Table of Contents

DISTRIBUTION LIST		
No.	**Holder**	**Organisation (Alphabetical Order)**
1	Port Hedland Manager	Allways Shipping
2	Port Hedland Manager	Asiaworld
3	Regional Manager , Port Hedland	Auriga Group
4	Manager Marine	BHP
5	Manager Production	BHP
6	Superintendent Marine Services	BHP
7	Superintendent – Port Services	BHP
8	Port Operations Manager	Fortescue
9	Marine Towage Operations	Fortescue
10	Port Hedland Manager	GAC World Shipping
11	Port Hedland Manager	Hedland Launch
12	Port Hedland Manager	Inchcape Shipping Services
13	Port Hedland Manager	Indian Ocean Shipping
14	Port Hedland Manager	Jetwave Marine Services
15	Branch Manager	LBH Shipping Agency
16	Port Hedland Operations Manager	Monson Agencies
17	Marine Superintendent	Odyssey Marine
18	General Manager	O'Brien Maritime Consultants
19	Towage Manager	Pilbara Marine Towage
20	Pilot Operation Manager	Pilbara Ports Pilots
21	Production Superintendent	Rio Tinto Minerals
22	General Manager	Rivtow Marine
23	Manager Shipping	Hancock Iron ore
24	Port Hedland Manager	Sea Corporation Pty Ltd
25	Lead Software Engineer	Saab Technologies (Klein)
26	Manager	Ship Agency Services Pty Ltd
27	Port Hedland Manager	Sturrock Grindrod Maritime Pty Ltd
28	General Manager	Kotug
29	Port Hedland Manager	Wilhelmsen Ship Services

1. OBJECTIVE

This document is intended for use by all personnel and organisations engaged in shipping operations and provides guidelines governing the movement of vessels at the Port of Port Hedland.

The guidelines in this document are subject to regular review and may be amended without notice by Pilbara Ports—Port Hedland depending on experience and observed operating conditions, in line with the Port's philosophy of continuous improvement and the safety and efficiency of vessel movement.

Section 10 and 11 of these guidelines provides information on dealing with emergency situations in the harbour and ships manoeuvrability requirements when navigating in the inner harbour.

Any vessel that cannot comply with the requirements within these guidelines may have restrictions imposed on their movements by the Harbour Master.

2. SCOPE

These guidelines and procedures have been developed and administered by Pilbara Ports—Port Hedland in accordance with its responsibilities under the Port Authorities Act 1999 (the Act) and the Port Authorities Regulations 2001 (the Regulations).

Pilbara Ports has the statutory authority to give effect to these guidelines and procedures within the Port of Port Hedland VTS area / Port Limits (refer to attachment 1).

The main functions of Pilbara Ports, as defined under the Act, include but are not limited to:

- being responsible for the safe and efficient operation of the port.
- protecting the environment of the port, and
- minimising the impact of the port activities on the environment.

In applying these guidelines and procedures, the safety of personnel always remains paramount.

3. VESSEL MOVEMENT GUIDELINES

The Harbour Master approves the following guidelines governing vessel movement in the port.

Vessels $\leq$ 340m LOA and a 60m beam, are the maximum dimensions for vessels approved for the Port.

Vessels > 335m LOA will berth at the discretion of the Harbour Master and in certain tidal and weather conditions may be restricted to daylight berthing and sailing.

Vessels over 280m LOA **must** be fitted with a bridge front compass/repeater positioned at or near the centreline, suitable to be used for pilotage. If a vessel calls at the Port of Port Hedland without this configuration the vessel will be restricted to daylight movements.

Irrespective of the proposed manoeuvre, vessels that have poor handling characteristics may be limited to daylight operations only.

Pilotage is not compulsory for the following:

(a) A vessel operated by a defence force of Australia, other than a vessel used primarily to transport troops, fuel oil, stores, or equipment.

(b) A vessel with a LOA of not more than 35m.

(c) A vessel under the command of an exempt Master permitted to be moved under the authority of the exempt master's pilotage exemption certificate.

(d) If the vessel is being led by another vessel that is under the control of a pilot in the circumstances described in regulation 40 of the Port Authorities Regulations 2001.

(e) If the vessel is, for the convenience of shipping in the port or because the vessel is engaged in dredging operations, exempted by the harbour master from using pilotage services.

Inward pilotage is compulsory for all vessels not listed above using the main shipping channel and navigating south of Latitude 20°10.000'S within the VTS area / Port Limits.

Outward pilotage is compulsory for all vessels not listed above using the main shipping channel.

Any vessel that poses an unacceptable risk to safe operations or continued poor performance at the Port of Port Hedland may be deemed unacceptable for entry into the Port.

3.1 Weather Parameters for Vessel Movements

Refer to "Port of Port Hedland – Weather Parameters for Vessel Movements".

3.2 Channel Entry / Exit Depths and Under-Keel-Clearance Requirements

Vessels entering / exiting the Port Hedland channel will require a minimum UKC of 2.5m, based upon the following declared depth:

Beacon 30/31 10.1m chart datum

Beacon 26/28 10.5m chart datum **Beacon 15/16** 13.4m chart datum

The Harbour Master may approve a reduction in this requirement in exceptional circumstances.

Arriving vessels: The vessel must maintain a minimum **UKC of 2.5m** whilst transiting **2E / 3E** waypoint via the eastern approach. **2E/3E**: 10.5m chart datum

Vessels berthing at the Port of Port Hedland must have a minimum of **1.2m UKC** in the applicable turning basin.

Vessels alongside Port of Port Hedland berths must maintain a minimum of 1.0m UKC at all times unless dispensation has been sought and approved by the Harbour Master.

A vessel arriving with a draft > 12.5 m and/or displacement > the *maximum berthing displacement for a specific berth (refer Port of Port Hedland Port Handbook) will be dealt with on a case-by-case basis.

3.3 Berthing Drafts

To reduce operational delays for de-ballasting whilst maintaining operational safety during berthing manoeuvring, the following criteria should be achieved by vessels.

Table 1: Vessel berthing drafts, trim and propeller immersion requirements under normal metocean conditions.

VESSEL SIZE	MINIMUM DRAFTS	MAXIMUM STERN TRIM	MINIMUM PROPELLER IMMERSION
≤ 10,000 DWT	Fwd. ≥ 2.5m	2.5m	100%
10,001 DWT to ≤ 20,000 DWT	Fwd. ≥ 3.0m	2.5m	100%
20,001 DWT to ≤ 50,000 DWT	Fwd. ≥ 3.5m	3.0m	90%
50,001 to ≤ 80,000 DWT	Fwd. ≥ 4.0m	1.5% of LOA	90%
80,001 DWT to ≤ 100,000 DWT	Fwd. ≥ 5.0m	0.7% of LOA	90%
100,001 DWT to ≤ 130,000 DWT	Fwd. ≥ 6.2m	0.7% of LOA	90%
130,001 DWT to ≤ 200,000 DWT	Fwd. ≥ 7.0m	0.7% of LOA	90%
> 200,001 DWT	Fwd. ≥ 7.5m	0.7% of LOA	90%

4. BERTHING AND SHIFTING VESSELS

4.1 Nelson Point Berths (NPA / NPB / NPC / NPD)

4.1.1 Berthing

Without limiting the effects of section 3; vessels may berth at Nelson Point at any time, day or night.

4.1.2 Shifting Ship NPA – NPB and NPC – NPD

The height/range of the tide will influence the timing of such moves, and the number of tugs required.

A vessel will not be moved out of the berth pocket near the end of an ebb tide if there is <0.5m UKC at LW.

Vessels > 192,000 DWT will require 3 tugs to shift between adjacent berths. Vessels < 192,000 DWT will require a minimum of 2 tugs.

The number of tugs required may be adjusted on the advice of the Marine Pilot to the Harbour Master, considering all the prevailing circumstances at the time.

