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1.0 PORT ADELAIDE

1.1 Local Port Rules

These Local Port Rules specifically relate to Port Adelaide. They operate in addition to and shall be read together with the requirements set out in the Master Port Rules. To the extent of any conflict between these Local Port Rules and the Master Port Rules, these Local Port Rules apply.

These Local Port Rules contain a summary of certain applicable legislative and contractual obligations. Port users are required to inform themselves of their duties under all applicable laws, regulations and contractual terms and nothing contained in these Local Port Rules exempts any port user from compliance with any other legal or contractual requirement or obligation.

These Local Port Rules, the Master Port Rules and other rules or terms incorporated into them may be amended from time to time, so we recommend that you routinely check the Flinders Ports website to ensure that you are referring to the current version.

1.2 Pilotage Constraints

A vessel of 35 metres These Local Port Rules, the Master Port Rules and other rules or terms incorporated into them may be amended from time to time, so we recommend that you routinely check the Flinders Ports website to ensure that you are referring to the current version.

A vessel of 35 metres or more in length must not be navigated in Port Adelaide unless the following conditions are satisfied:

- (a) the master of the vessel holds a pilotage exemption certificate issued by the South Australian Department of Planning, Transport and Infrastructure (**DPTI**) for Port Adelaide. Pilots can only be arranged through the vessel's owner or agent;
- (b) the vessel is navigated under the control or at the direction of a pilot who is licensed by DPTI for pilotage of vessels within Port Adelaide;
- (c) the vessel has lodged an application form 48 hours prior to her movement; and
- (d) boarding of the vessel by the pilot must occur at the pilot boarding ground located 3 nautical miles south west of the entrance beacon (unless expressly directed by a licensed pilot).

Prior to a vessel entering the port boundary and the vessel being under pilotage:

- (a) a licensed pilot must be on-board the vessel; and
- (b) the pilot/master exchange must occur to the satisfaction of the licenced pilot.

NOTE: A direction given for safety purposes must not be mistaken for or construed as "an act of pilotage".

1.3 Berthing Priorities

Outports

In an effort to minimise delays to all parties, Port Adelaide (being the resident port for pilots and tugs servicing these regions) will have reasonable priority over outport locations. The outport locations in order of priority are Port Adelaide, Port Giles, Wallaroo and Ardrossan.

Iron Ore Shipments

Scheduling of vessels at Outer Harbor 7 (**OH7**) will principally see priority given to container vessels over bulk vessels with the following considerations:

- (a) If OH7 has an available window for a period of 3 full days, the bulk carrier will be permitted to berth;
- (b) If the owner/operator of the bulk carrier chooses to berth inside an available window of less than 3 full days and part way through loading operations a container vessel requires the use of OH7, then:
 - i. if, in the reasonable opinion of Flinders Ports, one full shift or less is required to complete loading, the bulk vessel will be permitted to remain at the berth and complete loading;
 - ii. if, in the reasonable opinion of Flinders Ports, more than one full shift remains to complete loading operations, Flinders Ports will notify the appointed agent that the bulk vessel will be required to vacate OH7 at its own cost. Vacating options will include:
 - A. moving the vessel to Outer Harbor 8 (**OH8**) to allow FACT to commence and complete the provision of container stevedoring services to container vessels at OH7 (subject to availability at OH8) and following the completion of those services, Flinders Ports will allow the bulk vessel to move back to OH7 to resume loading; or
 - B. if OH8 is unavailable, Flinders Ports will require the bulk vessel to be moved off OH7 and to anchor until bulk loading operations can be resumed.

In both cases the waiting vessel will have priority over any other bulk carrier to occupy the berth and Flinders Ports will use its reasonable endeavours to ensure that stevedoring service resume as soon as possible.

Port Adelaide, Port Giles and Wallaroo Grain Berth Loading Priorities:

- (a) The principle of “first come, first serviced” will be strictly adhered to;
- (b) If a vessel arrives to load grain cargoes, it will automatically be deemed as being ready to load. If the loading berth is/becomes available, the first vessel to arrive may occupy the loading berth;
- (c) Any vessel requiring the loading berth will be deemed as being ready to load and shall have the right to occupy the loading berth unless and until otherwise notified as a result

of surveys undertaken by the Australian Quarantine Inspection Service (**AQIS**), the Australian Maritime Safety Authority (**AMSA**) or marine surveyors;

- (d) If the loading berth is subsequently required by another vessel and the vessel in the berth is not ready to commence loading due to Major Survey Failure, that vessel must vacate the berth **at its own cost** in order to allow the other vessel to berth.
- (e) For the purposes of these loading priorities:
 - “**Major Survey Failure**” means any work required by a survey over and above Spraying and includes without limitation major hold cleaning and Fumigation;
 - “**Spraying**” means 6 hours spraying with crew remaining on-board the vessel;
 - “**Fumigation**” means 24-hour fumigation with all crew vacating the vessel;
- (f) Vessels which require Spraying only will be permitted to remain at the loading berth while the Spraying and re-survey is performed;
- (g) If, following Spraying, a vessel fails the resurvey, the vessel will be required to vacate the loading berth and return **at its own cost** once the survey has been passed;
- (h) A vessel at the loading berth which declines to fully utilise the loading plant must, if the loading berth is required by another vessel which is prepared to survey and fully utilise the loading plant, vacate and return to the berth **at its own cost** to allow the other vessel to work the loading berth until it has completed loading. Rules are to apply on the basis of a 24-hour loading operation;
- (i) If the other vessel referred to in (h) fails its survey, it may remain at the loading berth to perform tasks to pass the survey unless the berth is required by a third vessel in accordance with (d) - (g);
- (j) If a situation arises where there is a failed vessel at the loading berth and other failed vessel at another berth undergoing tasks to pass surveys, the vessel which passes its survey first and obtains the “permission to load” will be permitted to occupy the loading berth;
- (k) Agreements between the relevant agents of vessels may take precedence over (a) – (c). Such arrangements must be discussed and agreed by Flinders Ports before deviating from these loading priorities; and
- (l) Flinders Ports shall be the final arbiter in deciding the priority and setting the consistency needed for the cost-efficient operation of the loading berth.

