

## 7. Port navigation and movement restrictions

### 7.1 Under keel clearance (UKC)

The depth alongside at datum is 13.6 metres; there are no dredged channels or swing basin to the offshore berth. The approach depth to the berth is 13.2 metres

Vessels must maintain a minimum UKC of 10% of the draught at all times alongside.

The draught on sailing must allow for an Under Keel Clearance (UKC) of 6% of deepest draught + 1.00 metre.

Maximum departure draught = (approach depth + tide — 1.0) divided by 1.06

### 7.2 Approaches to pilot boarding ground (AUS 259)

There are no known dangers and there is good holding everywhere between the berth and the offshore islands. Ships waiting for pilots should anchor 1.0 nautical mile to the East or North of the pilot boarding place in approximately 20 metres of water.

### 7.3 Berthing requirements

Pilot and terminal operator will liaise on conditions (for example, weather and tide) and other factors of safety prior to berthing;

- Ships will generally berth starboard side alongside. Ships intending to berth Port side alongside must seek prior approval from the Regional Harbour Master at least 72 hours prior to pilot boarding, stating reason why it cannot berth starboard side alongside. The Regional Harbour Master (Townsville) and Pilot Manager will assess the request and respond with conditions.
- Two tugs will be used for berthing.
- Ships should ensure that engines are ready and fully operational, that mooring ropes with heaving lines are ready for use, and that anchors are cleared and ready.
- Cranes and derricks are to be stowed and lashed so as to provide clear vision forward of the bridge wings and wheelhouse.
- Gangways are not to be broken out until the ship is safely moored alongside.
- Discharge outlets in the vicinity of tug lashing points are not to be used unless absolutely essential to berthing operations.
- During periods of unsuitable wind and sea conditions, further restrictions may be imposed in the interests of safety. (refer 7.3.3 Guidelines for berthing and departing of vessels)

#### 7.3.1 Position at berth

Ship position at the berth should enable loading of all hatches of the ship (unless agreed otherwise by the terminal operator and Regional Harbour Master (Townsville)):

- ship position at the berth should limit overhang past the outermost fenders in contact with the ship to less than 25% of the ship's LOA
- ship position at the berth must achieve acceptable angular contact with fender frames, particularly those in contact with the flare of the ship's stern and bow
- ship's crew must not allow mooring lines to slacken (due to tidal range and loading rate, moorings can become slack allowing the ship to shift out of position)

- at all times that a ship is alongside, the number tugs required for departure will remain on standby within the port limits

### 7.3.2 Ships with LOA 200 metres or greater

- Ships with LOA 200 metres and greater will berth starboard side to and will be berthed only when wind conditions are 15 knots or less. When the wind is greater than 15 knots a risk assessment involving the Pilot Manager, the Pilot and if necessary RHM, will be conducted to determine if the berthing should proceed.
- Ships with LOA 200 metres and greater will depart on the ebb, with the assistance of two tugs. Tidal windows must make allowance to clear the channel on the ebb (falling tide) with minimum UKC of 6% of the deepest draught + 1 metre. An allowance of 30 minutes should be factored into the tidal window to clear the channel.

### 7.3.3 Guidelines for berthing

Due to the unprotected nature of the berth and the working limitations of the tugs following guidelines shall be adhered to

1. Prior to commencing a berthing manoeuvre, the Pilot shall conduct a risk assessment. If wind speed and swell are deemed to exceed safe working limits a vessel shall not proceed with the berthing. *In general the safe working conditions for the existing tugs are steady wind speeds not exceeding 20 knots (gusting 25 knots).*
2. When a strong wind warning has been forecast for the area and a vessel is expected to be alongside during that forecast period, generally a vessel shall not berth.  
  
The Master and Bulk Sugar Terminal may, after conducting a risk assessment decide to berth a vessel, provided the forecast conditions (wind and swell) are not expected to exceed safe working limits of the terminal. The following considerations must form part of the risk assessment process leading up to the decision.
  - a) The vessel may not be able to depart with one tug if wind and swell exceed safe working limits.
  - b) The availability of a 2<sup>nd</sup> tug on standby to assist if the vessel is required to depart.
  - c) The maximum wind limitation imposed by Bulk Sugar Terminal for a vessel to remain at the berth is steady winds speed 38 knots.
3. If a vessel is already alongside and a strong wind warning is forecast for the area, the Master and Bulk Sugar Terminal must make arrangements for the vessel to depart the berth prior to wind speed and swell exceeding the safe working limits of the terminal. The Master and Bulk Sugar Terminal may conduct a risk assessment and decide to let the vessel remain at the berth. This decision must consider limitations described in Section 7.3.3.2 a), 7.3.3.2 b) and 7.3.3.2 c) above.
4. The Master must consider the unprotected nature of the berth in deciding the quantity of ballast to retain on board during berthing and loading to ensure safety of vessel and the berth infrastructure at all times.
5. During the entire duration of ship's stay alongside, 1 tug with adequate bollard pull to assist and/or sail the vessel in emergency will remain within port limits. Ships requiring 2 tugs for departure (as per section 7.3.2) will require to have 2 tugs with adequate bollard pull to assist and/or sail the vessel in emergency standby within port limits. The tug(s) shall remain contactable on VHF channel 16 at all times.