4.2 Finucane Island Berths - (FIA / FIB)

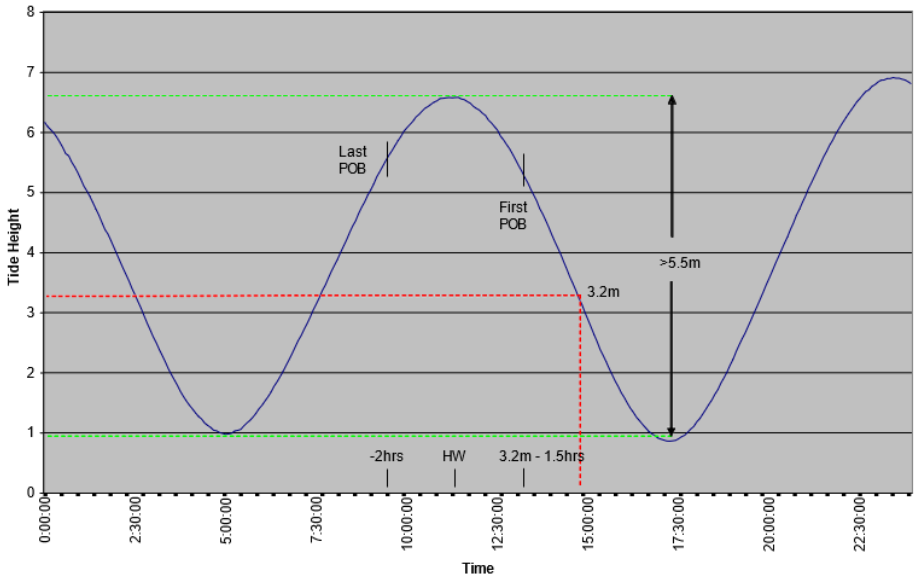
4.2.1 Berthing

Without limiting the effects of section 3:

- Vessels may berth on flood tides at any time day or night,
- Vessels may berth on ebb ranges <5.5m at any time day or night.

On ebb tide ranges ≥ 5.5m vessels will not berth from high water until the tide has fallen to 3.2m in the turning basin. This means that the POB time will be no later than 2 hours before high water and no earlier than 1.5 hours before the tide falls to 3.2m in the turning basin.

Figure 1



4.2.2 Shifting Ships FIA - FIB

The timing of such moves may be influenced by the height / range of the tide.

A vessel will not be moved out of the berth pocket near the end of an ebb tide if there will be <0.5m UKC at LW.

Regardless of vessel DWT, 4 tugs will typically be required to shift between adjacent berths. The number of tugs required may be adjusted on the advice of the Marine Pilot to the Harbour Master, taking into consideration all the circumstances prevailing at the time.

4.3 Finucane Island Berths - (FIC / FID)

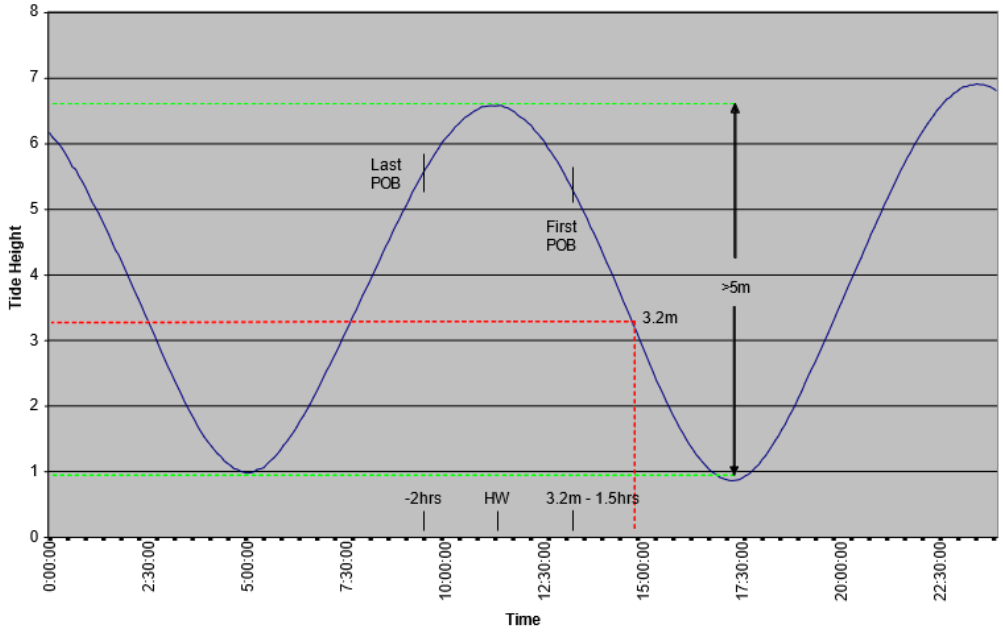
4.3.1 Berthing

Without limiting the effects of section 3:

- Vessels may berth on flood tides at any time day or night.
- Vessels may berth on ebb ranges of less than 5m at any time day or night.

On ebb tide ranges ≥ 5.0m vessels will not berth from high Water until the tide has fallen to 3.2m in the turning basin. This means that the POB time will be no later than 2 hours before high water and no earlier than 1.5 hours before the tide falls to 3.2m in the turning basin.

Figure 2



4.3.2 Shifting Ship FIC / FID

The timing of such moves may be influenced by the height/range of the tide.

A vessel will not be moved out of the berth pocket near the end of an ebb tide if there is < 0.5m UKC at LW.

Regardless of vessel DWT, 4 tugs will typically be required to shift between adjacent berths. The number of tugs required may be adjusted on the advice of the Marine Pilot to the Harbour Master, considering all the prevailing circumstances at the time.

4.4 Anderson Point Berths (AP1 / AP2 / AP3)

4.4.1 Berthing

Without limiting the effects of section 3, vessels may berth at Anderson Point any time day or night.

4.4.2 Shifting Ship AP1 - AP2 and AP2 - AP3

Shifting a Ship between these berths will be determined on a case-by-case basis by the Harbour Master.

4.5 Anderson Point Southwest Creek Berths (AP4 / AP5)

The maximum size vessel limitation for AP4 and AP5 is 330m LOA (and 265,000DWT). No two vessels of >212,000 DWT can be berthed at AP4 and AP5 at the same time.

4.5.1 Berthing

Vessels turning in the harbour and backing into AP4 or AP5 are to abide by the following inbound parameters:

All vessels may berth at any time on a flood tide with a range < 5.0m and on ebb tides with a range < 5.5m.

On ebb tides ≥ 5.5m, vessels may berth once the tide has fallen below 3.5m in the main turning basin. This means that POB time will be no later than 2 hours before high water and no earlier than 1.5 hours before the tide falls to 3.5m in the turning basin.

4.5.2 Shifting Ship AP4 - AP5

The height/range of the tide may influence the timing of such moves and the number of tugs.

Shifting ship to and from AP4 and AP5 will be determined on a case-by-case basis by the Harbour Master.

4.6 Stanley Point SouthWest Creek Berths (SP1 / SP2)

The maximum size vessel limitation for SP1 and SP2 is 300m LOA (Nominal 212,000 DWT).

4.6.1 Berthing

Vessels turning in the harbour and backing into SP1 and SP2 are to follow the following inbound parameters:

All vessels may berth at any time on a flood tide with a range <5.0m and on ebb tides with a range <5.5m.

On ebb tides ≥ 5.5m vessels may berth once the tide has fallen below 3.5m in the main turning basin. This means that POB time will be no later than 2 hours before high water and no earlier than 1.5 hours before the tide falls to 3.5m in the turning basin.

4.6.2 Shifting Ship SP1 – SP2

Shifting ship to and from SP1 and SP2 will be determined on a case-by-case basis by the Harbour Master.