Port Adelaide Petroleum (M Berth & Outer Harbor 4 Berth) Priorities:

- (a) M Berth and Outer Harbor 4 (**OH4**) berths at Port Adelaide are multi user liquids berth facilities and are classified as critical infrastructure for the State of South Australia.
- (b) Although shared with Pure Car Carriers (PCC), OH4 berth will see priority given to tankers if the delay to a tanker’s ETA exceeds 2 hours.

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- (c) In keeping with standard berthing priorities, tankers will follow the same fundamental principle of 'first in, first serviced' in being ready to berth at either location, in turn and without tidal limitation or delay.
- (d) Priorities can be further defined as follows;
- i. A vessel berthed at OH4 that requires to shift to M berth to complete cargo, may do so provided that:
 - A. M berth is not occupied or becomes unoccupied;
 - B. no other vessels have arrived at the pilot boarding ground prior to completion of pumping at OH4 that require to proceed directly to M berth;
 - C. it does not have to await a tidal window that becomes available after the ETA of a vessel arriving at the pilot boarding ground that requires M and is not tide dependant; and
 - D. if the vessel has a minimum UKC requirement above at which Flinders Ports operates, it does not impact on existing or alternative transits.
 - ii. If OH4 is subsequently required by another vessel when a vessel at the berth is remaining idle alongside awaiting M berth to become unoccupied or tide, that vessel shall vacate OH4 at its own costs, in order to allow the other vessel to berth.
 - iii. For vessels requiring to visit both berths in the reverse order to above, the same principles shall apply.
 - iv. If there is an urgent requirement for a particular grade of fuel to be brought into the State and the vessel is NOT next in line to berth, then the following is to be adopted:
 - A. the company will need to negotiate directly with the owner/charterer of the vessel that is due to berth and inform Flinders Ports if any agreement is reached;
 - B. if there is an urgent requirement for any grade of fuel and no agreement can be reached between the vessels then the fuel company will apply to the 'Energy Regulator' in DPTI to ensure priority berthing is given to that vessel.

Inner Harbor Berth 29 Priorities

To maximise port efficiency, if there is likely to be a conflict between two vessels wanting to berth at Inner Harbor Berth 29 (IH29), preference will be given to vessels that require facilities only available at IH29 and nowhere else (e.g. loader, crane etc). Hence fertiliser vessels, livestock vessels and breakbulk vessels which can be handled at other berths will need to berth elsewhere if a conflict exists or is likely to occur.

1.4 Geographic Limits

Port Adelaide Operating Limits:

The subjacent land underlying and the adjacent land extending from the waters, rivers, creeks and inlets to the high-water mark bounded as follows:

Commencing at Point Grey then due west along a line to its intersection with the western boundary of the harbor of Port Adelaide; then generally south south-easterly along the harbor boundary for 3 nautical miles; then along a line due east to its intersection with the south-westerly production of the Number 4 Leading Lights; then generally north-easterly along the production to its intersection with the high water mark on the southern face of the Southern Breakwater; then generally north-easterly along the high water mark to its intersection with the south-western boundary of Section 694 Hundred of Port Adelaide; then generally north-westerly along that boundary of Section 694 Hundred of Port Adelaide across the Southern Breakwater to its intersection with the high water mark on the northern face of the Southern Breakwater; then generally north-easterly along the high water mark to the northern extremity of Number 4 berth; then generally south-easterly along the high water mark to its intersection with the production southerly of the high water mark of the western face of the breakwater at the Royal South Australian Yacht Squadron (RSAYS); then generally north-easterly along the production across the RSAYS Basin; then generally north-westerly and north-easterly along the high water mark to Pelican Point; then generally south-easterly and southerly along the high water mark to its intersection with a line across the Port Adelaide River perpendicular to the western face of Number 18 berth and intersecting the western face of Number 18 berth and its southerly production at the southern extremity of the western face of Number 18 berth; then generally easterly along that perpendicular line across the Port Adelaide River to its intersection with the high water mark; then generally northerly and easterly along the high water mark, including Number 3 dock, to its intersection with the Wave Screen in North Arm; then generally northerly along the western face of the Wave Screen and its production to intersect with the high water mark on Torrens Island; then generally northerly along the high water mark to the point of commencement at Point Grey.

And including:

Portion of Section 694 Hundred of Port Adelaide being the area described as easement E on FPX 43068.

But excluding:

Allotment 5 FP 102960; Allotment 707 FP 50323; and that Portion of Allotment 33 DP 75708 which comprises the Marina Adelaide basin and the entrance to that basin and is bounded by a straight line across the opening to the entrance that is an extension of the high-water mark on the western bank of the river.

Refer to the Flinders Ports website for further information.

1.5 Communications

Flinders Ports Vessel Traffic Service (VTS) is staffed at all times and Flinders Ports maintains a listening watch on channels 16 and 12 (call sign “Adelaide Outer Harbor”).

1.6 Port Restrictions

Vessel Dimensions & Restrictions

1.6.1.1 Port Adelaide Maximum Vessel Dimensions & Restrictions

OUTER HARBOR	Daylight In/Out	350m x 49m
	Darkness In/Out	350m x 49m
	Oversize to a max of	366m x 51.2m
OSBORNE¹	Daylight Only In/Out	206m 32.26m
	Vessel to turn @ Osborne	183m x 32.26m
	Vessel to turn #3 Basin	206m x 32.26m
	Osborne # 1 Berth	185m
	Penrice	120m
¹ Maximum LOA at Osborne 1 Berth is subject to fleeting requirements with possible draft restrictions to apply.		
INNER HARBOR	Daylight/Dark In/Out	206m x 32.26m
	Car Carriers and livestock vessels	196m x 32.26m
	Oversize vessels to Panamax size	225m x 32.26m
NUMBER 2 DOCK	Daylight In/Out	183m
	Darkness In/Out	125m
<p>The following restrictions are applicable: -</p> <p>LOA > 165m First 80 m of the opposite berth to be clear when berthing.</p> <p>LOA > 160m If vessel entering No 2 Dock, H Berth to be unoccupied.</p> <p>Note: A vessel can depart when another vessel is berthed on the opposite side of the dock.</p>		

