

9. Tugs

9.1 Tug information

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

Towage services are provided by Engage Marine; their north Queensland operations office is based in Cairns. There are two tugs available for towage stationed at Cairns.

	Bollard pull (tonnes)	KW	Type	Fire Fighting
Engage Bandit	70	4200	Forward tractor	Class B support ship
Engage Challenger	45	2650	ASD	Class B support ship

Table 16 Tugs

Engage Marine	
Company profile:	Engage Marine provides tugs to vessels at Far North Queensland
Phone:	0428 807 164
Operations email:	cairns.shipping@engagemarine.com
Website:	www.engagemarine.com

Table 17 Engage Marine contact details

9.2 Tug usage requirements

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

The port tug will escort the vessel between the berth and the vicinity of number 17 beacon on departure. Tugs assigned to the departing vessel once dismissed by the pilot are to remain manned and immediately available until the outbound ship has departed the Cairns Channel. If the situation requires that the tug proceed further to seaward, the pilot will advise the tug master of the situation, and any additional assistance required. The following tables have been produced as a guide to assist agents and masters when booking tugs.

For ship movements in and out of Cairns using harbour towage the tug line on the aft tug will be secured to the ship whilst the ship passes Marlin Marina.

The Regional Harbour Master may require additional tugs, or extended escorts in/out dependant of vessels defects, environmental conditions and other circumstances.

9.2.1 Arrivals (stemming tide at berth)

Wharf	80 to 100 metres		100-130 metres		Greater than 130 metres	
	No swing	Swing	No swing	Swing	No swing	Swing
C1-C8			1	1	2	2
C10	1	1	2	2	2	2
C10 NGF	2	2	2	2	2	2
C12*			1	1	1	2
* Vessels at C12 greater than 170m LOA always swing and require two tugs. Flood tide only and rate less than 40 cm per hour.						

Table 18 Tug requirement for arriving vessels

9.2.2 Departures (stemming tide at berth)

Wharf	80 to 100 metres		100–130 metres		Greater than 130 metres	
	No swing	Swing	No swing	Swing	No swing	Swing
C1-C6			1	1	2	2
C7-C8			1	1	1	2
C10	1	1	2	2	2	2
C10 NGF	2	2	2	2	2	2
C12			1	1	1	2

Table 19 Tugs required by departing vessels (stemming tide at berth)

Ships with tide astern will require additional towage when berthing and departing. Passenger ships will be individually assessed at time of booking.

- A lines launch is available where lines are required to be run to dolphins; the relevant agents must arrange this in advance;
- Austal, Tropical Reef Slip, and Norship facilities: by agreement with Yard and Pilot, Tug and workboats are normally used; and
- Austal/ TRS Wharf/Masons wharf: vessels greater than 50 m tugs and workboats as required, slack water only.

Smiths Creek – vessels over 90m to have suitable tug and an operational effective thruster or work boat (this does not include tug and barge).

9.3 Request for Tug Reduction

A ships' Master may consider it appropriate to seek a reduction in the number of tugs required for a movement. Master of the ship must submit a request to the Regional Harbour Master utilising the appropriate form for each movement.

Each request must address each of the following criteria:

- Ship's name and IMO;
- Berth and side too;
- Capacity of bow thruster;
- Condition of the bow thruster;
- Defects/restrictions with navigational and mooring equipment, steering gear and engines including auxiliary engines);
- Draft Forward and Aft;
- Displacement;
- Declaration from Master stating he has assessed the intended manoeuvre and is satisfied with the request; and
- Tug reductions not applicable to passenger ships.

Appendix [16.12 Application for reduction in Tugs](#) contains the appropriate form for requesting a tug reduction.

This form is to be submitted to Cairns VTS via email.

9.4 Vessels with advanced manoeuvring characteristics.

Ships with unusual manoeuvring characteristics and /or fitted with advanced manoeuvring systems will be assessed on a case-by-case basis.

Passenger ships over 240 metres are required to have 2 tugs in attendance on the first arrival to the Port of Cairns.

Tug reductions not applicable to passenger ships.

9.4.1 Arrivals

Tugs are to be configured based on the pilot's assessment of the prevailing conditions and the pilotage SMS.

Wharf	Less than 180 metres	Less than 180 metres	180 -240 metres	180 -240 metres	Greater than 240 metres	Greater than 240 metres
	No swing	Swing	No swing	Swing	No Swing	Swing
C1-C6				1	1	2
C7-8				1	1	2

Table 20 Arrivals

9.4.2 Departures

Tugs are to be configured based on the pilot's assessment of the prevailing conditions and the pilotage SMS.

The larger bollard pull tug based in the port is always to be assigned to these ships when required and be used on the ship's stern when two tugs are required.

Wharf	Less than 100 metres	Less than 100 metres	100-200 metres	100-200 metres	200 - 240 metres	200 - 240 metres	Greater than 240 metres	Greater than 240 metres
	No swing	Swing	No swing	Swing	No swing	Swing	No Swing	Swing
C1-C6				1		1	1	2
C7-8				1		1	1	2

Table 21 Departures

9.4.3 Escort Harbour Towing

At times there may be a requirement for vessels to be escorted from beacon 17 to their berth and outbound from berth to beacon 17. This is due to the narrow channel and location of the Marlin Marina which sits perpendicular to the prevailing winds experienced in Trinity Inlet combined with high windage vessels. If a vessel is considered high risk due to the nature of its operation, cargo, or is defective, then this may be extended to the Fairway. This will be risk assessed with specific requirements provided by the Regional Harbour Master depending on the issue.

9.5 Part Loaded Tankers

Partly loaded tankers of between 100 and 160 meters LOA and fitted with an operational bow thruster will be subject to the following towing requirements

Arrivals

Vessel in ballasted condition – 1 tug

Vessel in part loaded condition – 2 tugs

Vessel in loaded condition – 2 tugs

Departures

Vessel in loaded condition – 1 tug

Vessels with tide astern will require additional towing or as determined by the Regional Harbour Master - Cairns

9.6 Additional Information

9.6.1 Vessels turning in Crystal Swing Basin

Max LOA for Passenger vessels turning in Crystal Swing Basin when C1-3 is occupied is 230 meters.

9.6.2 Bow and stern thrusters

This section is not applicable to passenger ships

A bow or stern thruster of sufficient power may count as one tug. The thruster is to be in working order and effective. An application is to be made to the RHM via VTS for a tug reduction. Vessel on a maiden arrival to the port will not be subject to a reduction of tugs.

Please refer to the form - [16.12 Application for reduction in Tugs](#)

9.6.3 Tug Availability

Two tugs are always to be available within 2 hours in Cairns when an NGF tanker or passenger ship more than 150 meters LOA is berthed.