4.7 PH1, PH2, PH3 and PH4

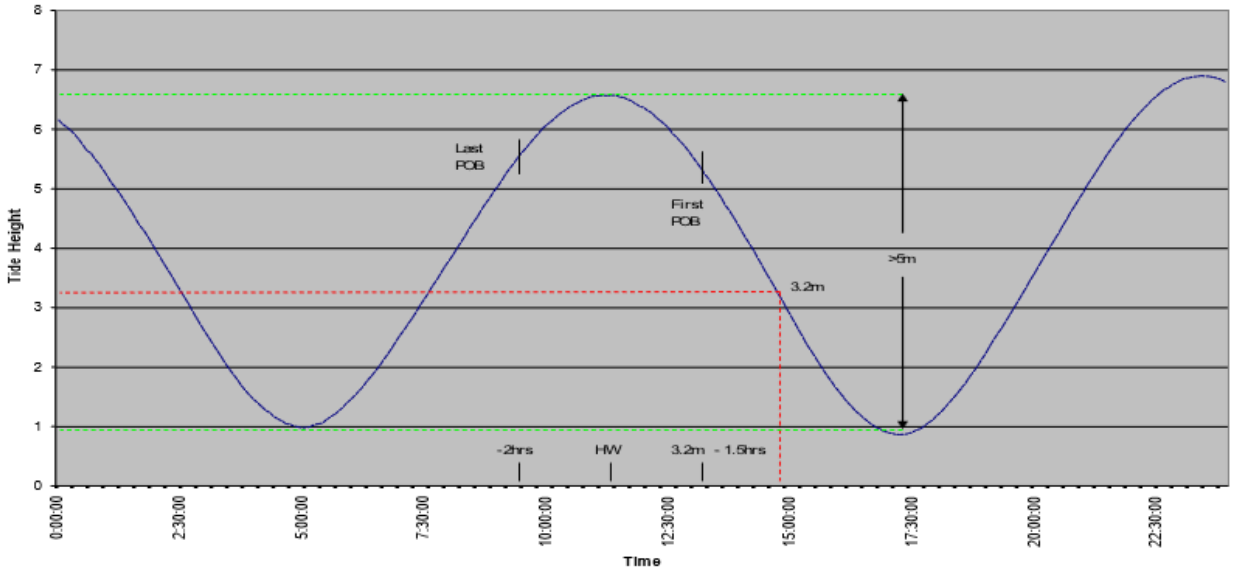
4.7.1 Berthing

Without limiting the effects of section 3, vessels destined for PH1, PH2, and PH3 may berth at any time, day or night.

For PH4, without limiting the effects of section 3:

- Vessels may berth on flood tides at any time, day or night.
- Vessels may berth on ebb ranges <5.5m at any time, day or night.
- On ebb tides ranges ≥ 5.5 m, vessels may berth once the tide has fallen below 3.2 m in the main turning basin. This means that the POB will be no later than 2 hours before high water and no earlier than 1.5 hours before the tide falls to 3.2 m in the turning basin

Figure 3



4.7.2 Shifting Ship PH Berths

The height andrange of the tide may influence the timing of such moves and the number of tugs.

A vessel will not be moved out of the berth pocket near the end of an ebb tide if there is <0.5m UKC at LW.

Shift ship movements between any of the PH berths will be assessed on a case-by- case basis by the Harbour Master taking into consideration all the circumstances prevailing at the time.

5. DEPARTURES

Vessels > 335m may be daylight restricted.

All vessels must complete loading, close cargo hatches, complete all paperwork, and have the ship loader clear of the vessel at least 30 minutes before the scheduled Last Line Ashore (LLA) time.

LLA times for tidally constrained departing vessels should be no later than 15 minutes before the close of the vessel's DUKC® window. Exemption to this requirement may only be granted by the Harbour Master or delegate.

5.1 Nelson Point, Anderson Point (AP1 / AP2 / AP3) and Finucane Island Berths

Vessels less than 260m LOA and ≤ 120,000 DWT may depart at any time.

5.1.1 Flood Tide Departures

All vessels may depart on the flood tide at any time.

5.1.2 Restrictions on Ebb Tide Departures

General Restrictions – All Berths (Excluding SWC)

- **Vessels ≥ 120,000 DWT and ≤ 192,000 DWT**
  - May depart on ebb tides with a range **< 6.0 m** at any time, or
  - On ebb tides **≥ 6.0 m** once the tide has fallen to a height of **3.2 m**.
- **Vessels > 192,000 DWT – Berths FIC, FID**
  - May depart on ebb tides with a range **< 3.5 m** at any time.

Reduced Restrictions – Berths AP1, AP2, AP3, NPA, NPB, NPC, NPD, FIA, FIB

(These berths allow larger vessels to depart on greater tide ranges than the general limits above)

- **Vessels > 192,000 DWT and ≤ 212,000 DWT**
  - May depart on ebb tides with a range **< 4.2 m** at any time, or
  - May depart on ebb tides with a range **≥ 4.2 m and < 6.0 m**, but **no later than 45 minutes after high water**, or
  - On ebb tides **≥ 6.0 m** once the tide has fallen to a height of **3.2 m**.
- **Vessels > 212,000 DWT**
  - May depart on ebb tides with a range **< 3.5 m** at any time

5.2 Anderson Point Southwest Creek Berths (AP4 / AP5)

Vessels < 265,000 DWT may depart on the flood tide, at any time.

Vessels < 265,000 DWT may depart on ebb tides with a range of up to 3.5m at any time.

5.3 Stanley Point Southwest Creek Berths (SP1 / SP2)

SP1 and SP2 vessels < 212,000 DWT may depart on the flood tide, at any time.

Vessels < 212,000 DWT may depart on ebb tides with a range of up to 3.5m, at any time.

5.4 PH1, PH2, PH3 and PH4 Berths

PH 1, 2 and 3 Berths - Vessels may depart at any time subject to sufficient UKC.

PH4 Berth - Vessels may depart at any time subject to sufficient UKC (refer to section 6.2.3 for conditions for ebb tide departures over 5m range).

6. TUG ALLOCATION AND TOWAGE STRATEGY

The number of tugs required for a vessel's arrival or departure may be adjusted based on the advice of the Marine Pilot to the Harbour Master, taking into consideration all the circumstances prevailing at the time, i.e., prevailing weather and tide conditions.

Vessels exceeding the prescribed berthing displacement may require additional towage taking into consideration all the circumstances prevailing at the time i.e., prevailing weather and tide conditions.

Ad hoc vessel movement that falls outside the parameters covered in this document will be reviewed by the Pilbara Ports / Harbour Master on a case-by-case basis.

It is not expected that towage requirements will be reduced for vessels having bow thruster/s.

Specifications of all Port Hedland tugs are annotated in the port of Port Hedland Port Handbook.

6.1 Smaller Vessels (All Berths)

< 1,500 DWT

Will require a minimum of 1 tug for all movements or as directed by the Harbour Master.

≥1,500 DWT to < 25,000 DWT

Will require 1 or 2 tugs for all movements or as directed by the Harbour Master.

6.2 Larger Vessels

6.2.1 Nelson Point, Anderson Point (AP1, AP2, AP3) and PH1, PH2, PH3, Berths

< 90,000 DWT
Will require a minimum of 2 tugs for all movements or as directed by the Harbour Master.

≥ 90,000 to 150,000 DWT
Will require a minimum of 3 tugs for all movements or as directed by the Harbour Master.

>150,000 DWT
Will require a minimum of 4 tugs for all movements or as directed by the Harbour Master.

6.2.2 Finucane Island Berths

< 130,000 DWT
Will require a minimum of 3 tugs for all movements or as directed by the Harbour Master.

An additional tug will be required for departures on the ebb tide where the range is >5.0m.

≥ 130,000 DWT
Will require a minimum of 4 tugs for all movements or as directed by the Harbour Master.

6.2.3 PH4 Berth (Utah Point)

For departures on the ebb tide where the range is >5.0m, an additional tug will be required in conjunction with the following or at Harbour Master's discretion:

< 90,000 DWT
Will require a minimum of 2 tugs for all movements or as directed by the Harbour Master.

≥90,000 to 130,000 DWT
Will require a minimum of 3 tugs for all movements or as directed by the Harbour Master.

6.2.4 Southwest Creek Berths (AP4 / AP5 / SP1 / SP2)

Will require a minimum of 4 tugs for all movements or as directed by the Harbour Master.

6.3 Passenger Vessels / High Windage Area Vessels

The towage requirement for passenger vessels and high windage area vessels (e.g., RORO, PCC vessels) will be determined by Pilbara Ports / Harbour Master on a case-by-case basis.