<p>Port Adelaide Turning Basins</p>	<p>The following guidelines may generate impacts on either vessel limitations or tidal constraints as applicable.</p> <p>Number 2 (no 2 Dock) Max LOA to swing 125m</p> <p>Number 3 (No 3 Dock) Turning Basin Max LOA to swing 229m</p> <p>The following restrictions are applicable: -</p> <p>LOA >= 180m If vessel at Berth 27 which extends either into or is positioned near the swinging basin (typically Panamax), then 2 tugs to swing</p> <p>LOA > 191m K Berth to be unoccupied to swing</p> <p>Number 4 (Osborne) Max LOA to swing 183m</p>
	<p>Number 6 (OH 2 berth) Turning Basin</p> <p>The following restrictions are applicable: -</p> <p>LOA > 260m & drafts > 9m at LAT Vessels shall use No. 5 (OH 6) turning basin</p>
	<p>Number 5 (OH 6 -7 berth) Turning Basin</p> <p>LOA > 275 & ≤ 306m Beam ≤ 40.3m UKC < 20% 0.3kt</p> <p>LOA ≤ 306m Beam > 40.3 & ≤ 49m UKC > 20% 0.3kt UKC < 20% slack water</p> <p>LOA > 306 & ≤ 350m Beam ≤ 49m UKC > 20% 0.3kt UKC < 20% slack water</p> <p>LOA > 350 or Beam > 49m slack water</p> <p>Vessels exceeding Port Limits (350 x 49) when turning, OH6 berth to be clear.</p>

	<i>Refer also sections 1.6.3 Tugs Required – Port Adelaide & 1.6.9. Container Vessel – Tide & Wind Constraints (OH6-7 berths)</i>
	Number 6 (Outer Harbor 2 berth) turning area guidelines Maximum length 260 metres. Vessels over this length shall use number 5 (OH6) turning area.

Note: Should current predictions not be available then swinging limits will be based on 30cm rise or fall in the hour.

1.6.2 **General rules for vessels in excess of port limitations**

Oversize vessels are at the discretion of the General Manager, Marine Operations, Flinders Ports (GMFP OR MARINE OPERATIONS MANAGER) and may be restricted to high water, daylight only, additional tugs, minimum cross currents, maximum wind speed or any other restriction which may be prudent for the particular vessel. Vessels outside of the above parameters may be considered after simulations are carried out in a full mission vessel simulator.

Tugs

OUTER HARBOR	
VESSEL TYPE	TUG REQUIREMENTS
Up to 90m LOA (not turning)	No tugs
Up to 90m LOA (when turning)	1 tug
Between 90m and 120m LOA	1 tug
Between 120m and 230m LOA	2 tugs
In excess of 230m LOA (with or without bow thrusters) – see No. 5 OH6-7 Turning Basin Guidelines	3 tugs (or 2 Z Pellers)
Car carriers swinging on departure with bow thrusters exceeding 1000hp (735.5w) (provided that wind less than 15 knots)	1 tug
Livestock and car carriers operating in winds exceeding 15 knots	2 tugs
Livestock and car carriers in excess of 183m LOA when turning	2 tugs
Vessels berthing with a beam in excess of 32.20m	Refer to additional information under “Bulk Carriers Berthing at OH7/8 from Sea
Container vessels sailing (head-out) in either forecast winds exceeding 15 knots or actual winds exceeding 20 knots	2 tugs
Vessel with displacement ≤ 127,000 tonnes	2 tugs (min 70T bollard pull)
Vessels with displacement ≥ 127,000 tonnes	3 tugs
If a vessel has bollards or fairleads with a SWL <70T the following displacements will represent the limitations for 2 tugs (Z’s)	For 60T bollards max 109,000T For 50T bollards max 91,000T For 40T bollards max 73,000T For 30T bollards max 54,000T For 20T bollards max 36,000T

OSBORNE AND INNER HARBOR	
VESSEL TYPE	TUG REQUIREMENTS
Up to 90m LOA (not turning)	No tugs
Up to 90m LOA (when turning)	1 tug
Between 90m and 120m LOA	1 tug
Between 120m and 176m LOA	2 tugs
All tankers exceeding 176m LOA or with draft exceeding 9m	3 tugs (or 2 Z Pellers)*
Vessels in excess of 183m when turning (see additional requirements under Number 3 turning basin)	3 tugs (or 2 Z Pellers)
Vessels in excess of 206m when turning	3 tugs (or 2 Z Pellers)

* Due to M Berth being classified as critical infrastructure, all tankers carrying flammable cargo will require 2 tugs and gate security. Tankers with a LOA of less than 120m and fitted

with a bow thruster may dispense with 1 tug for arrival and sail without a tug at the pilot's discretion.

Tug Ahead

Vessels will require a tug ahead/tug assist whilst negotiating the Port River under the following circumstances:

- (a) Vessel with a draft of 9.3m or more
- (b) Oversize vessels (as per the dimensions set out in paragraph 1.6.2)
- (c) Any vessel with a defect that effects navigation or ability to manoeuvre.

Under Keel Clearance (UKC)

All vessels to maintain 0.3m UKC at all berths at all times.

The following additional requirements apply:

LOCATION	UKC
Inner Harbor Channel	<p>UKC of not less than 7.5% of draft.</p> <p>Vessels in excess of 200m LOA and all tankers to have UKC of not less than 10% of draft.</p> <p>Vessels with a draft in excess of 9.5m may transit on an ebb tide if there is sufficient water at OH6 two hours after sailing time, OR there is sufficient water in the Inner Harbor channel three hours after Pilot On Board (POB) time.</p>
Outer Harbor Channel	UKC of not less than 10% of draft.

Clear River

The following vessel restrictions require the river channel to be clear of traffic:

- (a) Vessels with a LOA greater than 183m and/or draft of greater than 9.3m
- (b) At night where the vessel is the Accolade II
- (c) Where the vessel is a tanker (if not gas free)
- (d) If a vessel is hampered for any reason.

The extent of the clear river will be:

- A. Geographically from the point the vessel enter/departs the Channel and the berth as the other point.