### 7.3.4 Guidelines for Departures

Due to the unprotected nature of the berth and the working limitations of the tugs following guidelines shall be adhered to

1. In general the safe working conditions for the existing tugs are steady wind speeds not exceeding 20 knots (gusting 25 knots). Generally every attempt will be made to sail a vessel within the safe working conditions.

In exceptional circumstances it may be necessary for a departure manoeuvre to be considered in conditions exceeding those described above. The departure may proceed provided a comprehensive risk assessment in consultation with the tug masters is conducted and an agreed safe departure manoeuvre formulated.

2. If a vessel is already alongside and a strong wind warning is forecast for the area, the Master and Bulk Sugar Terminal must make arrangements for the vessel to depart the berth prior to wind speed and swell exceeding the safe working limits of the terminal. The Master and Bulk Sugar Terminal may conduct a risk assessment and decide to let the vessel remain at the berth. This decision must consider limitations described in Section 7.3.3.2 a), 7.3.3.2 b) and 7.3.3.2 c) above.
3. Ship's with draft greater than 10 metres will be programmed to depart at slack water or on an ebb tide.
4. Departures during flood tides or in adverse weather conditions may require the use of two tugs.

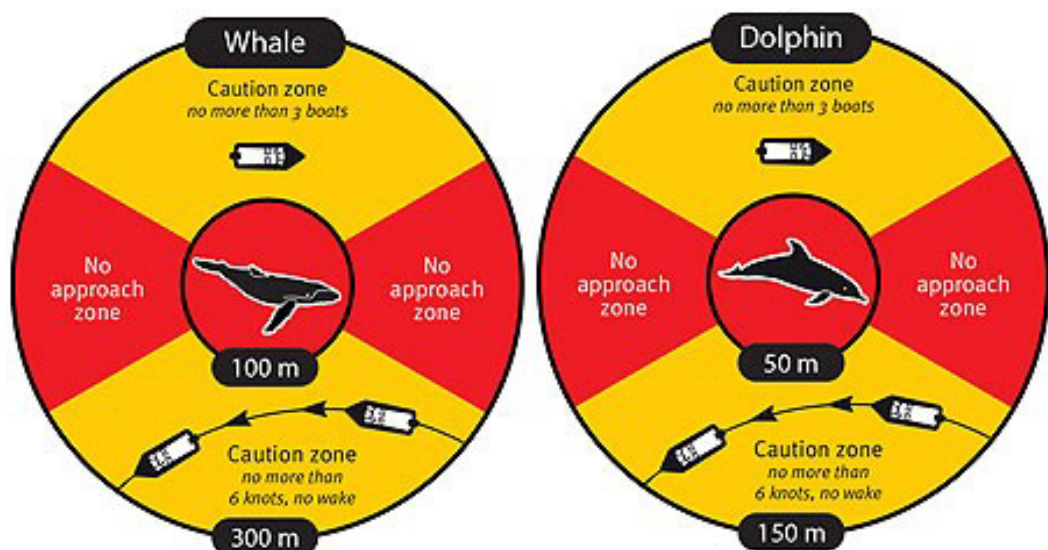
### 7.3.5 Advisory Note - Interaction with marine mammals

The presence of whales or marine mammals indicates that our ports are seen as environmentally attractive places.

The safety of life and the security of the environment from ship based incidents is paramount.

All vessel masters are required to fully comply with relevant marine mammal legislation, such as the provisions of the [Nature Conservation \(Animals\) Regulation 2020 Chapter 6 Part 1](#) which prescribes minimum approach distances and maximum speeds within proximity to whales as illustrated in the diagram below.

When whales or marine mammals are reported in the vicinity of port areas and a risk to marine mammals is perceived, then every possible endeavour will be undertaken to manage shipping



movements around the marine mammals to keep them safe, provided the safety of life, the ship and other environmental protection objectives are not threatened. Such action may include not commencing transits until the mammals are deemed clear.

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

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

[http://www.ehp.qld.gov.au/wildlife/caring-for-wildlife/marine\\_strandings.html](http://www.ehp.qld.gov.au/wildlife/caring-for-wildlife/marine_strandings.html)