6.4 Towage Allocation for Outbound Vessels

The following towage allocation is a minimum guideline and may be adapted taking into consideration all the circumstances prevailing at the time.

Vessels ≤ 1,500 DWT must:

- Retain 1 x escort tug tethered (made fast) to the vessel from berth to beacons 30/31.
- Unless deemed necessary by the Marine Pilot through a risk assessment, the escort tug must not be untethered (cast off) from the vessel before reaching beacons 30/31.

Vessels ≥ 1,500DWT to < 90,000DWT departing Nelson Point, Anderson Point (AP1, AP2, AP3) and PH1, PH2, PH3, PH4 (Utah Point) berths must:

- Retain 2 x escort tugs tethered (made fast) to the vessel from berth to beacons 30/31.
- Unless deemed necessary by the Marine Pilot through a risk assessment, the escort tugs must not be untethered (cast off) from the vessel before reaching beacons 30/31.
- For deep draft (tidally constrained) vessels, one (1) dedicated Passive Escort Tug will be suitably positioned at the discretion of the Marine Pilot for departures from berth to beacon 15/16. The tug should be tethered (made fast) from berth to beacon 30/31 and remain passive until beacons 15/16. The dedicated Passive Escort Tug must be capable of centre lead forward operations if required by the Marine Pilot.
- Additionally, for deep draft (tidally constrained) vessels, subject to risk assessment and the subsequent decision of the Marine Pilot, an additional Passive Escort Tug will be suitably positioned at the discretion of the Marine Pilot for departures from berth to beacons 15/16.
- The '1st Available Tug' (Table 7 – Towage Allocation Intervals) is not applicable.

Vessels ≥ 1,500DWT to < 90,000DWT departing PH4 berth (Utah Point) ebb tide range >5m must:

- Retain 3 x escort tugs tethered (made fast) to the vessel from berth to Hunt Point.
- Retain 2 x escort tugs tethered (made fast) to the vessel from Hunt Point to beacons 30/31. Unless deemed necessary by the Marine Pilot through a risk assessment, the escort tugs must not be untethered (cast off) from the vessel before reaching beacons 30/31.
- For deep draft (tidally constrained) vessels, one (1) dedicated Passive Escort Tug will be suitably positioned at the discretion of the Marine Pilot for departures from berth to beacon 15/16. The tug should be tethered (made fast) from berth

to beacon 30/31 and remain active or passive until beacons 15/16 as per pilot's assessment. The dedicated Passive Escort Tug must be capable of centre-lead forward operations if required by the Marine Pilot.

- Additionally, for deep draft (tidally constrained) vessels, subject to risk assessment and the subsequent decision of the Marine Pilot, an additional Passive Escort Tug will be suitably positioned at the discretion of the Marine Pilot, an additional Passive Escort Tug will be suitably positioned at the discretion of the Marine Pilot for departures from berth to beacon 15/16.

Vessels ≥ 90,000DWT to < 130,000DWT departing PH4 berth (Utah Point) must:

- Retain 3 x escort tugs tethered (made fast) to the vessel from berth to beacons 30/31.
- Unless deemed necessary by the Marine Pilot through a risk assessment, the escort tugs (except for the line aft dedicated Active Escort Tug applicable to cape sized vessels >120,000DWT), must not be untethered (cast off) from the vessel before reaching beacons 30/31.
- A dedicated Active Escort Tug will be allocated to all deep draft (tidally constrained) cape sized vessels >120,000DWT. The dedicated escort tug will be positioned and secured line aft for departures from berth to beacon 15/16 (vessels maintain a speed of approximately 8 knots during active escort towage).
- A dedicated Passive Escort Tug will be allocated to all deep draft (tidally constrained) cape sized vessels >120,000DWT. The dedicated Passive Escort Tug will be suitably positioned at the discretion of the Marine Pilot for departures from berth to beacon 15/16. The tug should be tethered (made fast) from berth to beacon 30/31 and remain active or passive as per the Marine Pilot's assessment until beacons 15/16. The dedicated Passive Escort Tug must be capable of centre- lead forward operations if required by the Marine Pilot.
- For deep draft (tidally constrained) vessels <120,000DWT, one (1) dedicated Passive Escort Tug will be suitably positioned at the discretion of the Marine Pilot for departures from berth to beacon 15/16. The tug should be tethered (made fast) from berth to beacon 30/31 and remain active or passive as per the Marine Pilot's assessment until beacons 15/16. The dedicated Passive Escort Tug must be capable of centre-lead forward operations if required by the Marine Pilot.
- Additionally, for deep drafted (tidally constrained) vessels <120,000 DWT, subject to risk assessment and the subsequent decision of the Marine Pilot, an additional Passive Escort Tug will be suitably positioned at the discretion of the Marine Pilot for departures from berth to beacon 15/16.
- The '1st Available Tug' (Table 7 – Towage Allocation Intervals) is not applicable.

Vessels ≥ 90,000DWT to ≤ 130,00DWT departing PH4 berth (Utah Point) ebb tide range >5m must:

- Retain 4 x escort tugs tethered (made fast) to the vessel from berth to Hunt Point.

- Retain 3 x escort tugs tethered (made fast) to the vessel from Hunt Point to beacons 31/30.
- Unless deemed necessary by the Marine Pilot through a risk assessment, the escort tugs (except for the line aft dedicated Active Escort Tug applicable to cape sized vessels >120,000 DWT) must not be untethered (cast off) from the vessel prior to reaching beacons 30/31.
- A dedicated Active Escort Tug will be allocated to all deep draft (tidally constrained) cape sized vessels >120,000 DWT. The dedicated Escort Tug will be positioned, and secured line aft for departures from berth to beacon 15/16 (vessels maintain a speed of approximately 8 knots during active escort towage).
- A dedicated Passive Escort Tug will be allocated to all deep draft (tidally constrained) cape sized vessels >120,000 DWT. The dedicated Passive Escort Tug will be suitably positioned at the discretion of the Marine Pilot for departures from berth to beacon 15/16. The tug should be tethered (made fast) from berth to beacon 30/31 and remain active or passive as per the Marine pilot's assessment until beacons 15/16. The dedicated Passive Escort Tug must be capable of centre- lead forward operations if required by the Marine Pilot.
- For deep draft (tidally constrained) vessels <120,000 DWT, one (1) dedicated Passive Escort Tug will be suitably positioned at the discretion of the Marine Pilot for departures from berth to beacon 15/16. The tug should be tethered (made fast) from berth to beacon 30/31 and remain passive until beacons 15/16. The dedicated Passive Escort Tug must be capable of centre-lead forward operations if required by the Marine Pilot.
- Additionally, for deep draft (tidally constrained) vessels <120,000 DWT, subject to risk assessment and the subsequent decision of the Marine Pilot, an additional Passive Escort Tug will be suitably positioned at the discretion of the Marine Pilot for departures from berth to beacon 15/16.

Vessels < 130,000DWT departing Finucane Island berths must:

- Retain 3 x escort tugs tethered (made fast) to the vessel from berth to beacons 30/31.
- Unless deemed necessary by the Marine Pilot through a risk assessment, the escort tugs (except for the line aft dedicated Active Escort Tug applicable to cape sized vessels >120,000 DWT) must not be untethered (cast off) from the vessel prior to reaching beacons 30/31.
- A dedicated Active Escort Tug will be allocated to all deep draft (tidally constrained) cape sized vessels >120,000 DWT. The dedicated Escort Tug will be positioned, and secured line aft for departures from berth to beacon 15/16 (vessels maintain a speed of approximately 8 knots during active escort towage).
- A dedicated Passive Escort Tug will be allocated to all deep draft (tidally constrained) cape sized vessels >120,000 DWT. The dedicated Passive Escort Tug will be suitably positioned at the discretion of the Marine Pilot for departures

from berth to beacon 15/16. The tug should be tethered (made fast) from berth to beacon 30/31 and remain passive until beacons 15/16. The dedicated Passive Escort Tug must be capable of centre-lead forward operations if required by the Marine Pilot.