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- B. In time by allowing 1.5 hours between POBs for all traffic ahead of the Clear River vessel and 30 minutes behind.
- C. If there are two vessels transiting in the same direction then a 30-minute time difference will be allowed provided there is tug assist.
- D. Allowance is to be made for the Accolade II to pass. The practise of allowing Accolade II to pass in the Osborne area or Outer Harbor will continue. Where the Accolade II is sailing out ahead of a clear river vessel, a time of 1 hour is to be allowed, shortened to 30 minutes if there is a tug assist.
- E. Other allowances will be at the Pilot’s discretion considering all factors of risk assessment.

If the Clear River outbound vessel has a tug assist then the tug is to be retained till the vessel is passing Outer Harbor and in deeper waters.

Launch

A line launch is required for all berths except 18-20 berth if 2 tugs are used (or 1 tug plus bow thruster).

Berths

From time to time, restrictions against a specific berth may exist. Load limits apply to all wharves and jetties.

For further information, contact Flinders Ports on (08) 8447 0611 or refer to the berth information for Port Adelaide on the Flinders Ports website.

Specific requirements are set out below:

Berth Description	Requirements
Outer Harbor Berths 6-7 (Container Terminal)	<ul style="list-style-type: none"> • Cranes are specifically positioned on arrival or departure of a vessel, to ensure a safe operating environment for mooring personnel, to prevent damage to other vessels at berth and the infrastructure. • Whilst berthing at OH7 and another vessel is working alongside OH6, the container crane booms will only be lifted if requested by the pilot/master. The pilot/master will advise the Communications Tower if this is required. • A vessel occupying OH6 shall have its own cranes stowed inboard as another vessel manoeuvres past. • All container cranes will be “parked” at the northern end of OH7 except when a vessel is berthing at OH7 (with or without a vessel alongside OH6) when the cranes shall be “parked” as follows: <ul style="list-style-type: none"> (i) Numbers 1 and 2 cranes at the southern end of OH6 or behind any vessel berthed at OH6;

Berth Description	Requirements
	<p>(ii) Numbers 3 and 4 cranes in the mid-ship half length of the ship when in the berthed position.</p> <ul style="list-style-type: none"> Note: Cranes 3 and 4 will only travel from the northern end to the 200m mark.
Outer Harbor Berth 8	<ul style="list-style-type: none"> The loader will be positioned on arrival or departure of a vessel in the midship half length of the vessel when in the berthed position. There is no preference with regard to the parked positions of container cranes when berthing or sailing vessels in or out of OH8. Pilots will need to be advised of any instances where boom(s) are in the lowered position. The FACT duty supervisor (in any case) needs to be advised when pilotages in or out of OH8 are to occur. Communication protocols follow: <ul style="list-style-type: none"> Arrivals: FACT duty supervisor to be contacted at time of pilot pick up at OH2, ie 30 minutes prior to scheduled pilot boarding time. Departures: FACT duty supervisor to be contacted 1 hour prior to scheduled departure time
Bulk Carriers arriving or sailing to / from OH6/7/8 berths	<ul style="list-style-type: none"> Bulk carriers arriving or sailing to or from OH6/7/8, should meet the same requirements as a container ship of the same dimensions and drafts. Refer to 0 Container Vessel Tide & Wind Constraints (OH6-7 berths) May sail day or night Allow one hour and 15 minutes for pilotage.
Bulk Carriers shifting from Berth 27 to Outer Harbor Berth 8	<ul style="list-style-type: none"> Requires 2 hours for all vessels. <p>Panamax Vessels (any vessel greater than 206m LOA and 32.2m beam)</p> <ul style="list-style-type: none"> Daylight only for the channel between Berth 27 and number 20 beacon. May berth at night at OH8 (vessel may commence any time from sunrise until 1 hour 30 minutes before sunset). 2 tugs to sail from Berth 27, 2 Z Pellers (or 3 tugs) to berth at OH8. Tug ahead required if draft over 9.3m. Timed to berth at OH8 at slack water or on the flood (shift commences at one hour before low water until one hour before high water). <p>Non Panamax vessels (LOA less than 206m)</p>

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Berth Description	Requirements
	<ul style="list-style-type: none"> • May shift any time day or night. • 2 tugs to sail 2 tugs to berth (if draft over 9.3m, then 2 Z Pellers are required). • Tug ahead required if over 9.3m draft. • If draft over 9.3m timed to berth at OH8 at slack water or on the flood (shift commences at one hour before low water until one hour before high water).

Container Vessel Tide & Wind Constraints (OH6-7 berths)

Tidal Limitations

Size	Arrival		Departure		Swing	
	Flood	Ebb	Flood	Ebb	Flood	Ebb
LOA <= 306m Beam <= 40.3m	no limit	no limit	no limit	no limit	no limit	no limit
LOA > 306 & <= 350m Beam > 40.3 & <= 49m	no limit 0.5kt between breakwaters	no limit	no limit	no limit	0.3kt	0.3kt
UKC > 20% UKC < 20%		no limit	no limit	no limit	0.3kt	0.3kt
LOA > 350m or Beam > 49m	0.5kt between breakwaters POB 1 hr prior HW	no limit	no limit	no limit	0.3kt	0.3kt
UKC > 20% UKC < 20%		POB 1 hr prior LW	30-60 mins prior HW	30-60 mins prior LW	slack water	slack water

Note: Should current predictions not be available then swinging limits will be based on 30cm rise or fall in the hour.

Wind Limitations
All container vessels exceeding 306m LOA: max allowable winds 25 knots (arrival or departure)
All container vessels up to 306m LOA & all other vessels: max allowable winds to 35 knots but may be reduced to 25 knots at pilot's discretion, taking into account wind direction, broadside windage area of the vessel and available useable tug power

Vessel Navigation

Vessels enter and exit the Port Adelaide channel in three (3) locations depending on the type of vessel and its draft:

- (a) At Beacon Number 9

- (b) At Beacon Number 5
- (c) At the Entrance Beacon

Anchor Restrictions

The Master or operator of a vessel must not cause or allow the vessel to be anchored or an anchor to be used in any of the following areas:

- (a) the area comprising the full width of the Port Adelaide River which lies within 70m of a line from a point on the western bank of the river distance 490m and bearing 314 degrees from No. 11 front inward leading beacon to a point on the eastern bank of the river distance 215m and bearing 22 degrees from No. 11 front inward leading beacon; and
- (b) the area comprising the full width of the Port Adelaide River which lies within 60m of a line from a point on the western bank of the river distance 410m and bearing 273 degrees from No. 12 rear inward leading beacon to a point on the eastern bank of the river distance 210m and bearing 204 degrees from No. 12 rear inward leading beacon.

