

11. A line 084.5º(T) for 381 metres from the end of Queen Victoria Street, Drummoyne; thence about 038º(T) for 244 metres; and approximately 326º(T) to Spectacle Island.

12. A line from the shore at the south-eastern corner of St. Georges Crescent Reserve, Drummoyne, to the south-western extremity of Snapper Island.

13. A line bearing 240º(T) for 244 metres from Elliott Street Jetty, Balmain; thence 330º(T) for 305 metres; thence to the short St. Georges Crescent Reserve, Drummoyne.
14. From Gipps Street, Drummoyne, to Rodd Island, Iron Cove.

15. Directly across Iron Cove from a point on the shore about midway between Henley Street and Ullathorne Street, Drummoyne, 127º(T) to the Leichhardt shore.

16. A line from Millar Street, Drummoyne, to Rodd Island, Iron Cove.

17. A line from Rodd Island, Iron Cove, southerly to Leichhardt Park.

18. A line from the mid-point of the eastern side of Rodd Point, Iron Cove 103º(T) to Leichhardt Park.


20. A line from the western side of Wrights Point, Drummoyne, to the Ferry Wharf at the end of Ferry Street, Hunters Hill.

21. A line from Herberton Avenue, Hunters Hill, southerly across Tarban Creek.

22. A line across the Parramatta River between the vehicular ferry landing at Hilly Street, Mortlake, and the landing at Pellisier Street, Putney.

23. From a point where the extension of the northern side of Waine Street, Cabarita, meets the shore, across Hen and Chicken Bay to the opposite shore at Spring Street, Abbotsford.

24. A line 271º(T) across Majors Bay from where the northern alignment of Edwin Street, Mortlake, meets the high water mark, to a point on the opposite shore.

25. A line 048º(T) from a position on the seawall approximately 30 metres westward of the jetty on Wentworth Point, extending across Parramatta River to the opposite bank.

26. From Abbotsford Ferry Jetty to Punt Road, Bedlam Point, Gladesville.

27. A line north-westerly across Duck River about nine metres downstream from the jetty owned by BP Australia Limited.

28. A line bearing 007º(T) extending across Duck River from a point on the northern side of Adderley Street, Auburn, approximately 149 metres from its intersection with Junction Street.

29. A line 008º(T) across Duck River from the extension of the south-western side of Derby Street, Auburn, about 213 metres north-west from its intersection with Skarratt Street.

30. A line extending across Parramatta River 222º(T) from a point on the northern bank approximately 192 metres upstream from Silverwater Bridge.

31. On a line from where the eastern side of Morton Street, Parramatta, meets the northern bank of the Parramatta River, south-easterly to the opposite bank.

32. A line from Viret Street Hunters Hill, across the Lane Cove River, to Kenneth Street, Longueville.

33. A line from High Street, Hunters Hill, easterly across the Lane Cove River.

34. A line from Wy-ar-Gine Point to Beatrice Street Clontarf, about 183 metres east of Clontarf Point, Middle Harbour.

35. A line from the inner end of the public wharf on the eastern side of The Spit to a point at the head of Sandy Bay, Middle Harbour.

36. A line extending across Long Bay, Middle Harbour, from the end of Wyong Road, Mosman bearing firstly 300º(T) for 46 metres thence 335º(T) to the opposite shore.
37. A line across Middle Harbour from a point where the centre line of Boundary Street, Willoughby, meets the high water mark, 058°(T) for 122 metres; thence due easterly for 351 metres; thence due northerly to high water mark on the shore of Davidson Park, Warringah.

**Botany Bay**

Two pipelines, which are no longer in use but remain in the sea bed, may present a problem to vessels anchoring in the vicinity. These pipelines should be avoided.

1. From Yarra Point 242°(T) 340 metres; then 240°(T) 320 metres.

From a point on the shore 390 metres north from Yarra Point 250°(T) 720 metres to the site of a previous submarine tanker berth in Yarra Bay