- For deep draft (tidally constrained) vessels <120,000 DWT, one (1) dedicated Passive Escort Tug will be suitably positioned at the discretion of the Marine Pilot for departures from berth to beacon 15/16. The tug should be tethered (made fast) from berth to beacon 30/31 and remain passive until beacons 15/16. The dedicated Passive Escort Tug must be capable of centre-lead forward operations if required by the Marine Pilot.
- Additionally, for deep draft (tidally constrained) vessel <120,000DWT, subject to risk assessment and the subsequent decision of the Marine Pilot, an additional Passive Escort Tug will be suitably positioned at the discretion of the Marine Pilot for departures from berth to beacon 15/16.
- The '1st Available Tug' (Table 7 – Towage Allocation Intervals) is not applicable.

Vessels ≥ 130,000 DWT departing Finucane Island berths must:

- Retain 4 x escort tugs tethered (made fast) to the vessel from berth to Hunt Point.
- Retain 3 x escort tugs tethered (made fast) to the vessel from Hunt Point to beacons 30/31.
- Unless deemed necessary by the Marine Pilot through a risk assessment, the escort tugs (except for the line aft dedicated Active Escort Tug) must not be untethered (cast off) from the vessel before reaching beacons 30/31.
- A dedicated Active Escort Tug will be allocated to all deep draft (tidally constrained) cape sized vessels > 120,000 DWT. The dedicated Escort Tug will be positioned and secured line aft for departures from berth to beacon 15/16 (vessels maintain a speed of approximately 8 knots during active escort towage).
- A dedicated Passive Escort Tug will be allocated to all deep draft (tidally constrained) cape sized vessels > 120,000 DWT. The dedicated Passive Escort Tug will be suitably positioned at the discretion of the Marine Pilot for departures from berth to beacon 15/16. The tug should be tethered (made fast) from berth to beacon 30/31 and remain passive until beacons 15/16. The dedicated Passive Escort Tug must be capable of centre-lead forward operations if required by the Marine Pilot.

Vessels ≥ 90,000DWT to ≤ 150,000DWT departing Nelson Point, Anderson Point (AP1, AP2, AP3) berths must:

- Retain 3 x escort tugs tethered (made fast) to the vessel from berth to beacons 30/31.
- Unless deemed necessary by the Marine Pilot through a risk assessment, the escort tugs (except for the line aft dedicated Active Escort Tug applicable to cape sized vessels >120,000 DWT) must not be untethered (cast off) from the vessel before reaching beacons 30/31.

- A dedicated Active Escort Tug will be allocated to all deep draft (tidally constrained) cape sized vessels >120,000 DWT. The dedicated Escort Tug will be positioned and secured line aft for departures from berth to beacon 15/16 (vessels maintain a speed of approximately 8 knots during active escort towage).
- A dedicated Passive Escort Tug will be allocated to all deep draft (tidally constrained) cape sized vessels >120,000 DWT. The dedicated Passive Escort Tug will be suitably positioned at the discretion of the Marine Pilot for departures from berth to beacon 15/16. The tug should be tethered (made fast) from berth to beacon 30/31 and remain passive until beacons 15/16. The dedicated Passive Escort Tug must be capable of centre-lead forward operations if required by the Marine Pilot.
- For deep draft (tidally constrained) vessels <120,000 DWT, one (1) dedicated Passive Escort Tug will be suitably positioned at the discretion of the Marine Pilot for departures from berth to beacon 15/16. The tug should be tethered (made fast) from berth to beacon 30/31 and remain passive until beacons 15/16. The dedicated Passive Escort Tug must be capable of centre-lead forward operations if required by the Marine Pilot.
- Additionally, for deep draft (tidally constrained) vessels <120,000 DWT, subject to risk assessment and the subsequent decision of the Marine Pilot, an additional Passive Escort Tug will be suitably positioned at the discretion of the Marine Pilot for departures from berth to beacon 15/16,
- The '1st Available Tug' (Table 7 – Towage Allocation Intervals) is not applicable.

Vessels > 150,000DWT departing Nelson Point, Anderson Point (AP1, AP2, AP3) and PH1, PH2, PH3, berths must:

- Retain 4 x escort tugs tethered (made fast) to the vessel from berth to Hunt Point.
- Retain 3 x escort tugs tethered (made fast) to the vessel from Hunt Point to beacons 30/31.
- Unless deemed necessary by the Marine Pilot through a risk assessment, the tethered (made fast) escort tugs (except for the line aft dedicated Active Escort Tug) must not be untethered (cast off) from the vessel before reaching beacons 30/31.
- A dedicated Active Escort Tug will be allocated to all deep draft (tidally constrained) cape sized vessels >120,000 DWT. The dedicated Escort Tug will be positioned and secured line aft for departures from berth to beacon 15/16 (vessels maintain a speed of approximately 8 knots during active escort towage).
- A dedicated Passive Escort Tug will be allocated to all deep draft (tidally constrained) cape sized vessels >120,000 DWT. The dedicated Passive Escort Tug will be suitably positioned at the discretion of the Marine Pilot for departures from berth to beacon 15/16. The tug should be tethered (made fast) from berth to beacon 30/31 and remain passive until beacons 15/16. The dedicated

Passive Escort Tug must be capable of centre-lead forward operations if required by the Marine Pilot.

Vessels departing Southwest Creek berths must:

- Retain 4 x escort tugs tethered (made fast) to the vessel from berth to Hunt Point.
- Retain 3 x escort tugs tethered (made fast) to the vessel from Hunt Point to beacons 30/31.
- Unless deemed necessary by the Marine Pilot through a risk assessment, the tethered (made fast) escort tugs (except for the line aft dedicated Active Escort Tug applicable to cape sized vessel >120,000 DWT) must not be tethered (cast off) from the vessel prior to reaching beacons 30/31.
- A dedicated Active Escort Tug will be allocated to all deep draft (tidally constrained) cape sized vessels >120,000 DWT. The dedicated Escort Tug will be positioned and secured line aft for departures from berth to beacon 15/16 (vessels maintain a speed of approximately 8 knots during active escort towage).
- A dedicated Passive Escort Tug will be allocated to all deep draft (tidally constrained) cape sized vessels >120,000 DWT. The dedicated Passive Escort Tug will be suitably positioned at the discretion of the Marine Pilot for departures from berth to beacon 15/16. The tug should be tethered (made fast) from berth to beacon 30/31 and remain passive until beacons 15/16. The dedicated Passive Escort Tug must be capable of centre-lead forward operations if required by the Marine Pilot.
- For deep draft (tidally constrained) vessels <120,000 DWT, two (2) dedicated Passive Escort Tugs will be suitably positioned at the discretion of the Marine Pilot for departures from berth to beacon 15/16. The tug should be tethered (made fast) from berth to beacon 30/31 and remain passive until beacons 15/16. The dedicated Passive Escort Tugs must be capable of centre-lead forward operations if required by the Marine Pilot.
- For deep draft (tidally constrained) vessels <120,000DWT, one (1) dedicated Passive Escort Tug will be suitably positioned at the discretion of the Marine Pilot for departures from berth to beacon 15/16. The tug should be tethered (made fast) from berth to beacon 30/31 and remain passive until beacons 15/16. The dedicated Passive Escort Tug must be capable of centre lead forward operations if required by the Marine Pilot.
- Additionally, for deep draft (tidally constrained) vessels <120,000 DWT, subject to risk assessment and the subsequent decision of the Marine Pilot, an additional Passive Escort Tug will be suitably positioned at the discretion of the Marine Pilot for departures from berth to beacon 15/16.

Outbound vessel convoy:

In addition to the above outbound towage parameters, an additional Passive Escort Tug will be allocated to all deep draft (tidally constrained) vessels ≥120,000 DWT that **CONCLUDE** the outbound departure convoy. The dedicated additional Passive Escort

Tug will be suitably positioned at the discretion of the Marine Pilot for departures from berth to beacon 15/16. The tug should be tethered (made fast) from berth to beacon 30/31 (subject Marine Pilot risk assessment) and remain passive until beacons 15/16. The dedicated additional Passive Escort Tug must be capable of centre-lead forward operations if required by the Marine Pilot.