Speed




The speed limit in the following waters is seven (7) knots:

- (a) That portion of the Port Adelaide River, which lies between No. 12 Channel Beacon and No. 22 Channel Beacon; and
- (b) That portion of the Port Adelaide River, which lies south of No. 35 Channel Beacon.

The speed limit when passing any moored vessel is four (4) knots.

Signals

The tide lights located at the top of the Communications Tower shall remain lit at all times to inform vessel traffic which way the tide is running. The 'slack' period of the tide should be interpreted as approximately 15 minutes either side of predicted low and high water.

- All round green light - indicates the tide is flooding 
- All round red light - indicates the tide is ebbing 
- All round white light - indicates the tide is slack 
- All 3 lights lit simultaneously - indicates the channel is blocked



2. Vessel Traffic Analysis (Scheduling)

2.1 Towage

Svitzer

Svitzer tugs are located at Port Adelaide and are responsible for providing towage services for Port Adelaide, Port Giles and Ardrossan from their local office.

Hours of Business: 0830 – 1700

Out of Hours: Fremantle Operations Centre

Enquiries from shipping agents regarding tug costs or penalties for alterations and/or cancellations regarding towage should be directed to the towage operator.

Gale Watch

When a gale warning is issued by the Bureau of Meteorology and the General Manager Flinders Ports determines that a gale watch is to be activated, the VTS is to take the following steps;

- VTS will call the Fremantle Operations Centre and advise the specific time gale watch standby is to commence. (Svitzer will allow 2 hours for Port Adelaide crews to attend for gale watch).
- If a request from VTS is for attendance as soon as possible, Svitzer Operations Officers will call each crew member and advise they are required to attend the tug/s in their best time. Operations Officers will then revert back to VTS with an approximate time full crew/s will be onboard.
- Once the full crew/s have arrived, Svitzer Operations Officers will confirm with VTS that the tug/s are officially on standby.
- Once advice is received from the General Manager Flinders Ports, VTS will call the Fremantle Operations Centre to end the standby for gale watch.

2.2 Priorities

All ports are allocated (for vessel traffic analysis) to 2 regions: - Central & Regional.

Central Region refers to the following ports:

- Port Adelaide
- Port Giles
- Klein Point
- Ardrossan
- Wallaroo

Regional Ports region refers to the following ports:

- Thevenard
- Port Lincoln

- Whyalla
- Port Bonython
- Whyalla (SPN)
- Port Pirie

Commercial vessel traffic for a region is then managed according to shipping agent request, berth availability, other traffic movements, operational restrictions (such as draft v tide limitations) and resource availability (pilot, tug etc).

Vessels requiring pilotage that are non-commercial are ranked lowest in priority. For further information on vessel movement priority, refer to section 1.2 "*Pilotage Constraints*".

2.3 Vessel Positioning

Port Adelaide Vessel Positioning

Bridge & associated marks to establish vessel positioning are principally defined by the duty Labour Allocator for presenting to Mooring Team Leaders. Vehicle carriers have specific requirements in terms of stern / mid-ship ramp placement & in the case of containerised vessels & OH 8 berth, positioning is determined in direct consultation with the terminal operators respectively.

On occasion, specific requirements may exist for 18 to 20 and 29 berths that are requested by the allocated Stevedore.

A vessel berthing at 18 to 20 berths with no specific requirements, a nominal distance from either end of the wharf is adopted to achieve sufficient head-line / stern-line purchase.

Pre-Planning for Fleeting Operations

Port Adelaide Fleeting

Grain shippers at IH 27 berth will be encouraged to use hatches 2, 3, 4, 5 and 6; that is hatches other than end hatches on Panamax vessels where possible, thereby reducing the need to fleet vessels. Where ship's deadweight, hull stresses and operational constraints do not allow for this, fleeting must take place.

Agents will be asked to declare on their berthing applications hatches to be used and indicate when the ship has to be fled.

Best use of mooring facilities shall be used on berthing to facilitate fleeting operations, i.e. minimum of shifting lines.

A responsible person from Flinders Ports may be required to attend fleeting.

A Mooring Team will be required for gangway and line shifting duties.
Safety of personnel and ship to be of prime concern at all times

Considerations concerning fleeting:

- Ship's draft, aircraft, trim and displacement.
- Wind conditions - direction and speed – forecasts and warnings.
- Tide conditions - direction and speed.
- Ship hull form (flare and counter) and projections (cranes etc.) and proximity to bulk loading plant and wharf infrastructure.
- Daylight/darkness conditions.
- Ship/shore communications.
- Communications with stevedore for positioning of ship.
- Availability of ship's lines and winching capacity.
- Extreme of berth box for final draft/tide in the position.
- The possibility of tug assistance.
- Pilotage attendance.
- Line launch availability.

Masters will be required to ensure that the number of mooring lines used are sufficient for those exposed to extreme weather conditions.

Note: All fleeting events with movement of the vessel greater than the LOA of the vessel will require a pilot and / or tugs.

2.4 Operational Changes

Alteration to Berthing Times

Berthing of vessels maybe arranged to suit the operational requirements of the port i.e. a vessel is berthed earlier than the preferred time (as requested by the agent). This may occur to expedite a traffic scheduling or resource issue. Where the vessel is brought forward in such a manner, then shipping based charges are typically adjusted to reflect the preferred time rather than the actual operational times recorded.

The VTSO (with prior approval from the GMFP OR MARINE OPERATIONS MANAGER) is required to document the preferred berthing time to be utilised for the intended waiver (email is sufficient) for notifying the Income Accounting Officer as appropriate.

2.5 Tide Information

Height of Tide Required-

The following tables determine the minimum tide required to navigate the required section of the channel, based on a vessel's draft and its UKC. These values may then be utilised in conjunction with predicted tide values to determine suitable windows of opportunity to move a vessel within the port as constrained by its required transit times.