For clarity:

- The last deep draft vessel is defined as a vessel **≥ 120,000 DWT**, a maximum draft **≥ 14.3 m,** and the last to sail before low water. This vessel will be allocated an additional Passive Escort Tug.

6.5 Zone 5 towage requirement for outbound vessels >120,000DWT

Vessels ≤ 205,000 DWT (Conventional Fuel)

- Aft centre lead active (1)
- Aft passive (1)

Vessels ≤ 205,000 DWT (Dual Fuel / Flared Stern):

- Aft centre lead active (1)
- Aft passive (2)

Vessels > 205,000 DWT :

- Aft centre lead (1)
- Aft passive (2)

Last capesize vessel (>120,000 DWT) on departure tide:

- Aft centre lead active (1)
- Aft passive (2)

6.6 Towage Allocation for Inbound Vessels

All inbound vessels entering the shipping channel at beacons 15/16 will have a dedicated tug positioned “line aft” before channel entry. The tug shall be tethered (made fast) before entering the shipping channel.

An additional tethered tug is required for part-loaded capesize vessels and loaded tankers entering the shipping channel at beacons 15/16 and/or 30/31(i.e. 2 tugs must be tethered (made fast) before entering the channel.

All inbound vessels entering the shipping channel at beacons 30/31,beacon 26 or beacons15/16 will have a dedicated tug positioned “line aft” before channel entry. The tug shall be tethered (made fast) before entering the shipping channel.

7. TIME INTERVALS BETWEEN MOVEMENTS

The purpose of maintaining time intervals between shipping movements considers factors such as navigation light visibility (including lead lights), vessel incident management and the allocation of port resources (tugs, lines boats, mooring gangs).

7.1 Interval between Inbound Vessels

Inward movements should therefore take into consideration the type; speed and manoeuvrability of the first vessel to ensure the above conditions are met.

The interval between inbound vessels is 1 hour except in the cases of:

- A vessel following an FIC or FID inbound will be scheduled POB 1 hour 30 minutes after the inbound vessel to FIC or FID.
- A vessel following a PH1 starboard alongside will be scheduled POB 1 hour and 15 minutes after the inbound to PH1.

The pilot is responsible for determining the progress of the lead ship and, if necessary, delaying entry as conditions require.

Dependent on UKC requirements being met, scheduling of vessels and safety considerations, the inbound interval may be reduced to 30-minutes where the first vessel is berthing in the southern end of the harbour (NPC, NPD, AP2, AP3) followed by a vessel berthing in the northern part of the harbour.

7.2 Interval between Inbound Vessel Followed by Outbound Vessel

Where an inbound movement is to be followed by an outbound movement, the outbound vessel may leave its berth only when the pilot is satisfied that it is safe to do so. To this end, the pilots involved should discuss the manoeuvre and liaise with each other by radio and through “Port Hedland VTS”. See also clause 8 - Double Shuffles.

Main Harbour Berths

The interval between POB for an inbound vessel and LLA for an outbound vessel is 1 hour, unless the inbound vessel is berthing ahead of the departing vessel in the harbour and will impede the clear transit path of the departing vessel, in which case the interval will increase to 1 hours 30 minutes.

Where an inbound vessel to AP2 or NPC is followed by an outbound vessel from AP3 or NPD, the interval between POB and LLA times is increased to 2 hours. Alternatively, the movement may be treated as a Double Shuffle as per Section 8.

Where an inbound vessel to FIA is followed by an outbound vessel from SWC, the interval between POB and LLA times is increased to 2 hours.

South West Creek Berths

Where the last inbound vessel is to a Southwest Creek berths and is immediately followed by an outbound vessel from a Southwest Creek berths, the POB and LLA times will be separated by 2 hours ~~and 30 minutes~~.

7.3 Interval between Outbound Vessels

The departure of the second or consecutive vessel should be arranged so that there is a time interval of 30 minutes between vessels clearing Hunt Point. Refer to table 5.

7.4 Interval between Outbound Vessel Followed by Inbound Vessel

POB time for the inbound ship is normally 1 hour after (LLA) for the outbound, this excludes berths AP2, AP3, NPC, NPD and SP2 for which 1 hour 15 minutes will be scheduled for the inbound ship. The timing is intended to be such that the inbound vessel will enter the channel as determined by the attending pilot after the outbound vessel has passed by the selected channel entry point.

8. DOUBLE SHUFFLES

"Double Shuffle" means a vessel manoeuvre requiring an incoming vessel to enter the inner harbour before the departure from the berth of the vessel it is replacing.

Other than for those berths listed in clauses 8.1 and 8.2, where restrictions for Double Shuffles apply, vessels of any size may conduct a double shuffle at any berth, day or night, provided that the movement of both vessels comply with these guidelines noting additional consideration shall be given to vessels that are berthed at PH 1, 2 & 3 berths that are berthed / berthing 'head in' / Port Side To (PST).

Marine Pilot, Tugs and Mooring/Lines Crews are to attend the departing vessel no later than 15-minutes prior to the scheduled departure.

The next outbound vessel movement immediately following a double shuffle outbound from FIC and FID will have an additional 15 minutes allocated to the LLA separation times in Table 5.

Additionally, the inbound POB time for a double shuffle movement between FIC and FID will be an additional 15 minutes earlier that a standard 1-hour inbound separation time.

Double Shuffle Example:
An inbound to FID POB 1145 followed by the corresponding outbound FID scheduled LLA 1300.

8.1 Restriction – NPC / NPD & AP2 / AP3 Berths

Inbound vessels of up to 300m LOA.

Double shuffle will be allowed during a tidal range of up to 5.5m.

Note:

- The LOA restrictions applies to the inbound vessel only.
- The outbound vessel can be of any DWT and/or LOA that is the maximum allowable at that berth.

Inbound vessels of greater than 300m LOA.
No double shuffles.

8.2 Restriction – Southwest Creek Berths (AP4 / AP5 / SP1 / SP2)

No double shuffle movements.

9. DYNAMIC UNDER KEEL CLEARANCES

Manoeuvrability margin and bottom clearances are calculated by a Dynamic Under Keel Clearance (DUKC®) program licenced and operated by Pilbara Ports – Port Hedland which considers real time tide and wave conditions as well as individual ship particulars to determine the wave response.

The DUKC® calculation provides the window of opportunity for a given draft during which the vessel may sail, together with the manoeuvrability margin and bottom clearance for various waypoints in the departure channel.

Vessels with a draft of 14.0m or greater will require a DUKC® calculation.

A Static UKC calculation (B Swell) will be made available to terminals on request for vessels departing from any berth with an anticipated draft greater than 12.5m.

10. VESSEL EMERGENCY - PROCEDURES

The following procedures may be implemented in the event a Vessel Emergency is declared:

10.1 Inner Harbour

The Marine Pilot will be responsible for positioning all available tugs and pilotage to the berth or to sea, assisted by a second pilot if required. The Harbour Master will decide whether to return the vessel to a nominated berth or escort it out under tow in consultation with the Marine Pilot on board the affected vessel.

10.2 Outer Harbour

Every effort should be made to continue the transit with tug assistance taking into consideration UKC through the Main Shipping Channel and / or Emergency Passing Lane (EPL) and available towage to maintain channel integrity.

10.3 Emergency Communications with Tugs

In the event of a loss of VHF communications between the Marine Pilot and the Tug Master(s), the following procedure should be followed:

Marine Pilot will sound a series of short blasts on the ship's horn. VHF CH 16 monitored by Tug Masters during pilotage, shall be used for communication between the Marine Pilot and Tug. This arrangement shall continue until such time communications between the Marine Pilot and Tug Masters has been re-established, and an alternative tug working channel is allocated.