Height of Tide Required for Port Adelaide Outer Harbor

Channel Declared Depth at LW – 14.2m LAT

Under Keel Clearance – 10.0 % of Draft

Draft	Tide Required
12.90	-0.01
13.00	0.10
13.10	0.21
13.20	0.32
13.30	0.43
13.40	0.54
13.50	0.65
13.60	0.76
13.70	0.87
13.80	0.98
13.90	1.09

Draft	Tide Required
14.00	1.20
14.10	1.31
14.20	1.42
14.30	1.53
14.40	1.64
14.50	1.75
14.60	1.86
14.70	1.97
14.80	2.08
14.90	2.19
15.00	2.30
15.10	2.41

Refer to additional tidal constraints associated with [\(OH 6–7\) Turning Basin Guidelines](#) or [\(OH 2\) Turning Basin Guidelines](#) if applicable.

Height of Tide Required for Port Adelaide Outer Harbor

Channel Declared Depth at LW – 14.2m LAT

Under Keel Clearance – 20.0 % of Draft

Draft	Tide Required
11.8	-0.04
11.9	0.08
12	0.2
12.1	0.32
12.2	0.44
12.3	0.56
12.4	0.68
12.5	0.8
12.6	0.92
12.7	1.04
12.8	1.16
12.9	1.28

Draft	Tide Required
13	1.4
13.1	1.52
13.2	1.64
13.3	1.76
13.4	1.88
13.5	2
13.6	2.12
13.7	2.24
13.8	2.36
13.9	2.48
14	2.6
14.1	2.72

Refer to additional tidal constraints associated with [\(OH 6–7\) Turning Basin Guidelines](#) or [\(OH 2\) Turning Basin Guidelines](#) if applicable.

Height of Tide Required for Port Adelaide Inner Harbor (excluding Oil Tankers & vessels with LOA > 200m)

Channel Declared Depth at LW - 9.3m LAT
Under Keel Clearance - 7.5 % of Draft

Draft	Tide Required
8.70	0.06
8.80	0.16
8.90	0.27
9.00	0.38
9.10	0.48
9.20	0.59
9.30	0.70
9.40	0.80
9.50	0.91
9.60	1.02
9.70	1.13
9.80	1.23
9.90	1.34
10.00	1.45
10.10	1.56
10.20	1.67
10.30	1.77

Draft	Tide Required
10.40	1.88
10.50	1.99
10.60	2.10
10.70	2.20
10.80	2.31
10.90	2.42
11.00	2.52
11.10	2.63
11.20	2.74
11.30	2.85
11.40	2.95
11.50	3.06
11.60	3.17
11.70	3.28
11.80	3.39
11.90	3.49
12.00	3.60

Height of Tide Required for Port Adelaide Inner Harbor (Oil Tankers & vessels exceeding 200m LOA)

Channel Declared Depth at LW - 9.3m LAT
Under Keel Clearance - 10 % of Draft

Draft	Tide Required
8.4	- .06
8.5	+.05
8.6	.16
8.7	.27
8.8	.38
8.9	.49
9.0	.60
9.1	.71
9.2	.82
9.3	.93
9.4	1.04
9.5	1.15

Draft	Tide Required
9.6	1.26
9.7	1.37
9.8	1.48
9.9	1.59
10.0	1.70
10.1	1.81
10.2	1.92
10.3	2.03
10.4	2.14
10.5	2.25
10.6	2.36
10.7	2.47

2.5.1.1 Port Adelaide Digital Tide Gauges

Port	Port Number	Data Available	Abbrev Dial
Outer Harbor	61600	Tide, Baro, Wind Speed, Wind Direction	1038

2.6 Resource Allocation

Launch Operations

2.6.1.1 Port Adelaide Pilot Launch Reporting Times

Arrivals 1 hour prior to POB (if shipping only). For reporting to Pilot pick up point, 30 minutes prior to scheduled Pilot Boarding Time.

Departures From Outer Harbor, half hour before sailing time (if shipping only).

Departures From Inner Harbour/Osborne, sailing time (if shipping only).

Mooring Personnel (Marine Services Team)

2.6.1.2 Port Adelaide Marine Services Team Reporting Times for Mooring Operations

Arrivals to OH1-4	Half hour after POB time
Arrivals to OH6-8	45 minutes after POB time if swinging (berthing port side to)
	30 minutes after POB time if berthing head-in
Arrivals to Osborne / Penrice	1 hour after POB time
Arrivals to Inner Harbor (all berths)	90 minutes after POB time
All departures	15 minutes prior to sailing time

2.7 Due Diligence & Risk Management

Noise Complaints

Noise complaints from the general public should be recorded on an Incident Report.

The following minimum checklist of information should be recorded from the complainant:

- Complainant name
- Phone No
- Address (if provided)
- Name (Author)
- Date
- Time
- Noise Source (vessel name)
- Location (berth)

- Noise type (e.g. fan)

Approaches may then be made to either the vessel master (or agent where appropriate) to investigate possible noise reduction, noting:

- Vessel Representative
- Comments/Advice received
- Weather conditions
- Operational issues that may affect the noise generated
- Any action taken as a result of the investigation

Small Boat Regattas

Notification of small boat regattas and yacht races must be brought to the attention of the VTS to ensure pilots and other significant vessel traffic are notified of the impending disruption to a clear channel.

If a pilotage is to occur during such an event, the pilot vessel should be deployed to ensure the safety of the piloted vessel by attempting to keep small vessels away.

Aquatic Events

Instruction to parties conducting aquatic events or other operations in the river should detail all precautionary steps in mitigating risks to both individuals partaking in the event and any vessels engaged in commercial shipping. These steps should include:

- Marine VHF protocols
- Provision of contact details
- Roles played by pilot launches or other vessels of authority

Any documentation including forwarding of advice should also be directed to all other operational marine groups (i.e. tugs) to ensure communicative awareness.

2.8 Reports

Various electronic and hardcopy reports are produced from the PortMIS application which are distributed to numerous internal and external clients.

Shipping Schedule

The shipping programme (Central) is presented formally (via e-mail) to resource groups daily at approximately 1145 (as a preliminary draft of the next day's schedule), providing the opportunity to enable resources to be initially rostered.

Interim parties (such as dredging or maritime operators) maybe included as required or deemed appropriate.