11. PORT USERS BRIEF

The briefing card for the ship's Masters and Engineers reads as follows:

Masters and Engineers – Port User Brief
The Port Hedland Navigation Channel extends 25 nm to seaward and laden ships are confined to the channel for most of this distance. Because of the large tidal range, a risk of grounding in the channel exists if normal power is not available for any reason. Masters and Engineers must ensure that, before entry into the channel and on departures, all equipment is checked and that engine tests are conducted to avoid critical equipment failure. **Full manoeuvring power must be available at all times.** Note: Ships which cannot comply with the requirements of the Port Users Brief and / or the ability to achieve the required DUKC® speed profile may have restrictions placed on their movements by the Harbour Master. Vessels unable to meet this performance expectation may be deemed unsuitable for Port Hedland.

12. USE OF EASTERN APPROACH - DEPARTURE

Departing vessels not constrained by their draft may use the eastern approach when departing the port.

13. PILOT BOARDING ARRANGEMENTS

Marine Pilots at the Port of Port Hedland will board and disembark vessels using the helicopter marine pilot transfer service or the pilot boat service.

13.1 Pilots boarding / disembarking by Helicopter (H) – for helicopter suitable vessels.

The flight time for the port helicopter departing the Pilbara Ports helipad and arriving at the Pilot Boarding Ground (PBG) is approximately 8 minutes.

The flying time for the port helicopter departing the Pilbara Ports helipad to Pilot C1 (pilot disembarkation point) is approximately 20 minutes.

The POB time allocated to inbound vessels is for external planning of port services (e.g., tugs, line boats, etc.).

The nominated Main Shipping Channel vessel entry point will determine the helicopter's departure time. Marine Pilots boarding by helicopter will embark the inbound vessel no later than the scheduled POB time. Marine / Helicopter Pilots shall be further guided by Table 3.

Where there is a conflicting Marine Pilot Transfer (MPT) time between inbound / outbound vessels, the MPT to the inbound vessel will take priority over the MPT from the outbound vessel.

Table 3

TO / FROM	ARRIVING vessels at Pilot Boarding Ground when:		DEPARTING vessels estimated time of arrival at:	
FROM	Entering Channel between B26 – B30	Entering Channel at B15	Pilot Boarding Ground – vessels departing via 2E/3E	C1 vessels using the Main Shipping Channel*
Helipad	- 15 mins	- 45 mins		
PH1, 2, 3 or 4			+1hr 15 mins	+ 2 hrs 30 mins
FIA or B				+ 3 hrs mins
FIC or D				+ 2 hrs 45 mins
NPA, B C or D				+ 3 hrs mins
AP1, 2 or 3				+ 3 hrs mins
South West Creek Berths				+ 3 hrs mins

*C1 pickup time is indicative only

Examples:
If an arriving vessel's POB time is 0800 and the vessel is entering the channel at B15, the helicopter's take-off time is 0715 (0800 – 45min = 0715).

If a vessel departing FIB has a POB time 1430, the vessel will be at C1 at 1730 (1430 + 3hrs = 1730).

13.2 Pilots boarding / disembarking by Pilot Boat (P)

Transit time for the Pilot Boat to the pilot boarding ground is approximately 45 minutes.

Transit time for the Pilot Boat to C1 (pilot disembarkation) is approximately 1 Hour and 30 minutes.

The nominated Main Shipping Channel vessel entry point will determine the pilot boat's departure time. Marine Pilots boarding by Pilot Boat will embark the inbound vessel no

later than the scheduled POB time. Marine Pilots and pilot Boat crew shall be further guided by Table 4.

Table 4

FROM \ TO	ARRIVING Vessels at Pilot Boarding Ground when:		DEPARTING Vessels estimated time of arrival at:	
	Entering Channel between B26 – B30	Entering Channel at B15	Pilot Boarding Ground – Vessels departing via 2E/3E	C1 - Vessels using the Main Shipping Channel*
Tug Haven	- 45 mins	- 1 hr 15 mins		
PH1, 2, 3 or 4			+1hr 15 mins	+ 2 hrs 30 mins
FIA or B				+ 3 hrs mins
FIC or D				+ 2 hrs 45 mins
NPA, B C or D				+ 3 hrs mins
AP1, 2 or 3				+ 3 hrs mins
Southwest Creek Berths				+ 3 hrs mins

*C1 pickup times are indicative only.

Examples:
If an arriving vessels POB time is 0800 and the vessel is entering the channel between B26 and B30, the Pilot boat departure time is 0715 (0800 – 45min = 0715).

If a vessel departing FIB has a POB time of 1430, the vessel will be at C1 at 1730 (1430 + 3hrs = 1730).

13.3 Pilot on Board (POB)

POB (inbound movement) and LLA (outbound movement) time indicates the time a movement is scheduled to commence and is displayed using a 24-hour time format on the Pilbara Ports Shipping Program. LLA departure times are additionally subject to the vessels DUKC® parameters. The scheduling of a POB / LLA time may also be influenced by tug availability. LLA times for departure vessel movements should be no later than 15 minutes before the close of the vessels DUKC® window. All services i.e., Marine Pilot, tugs, mooring / lines crews are to be in attendance in adequate time prior to vessels departure. Vessels shall prepare accordingly.

Refer to section 7 for details on intervals between scheduled POB/LLA times. Intervals between outbound vessels (scheduled LLA times) are annotated in Table 5.

Table 5:

Interval Between VL Departur From \ Followed by VL Departure From	AP1	AP2	AP3	AP4	AP5	SP1	SP2	FIA	FIB	FIC	FID	NPA	NPB	NPC	NPD	PH4	PH 1, 2, 3
AP1		30	30	30	30	30	30	45	45	45	45	30	30	30	30	45	45
AP2	30		30	45	30	30	30	45	45	45	45	30	30	30	30	45	45
AP3	45	30		45	30	45	30	45	45	60	60	45	45	30	30	45	45
AP4	30	30	30		30	30	30	45	45	45	45	30	30	30	30	45	45
AP5	45	30	30	45		30	30	45	45	45	45	45	45	30	30	45	45
SP1	45	30	30	45	30		30	45	45	45	45	45	45	30	30	45	45
SP2	45	45	30	45	45	45		45	45	60	60	45	45	30	30	45	45
FIA	30	30	30	30	30	30	30		45	45	45	30	30	30	30	45	45
FIB	30	30	30	30	30	30	30	30		45	45	30	30	30	30	30	45
FIC	15	15	15	15	15	15	15	30	30		45	30	30	15	15	30	45
FID	15	15	15	15	15	15	15	30	30	30		15	15	15	15	30	45
NPA	30	30	30	30	30	30	30	45	45	45	45		30	30	30	45	45
NPB	30	30	30	30	30	30	30	45	45	45	45	30		30	30	45	45
NPC	30	30	30	45	30	30	30	45	45	60	60	45	45		30	45	45
NPD	45	30	30	45	30	45	30	45	45	60	60	45	45	30		45	45
PH4	30	30	15	30	15	30	15	30	30	45	45	30	30	15	15		45
PH1, 2, 3	30 (45 if not STARBOARD side alongside)																

14. MOORING ARRANGEMENTS

Masters of all vessels berthing at the Port of Port Hedland prior to arrival, must confirm their compliance with the Mooring Line Management Procedures of the Port of Port Hedland.

While alongside, mooring lines must be always attended to by adequate competent persons giving due regard to the tidal variation and strong current flows experienced in the harbour.

Vessels are not permitted to warp alongside the wharf without the prior permission of Port Hedland VTS.

Mooring line arrangements are to be appropriate for the size of vessel. Refer table 6: Mooring Line Requirements – Port of Port Hedland.

All failures of mooring line(s) must be reported by the vessel or observer to Port Hedland VTS immediately via VHF CH 12 / 16 and / or telephone 08 9173 9030.

In the event of a mooring line incident requiring the re-running of lines in particularly in locations where safe access for wharf crew is dependent on slacking other lines, the following applies,

- To maintain the vessel in a safe moored condition, pilot and tug assistance will be required as directed by the Harbour Master or delegate.
- The pilot and tug shall remain in attendance until the vessel is confirmed All Fast.

14.1 Mooring Line Requirements – Port of Port Hedland

The tables below are a guide for mooring line configurations for the various berths at the Port.

Table 6
PPA BERTHS

Berth \ Line Config.	Head Lines	Breast	Spring	Stern Lines	Total
PPA - Port Hedland 1, 2 & 3 100 – 10,000 DWT	2	1F, 1A	1F, 1A	2	8
PPA - Port Hedland 1, 2 & 3 10,001 – 35,000 DWT	3	1F, 1A	1F, 1A	3	10
PPA - Port Hedland 1, 2 35,001 – 59,999 DWT	3	2F, 2A	1F, 1A	3	12
*PPA - Port Hedland Berth 3 ≥35,000DWT to ≤65,0000DWT & <201M LOA	4	No Breast Lines	2F, 2A	4	12

14.2 *Ultramax vessels LOA < 201m and DWT >60,0000 through to <65,0000:

- Vessels must be fitted at minimum with eight (8) independent mooring winches with conventional mooring lines.
- The tie-up at PH3 consists of 4 x Headlines, 4 x Stern Lines, 2F & 2Ax Spring Line (8 on independent winch and 4 on bits) a total of 12 mooring lines.

14.3 PH4 Berth:

- Hybrid berthing utilising a combination of the reduced number of Cavotec units and 12 mooring lines for vessels unable to fully attach to the minimum number of Cavotec units.
- The preferred method of mooring remains the CAVOTEC system.
- Vessels must have a minimum of 12 mooring winches.
- A break render test must be conducted on all 12 mooring lines at 60% of the Ship Designed MBL.

Table 7
CAPESIZE VESSELS – PRIVATE BERTHS

Berth / Line Config.	Head Lines	Breast	Spring	Stern Lines	Total
Nelson Point A, B, C & D Finucane Island A, B, C & D Anderson Point 1,2, 3, 4 & 5 Stanley Point 1 & 2	4	2F, 2A	2F, 2A	4	16

Table 8
MISCELLANEOUS DWT RANGE VESSELS AT ANDERSON POINT TERMINAL

Berth / Line Config.	Head Lines	Breast	Spring	Stern Lines	Total
Anderson Point 1, 2 &3 Up to 75,000 DWT	3	2F, 2A	1F, 1A	3	12
Anderson Point 1, 2 & 3 75,001 – 81,000 DWT	3	1F, 1A	2F, 2A	3	12
Anderson Point 1, 2 & 3 81,001 – 93,500 DWT	4	2F, 2A	2F, 2A	4	16

- The above table indicates the minimum mooring line requirements. These may need to be adjusted depending on special circumstances such as strong wind warning or other weather events, or a vessel's unique configuration.
- Generally, all mooring lines will be required to be run directly from a winch drum and not turned up on ship bitts.
- Vessels with self-tensioning winches will require Harbour Master approval before being deemed acceptable for Port Hedland visits.
- Defined mooring arrangements advice may be changed without notice.
- Some vessel types e.g., Cruise vessels / high windage vessels may require a specific mooring line configuration which will be assessed on a case-by-case basis.

15. TOWAGE ALLOCATION INTERVALS

Towage is allocated using the intervals advised in **Table 7 (based on normal operations)**:

Pilbara Ports Agreed Towage Allocation Intervals							
OUTBOUND							INBOUND
BERTH	POB - HP	POB - 1ST AVAILABLE TUG	POB - 30 /31	POB - 2ND AVAILABLE TUG	POB - AVAILABLE ESCORT TUGS (B15/B16)	POB - AVAILABLE ESCORT TUGS (OUT)	POB - 1ST AVAILABLE TUG
FIA	30 min	1 hr	1hr 03 min	1 hr 45min	2 hours 30 mins	3 hours 15 mins	2 hours
FIB	27 min	1 hr	58 min	1 hr 45min	2 hours 30 mins	3 hours 15 mins	2 hours
FIC	20 min	45 min	52 min	1 hr 30 min	2 hours 30 mins	3 hours 15 mins	2 hours
FID	20 min	45 min	52 min	1 hr 30 min	2 hours 30 mins	3 hours 15 mins	2 hours
AP1	34 min	1 hr*	1 hr 08 min	1 hr 45min *	2 hours 30 mins	3 hours 30 mins	2 hours
AP2	37 min	1 hr*	1 hr 08 min	1 hr 45min*	2 hours 30 mins	3 hours 30 mins	2 hours
AP3	40 min	1 hr*	1 hr 12 min	1 hr 45min *	2 hours 30 mins	3 hours 30 mins	2 hours
AP4	34 min	1 hr*	1 hr 07 min	1 hr 45min *	2 hours 30 mins	3 hours 30 mins	2 hours
AP5	38 min	1 hr*	1 hr 11 min	1 hr 45min *	2 hours 30 mins	3 hours 30 mins	2 hours
SP1	37 min	1 hr*	1 hr 10 min	1 hr 45min *	2 hours 30 mins	3 hours 30 mins	2 hours
SP2	40 min	1 hr*	1 hr 12 min	1 hr 45min *	2 hours 30 mins	3 hours 30 mins	2 hours
NPA	33 min	1 hr*	1 hr 05 min	1 hr 45min *	2 hours 30 mins	3 hours 30 mins	2 hours
NPB	35 min	1 hr*	1 hr 07 min	1 hr 45min *	2 hours 30 mins	3 hours 30 mins	2 hours
NPC	40 min	1 hr*	1 hr 12 min	1 hr 45min *	2 hours 30 mins	3 hours 30 mins	2 hours
NPD	41 min	1 hr*	1 hr 14 min	1 hr 45min *	2 hours 30 mins	3 hours 30 mins	2 hours
PH1	29 min	Nil	56 min	1 hr 30 min*	-	-	-
PH2	31 min	Nil	58 min	1 hr 30 min*	-	-	-
PH3	36 min	Nil	1 hr 06 min	1 hr 30 min*	-	-	-
PH4	32 min	1 hr	1 hr 03 min	1 hr 30 min*	-	-	-

15.1 Outbound

- POB → HP - indicates the average time a movement takes from POB time at a berth to reach Hunt Point.
- POB → 1st tug available - indicates the time it will take for a tug to return for its next POB job from the original departing berth when untethered at Hunt Point
- POB → B30/31 - indicates the average time it takes for the tug to be released at B30/31.
- POB → 2nd tug available - indicates the time it will take for a tug to return for its next POB outbound job from the original departing berth when released at B30/31.
- POB → Escort tugs available (B15/16) - indicates when the escort tugs will be available for an INBOUND job from the original departing berth when released at B15/16.

POB → Escort tugs available out - indicates the time it will take for a tug to return for its next POB outbound job from the original departing berth when released at B15/16.

- For outbound ships from PH1, 2, 3 and 4 that are not deep drafted (tidally constrained) and <120,000DWT, all tugs are released together at beacon 30/31 except in the case of PH4 Ebb tide >5m. In this case, the 1st away tug will be released at Hunt Point.

For outbound ships from PH3 and PH4 that are deep-drafted (tidally constrained) and <120,000DWT, two (2) Passive Escort Tugs are required to BN15/16.

For outbound ships from PH3 and PH4 that are deep-drafted (tidally constrained) and <120,000DWT, one (1) Passive Escort Tug is required to BN 15/16.

- For outbound ships from PH4 that are deep-drafted (tidally constrained) and >120,000DWT, one (1) Active Escort and one (1) Passive Escort Tug is required to BN15/16.
- An additional Passive Escort Tug to BN15/16 will be allocated to all deep draft (tidally constrained) vessels >120,000 DWT that CONCLUDE the outbound departure convoy.

15.2 Inbound

- POB →1st available tug - indicates when the first tug will be available after an inbound movement is alongside. Add 15 minutes for the remaining tug's availability.
- For inbound ships into PH1, 2, 3 and 4, all tugs are released together normally 2 hours 30 minutes after scheduled POB.
- Inbound tugs scheduled for double shuffle movements require an additional 15 minutes before release.
- Tugs released at B30/B31 are free to be scheduled to bring in an inbound movement providing the inbound movement is scheduled 1hr after the outbound POB.

16. DOCUMENT OWNER

The Executive General Manager Marine is responsible for this procedure.

17. ATTACHMENT 1 PORT HEDLAND PORT BOUNDARY AND VTS AREA