At 1500, a follow up report is provided (with pilot allocations included and confirmed time-frames where possible).

External Recipients

As a service to select external organisations that interact with commercial shipping (e.g. Customs, AQIS, Stevedores etc), two emailed electronic reports encompassing berth and vessel traffic prognostics are produced daily.

Additional reports can also be obtained from PortMIS directly by applying filtered queries to voyage/job related data for all or individual ports.

Public Shipping Schedule

Except for specific detailed queries, members of the public should be referred to the Flinders Ports Shipping Schedules for information relating to expected and actual movements, vessels in port and cruise ship schedules.

PortMIS Requested VARs

PortMIS requested VARs report provides a summary of voyage applications lodged by external shipping agents via the PortMIS Web Interface – Agent Portal that will require assessment prior to acceptance into the vessel traffic schedule.

3. Finance

3.1 Discounts/Waivers

Flinders Ports via the GMFP OR MARINE OPERATIONS MANAGER may approve discounts and/or waivers for clients depending upon a range of circumstances e.g. emergency repairs, operational etc

Additionally, Business Development may also negotiate incentive schemes with specific clientele depending upon their level of service. This type of discount is negotiated in commercial confidence and is not covered within this document.

All waivers granted require the VTS to advise the Finance section (Income Accounting Officer(s)) of revised billing times as applicable.

3.2 Berthing Time

This type of waiver is granted where a vessel is berthed ahead or has the sailing deferred of the required shipping agents requested time for the benefit of Flinders Ports' operational requirements i.e. tug resourcing, mooring resources etc.

This waiver is only applicable whilst the vessel is not loading or discharging.

3.3 Ad-Hoc

These waivers may be granted in instances where ships are in distress and require a safe berth to conduct emergency repairs. This is a negotiated waiver, depending on the individual circumstances.

3.4 Harbour Service Charge

Harbour Service Charge Waivers are provided when ships are undergoing repairs or decommissioned and undergoing grain surveys

This waiver only applies whilst ships are not loading/discharging.

3.5 Standby (Cargo Vessels)

In order to facilitate the entry of grain vessels into ports to undergo survey and cleaning prior to taking up the loading berth, vessels may receive a reduction in charges.

The reduction in charges for a vessel of approximately 30,000 GRT would be in the order of 70%.

The following rules apply.

- The grain vessel would be allocated a berth if one was available and did not inconvenience other shipping.
- The vessel would only berth during ordinary hours and not inconvenience the entry or departure of other shipping.
- Removals to the loading berth would be at normal cost.
- The normal variable component of the Harbor Service Charge would be applicable from arrival, that is, first line at the loading berth.

Grain vessels entering to undergo survey and cleaning in Flinders Ports' ports may be granted a waiver of the variable component of the Harbor Services Charge of approximately 70%. It is intended that this waiver apply a flat rate charge per day plus GST or part thereof when the grain loading ship is undergoing survey and cleaning. The charge to cease once the first line is achieved at the loading berth.

4. Administration

4.1 Locations & Berths

All country and port locations utilised by PortMIS are identified by UN/LOCODE Codes (CODE FOR TRADE AND TRANSPORT LOCATIONS).

Undefined locations

Where a country location is unknown, a Country Code of ZZ (Unknown) can be utilized.

Where a port location is unknown, a Port Code of ZZZ (Unknown) can be utilized.

SALOC

A location for SA Local Offshore (SALOC) exists to identify previous or next ports where the port(s) are local to SA but do not carry a recognised UN/LOCODE. This is typically applicable to fishing or passenger vessels (ferries) that may transit to Adelaide to undertake maintenance or survey.

Anchorage

Vessels arriving to anchor substantially ahead of scheduled pilot boarding times should be shown as same, with a shift inserted (at the job level) signifying a movement from anchor to the allotted berth. If it is chosen to simplify the voyage by omitting the arrival to anchor (and thus shift), opting instead for the scheduled entry time, then a comment should be included under the remarks tab of the job editor to indicate the vessel's actual ETA to the anchorage. To this advantage, vessels arriving substantially early to anchor ahead of scheduled pilot boarding times won't be of any surprise or concern to the VTSO.

Port Adelaide Lay-By Berths

Commercial berths maybe allocated as lay-by berths for maintenance requirements or provision of stores, and should only be issued under the condition that the vessel vacates the berth within a period when required by a priority vessel.

Requests for a lay-up berth from the fishing industry or by non-trading type vessels should be referred to Renewal SA for placement within their jurisdiction, as usage of a commercial berth for a long-term occupancy should be discouraged given its impact on the berth's availability for shipping.

Vessel Management

All vessel detail is to be added to PortMIS shall be validated based on information available from Lloyds SEA-WEB or from information supplied by the agent.

Where information pertaining to the GRT value of a vessel differs, a certificate of international tonnage shall be sourced from the agent which shall then dictate the GRT value. The value from Lloyds SEA-WEB shall be used until receipt of the certificate.

No vessel can be added into PortMIS via the agent web interface. An agent wishing to lodge a VAR where the vessel does not appear within the available list shall notify the VTS, who shall be responsible for its data entry into the system. Whilst logged into Lloyds SEA-WEB, an opportunity exists to source as much information as applicable (additional to fields provided through the VAR) to better establish the vessel within the database – such fields include year of build, MMSI number, call sign, depth, NRT and main engine output. Once lodged, the vessel will be available for selection via the web interface.

Name changes to vessels are simply applied directly over the existing name in the vessel editor, at which point former names are captured & auto-populated as historic under the 'previous names' tab.

Vessel Particulars & Limitations

Where available, electronic copies of plans detailing vessel particulars shall be sourced from the shipping agent and attached to the vessel details available within PortMIS. This information is of significant benefit to operational staff and should be sourced prior to the vessel's arrival if possible.

All VARs received for oversize vessels shall have the relevant notice submitted by the issuing agent. A copy of the notice is also required by the Principal Marine Environment and Safety Officer, DPTI with forwarding advice to include the expected arrival date of the subject vessel.

Temporary restrictions may be introduced at certain berths when shoaling or infrastructure damage is identified. This could typically limit visiting vessels to a reduced LOA and / or maximum draft then what is normally permitted. Any restrictions imposed will remain in force until repairs have been carried out or the berth has been returned to its gazetted depth and this has been confirmed by the GMFP OR MARINE OPERATIONS MANAGERFP.

Container Vessels – Port Adelaide

Where the new vessel to be added is a container vessel, the appropriate Shipping Service (to which the vessel operates) shall be sourced from either the issuing agent or the FACT website.

Allocation of an appropriate Shipping Service to a vessel is pertinent to container trade statistics supplied by Flinders Ports to numerous agencies and authorities.

Default Towing

Default allocation of tugs for arrival, shifts and departures associated with a port can be established for a vessel, identifying the tugs required based on orientation and swing requirements.

This information (where supplied) is also available to agents lodging electronically via the agent web interface.

Default Services

Default services are typically applied either by the finance department or operational staff where a specific service has been identified e.g. Crane hire, security fencing etc.

Mooring Personnel

Default numbers of mooring personnel are defined by operational staff as a component of a risk assessment.

Operational Notes (Remarks)

Operational notes (General / Pilot / Mooring / Launch) can be assigned to a vessel identifying additional or lesser towing requirements, handling and propulsion characteristics. Pilot remarks should be added by the VTS following feedback after a 1st visit by a specific vessel.

Regular Runners

Vessels identified as regular runners (e.g. Accolade II) have predefined schedules assigned enabling the bulk creation of multiple voyages formed from the summary of information held against voyage templates.

The definition of a regular runner schedule for a vessel must be defined prior to planning recurring visits. A single instance of a planned voyage (to be utilised as the template) must exist to establish the schedule.

Specialised Vessel Traffic Port Adelaide

In addition to normal scheduling of commercial vessel traffic for Port Adelaide, other specialised vessels require access to the channel which must be considered. These include:

Submarine Traffic

A voyage application request (VAR) is not normally provided for movements associated with submarine traffic. These voyages are to be created based on verbal or electronic notification from the submarine corporation and will remain active within the system until all associated movements are finalized. Departure time-frames are commonly not known in advance therefore should be set back as far as deemed appropriate allowing the voyage to remain active in the system until confirmation is received regarding sailing.

Submarine movements affect other commercial traffic when navigating the channel, requiring 1.5 hours to transit between the entrance beacon and the Australian Submarine Corporation (ASC).

Sufficient time must be provided within the traffic schedule to enable the vessel safe passage, prior to programming subsequent movements.

Tugs (Svitzer) are also required to assist where manoeuvring submarines at either the ASC Berths or the Shiplift, and must be accounted for when coordinating resources for other commercial traffic during these periods.

Submarines do not normally require a Flinders Ports Pilot (Naval pilots are sourced) but are notoriously slow whilst navigating the channel.

4.2 AIS (Automated Identification System)

Automated Identification System (AIS) is the technology that enables the real time tracking of movements associated with all vessels within range to be monitored and recorded, where the vessel is fitted with an AIS transponder. As at July 2002, the International Maritime Organization (IMO) mandated the use of AIS, as part of the carriage requirements for vessels in accordance with SOLAS Chapter V, Regulation 19.

AIS is a transponder-based communication system that permits participants to track and communicate with each other through an AIS network. The AIS network is designed for automatic and autonomous data communication between vessels, and between vessels and shore stations. AIS transponders work in broadcast mode on shared channels so that all transponder equipped vessels can see each other. The transponders communicate on VHF frequencies and exchange information about vessels and base stations using a standardized protocol. Flinders Ports AIS based stations currently only receive AIS transmissions.

AIS provides improved functionality, accessibility and workflow associated with the port management process.

AIS Target identification

To enable AIS target identification, Flinders Ports utilizes an electronic charting system which provides a visual display of vessel positions. This is achieved by interfacing with vessel's AIS transponder data transmissions (comprising of small encrypted packets of information known as AIS messages) which have been received within VHF range of an AIS base station. Local AIS target information is then displayed via the software and also relayed back to a central data repository for distribution to the other remote locations.

Each AIS message consists of various information including safety related messages, vessel information (MMSI, name, position, speed over ground (SOG), call sign etc), cargo etc. about the specific AIS target. Its transmission cycle is dependent on the target's current navigation status. AIS target information is typically received at 10 to 20 second intervals when the AIS target is underway and at approximately 3-minute intervals when the AIS target is either at anchor or berthed.

A mandatory component of the AIS message is the inclusion of an MMSI number (Maritime Mobile Service Identity).

Australian Search and Rescue (AusSAR), a part of AMSA, allocates and issues MMSI to Australian vessels. Large commercial vessels subject to the Safety of Life at Sea (SOLAS) Convention must carry DSC (Digital Selective Calling) equipment appropriate to their area of operations. To use DSC techniques, an MF/HF or VHF DSC transceiver must be permanently programmed with a unique nine-digit identification number known as the Maritime Mobile Service Identity (MMSI). The MMSI is automatically included in all DSC transmissions from a station and electronically identifies that station to the receiving station(s).

MMSI Formats

Three of the nine digits of an MMSI identify country of origin. In the case of a coast station these digits indicate the country of location, and in the case of a ship station, the country of registration. The remaining six digits uniquely identify the station itself. The three digits identifying the country are known as the Maritime Identification Digits or MID. Australia's MID is 503.

An Australian MMSI takes the form 503 x x x x x where x is any number from 0 to 9.

Further information about MMSIs can be obtained from the AMSA website.

AIS Rules

It is a mandatory condition when a vessel enters a port managed by Flinders Ports that the vessel's AIS remains operational at all times (including tanker berths).

Where awareness of a vessel's position is known and no AIS signal is currently being received from that vessel, contact should be made with the master of the vessel where possible (or the responsible Shipping Agent) by port communications staff to advise them of the mandatory requirement for their AIS to transmit.

Note:

Validate that AIS transmissions are being received from other targets, to confirm overall functionality of the AIS network, before contacting the master of the vessel.

UNCONTROLLED if printed

Where an invalid MMSI or IMO is broadcast or the geographic location or orientation of a vessel being tracked is observed to be incorrect, contact should be made with the GMFP OR MARINE OPERATIONS MANAGER in the first instance, or if unavailable AMSA (Chris Barber: Marine Surveyor 0419 828 716) to report the inconsistency.