

Transport Infrastructure Act 1994 Gladstone Ports Corporation

Port Notice 03/20 LNG Vessel Operating Parameters

- These operating parameters have been developed based on navigation simulations with LNG vessels up to 220,000 m3 with laden drafts up to 12.20m and arrival drafts to 11.00m. Maximum length over all (LOA) 315m x 55m beam.
- 2. When Port capacity dictates, the passing of LNG vessels may be permitted under strict guidelines to be formalised in the Port Procedure Manual. This manoeuvre if scheduled will be pre-approved by the Regional Harbour Master (RHM).
- 3. LNG vessels may arrive and depart on all states of the tide. Preference will be given to arrival on ebb tide (with slack water at the berth) LNG vessels may enter and depart on all states of the tide. Exception restrictions will be documented in the PPM specifically relating to spring tide influences for berthing.
- 4. Whether the LNG vessel is swung to port or starboard is at the discretion of the ship's Pilot and Master. Preference is to swing stern to the wharf.
- 5. LNG vessels will transit all inner port channels and cuttings with tug escorts (2 x 80t bollard pull fully fitted for escort) at speeds up to about 10 knots with tugs made fast. Although the decision as to where to make the tugs fast will be made after consultation between the Pilots and the Master, it is recommended that both escort tugs should be attached on the stern (tandem deployment) for inbound and outbound transits of the inner Port.
- 6. LNG vessels will not be handled in weather conditions that make operations hazardous (typically wind speeds in excess of 25 knots and wave heights above 2.5m). The actual weather conditions to be determined at the time of the manoeuvre.
- 7. Four (4) tugs will be utilised for all berthing/unberthing operations. Two tugs will act as escorts from Beacon G4 and two will join the inbound vessel in the vicinity of A1 and be made fast subject to the discretion of the Pilot in charge in conjunction with the Master. Two tugs will be released on departure in the vicinity of A5 Beacon. The remaining two tugs be released by Beacon G4.
- 8. A standby tug with full fire fighting capability will be on station whilst an LNG vessel is at the berth for any/all loading operations, on the following principles:
 - a) One shared standby tug will be available for all three LNG Proponents. The standby tug will be located at the Tug base.
 - b) When LNG loading operations are taking place at any of the three LNG terminals, the standby tug must be able to respond within 30 minutes.
 - c) In the event of an emergency, a secondary tug will be made available as requested by an LNG Proponent or directed by the RHM (or delegate) with a response time of approximately 30 minutes.
 - d) In the event of inclement weather (specifically, Bureau of Meteorology Forecast of sustained gale force >33 knots), an individual tug can be made available to each LNG terminal where loading operations are taking place, or as otherwise decided by the RHM considering safety of vessels within the Port as a whole.



- 9. In the case where an emergency departure from the berth is necessary, a second tug will be required in addition to the standby tug. (The response time for the second tug to be determined). Thirty minutes is considered acceptable
- 10. Escort tugs may be deployed in other Port operations when not in attendance at an LNG vessel.
- 11. Pilot allocation will be two Pilots for the transit (in and out) subject to review following commencement of changes to these protocols (possibly at six months depending on the number of LNG transits carried out during that time).
- 12. Pilots will not be required to remain onboard an LNG vessel whilst alongside but must be available within 60 minutes of being summoned by VTS.
- 13. Vessel scheduling:
 - Priority of shipping will remain as per existing Port Rules except as stated below;
 - Ship scheduling will be carried out as at present by ship schedulers under the authority of the RHM and in accordance with the following principles;
 - LNG Vessels will advise their ETAs/ETDs as soon as possible and confirm ETA at least 48 hours prior to arrival;
 - The ship scheduler will schedule the movement of the LNG vessel after consultation with the vessel's Agent;
 - Once the time slot has been agreed between the RHM and the Agent, then no other vessel may occupy that time slot;
 - Other vessels that may experience delays may not occupy the time slot agreed for the movement of the LNG vessel except by mutual arrangement;
 - LNG vessels that miss their time slot will be allocated the next available time slot that fits in with other port movements;
 - Any vessels at risk of being tidally constrained at a berth shall have priority;
 - All other movements shall take place on a first come first served basis;
 - All vessel movements shall be subject to the approval of the RHM;
 - For tandem tethered towage the vessels will be equipped with adequate bollards and fairleads to the required capacity and configuration;
 - Vessels will have an International Association of Classification Societies, (IACS) Cap 2 classification for vessels 20 years and older.

14. Additional parameters may be placed on operations at individual terminals as circumstances dictate.



Additional Operating Parameters for LNG Vessels at Fishermans Landing (LNG Ltd)

- 1. Spherical Tank LNG Carriers (MOSS vessels) will not be considered without additional review of the channel and swing basin through further simulation studies.
- 2. The maximum vessel size to be accommodated is Membrane Type LNG vessels up to 152,000 m3 with a laden draft of up to 11.4m and arrival draft of up to 9.8m.
- 3. A restriction may need to be placed on the positioning of the stern/bow of the vessel moored at Berth 4 and adjacent to Berth 5 when an LNG ship is berthing at Berth 5.
- 4. Bridge leads are essential. Additional markers may be required if natural markers (eg; LNG Storage Tank and LNG Liquefaction facility) are insufficient.
- 5. There will be a restriction on ebb tide arrivals and departures with wind speed at or exceeding 15 knots out of the north to east quadrant. For all other quadrants, there will be a restriction on flood and ebb tide arrivals and departures with wind speeds at or exceeding 20 knots.
- 6. Preference shall be given to scheduled arrivals and departures on the flood tide.
- 7. Whether the vessel is swung to port or starboard is at the discretion of the ship's Pilot and Master.
- 8. Vessels using Fisherman's Landing Berth 5 will have an International Association of Classification Societies, (IACS) Cap 2 classification.
- 9. For tandem tethered towage, the LNG vessels will be equipped with adequate bollards and fairleads with the required capacity and configuration for indirect mode of operation of the escort tugs.
- 10.A UKC of 1.2m is satisfactory for swinging on arrival. Under normal operations vessels shall be berthed starboard side to the wharf. In the event that a vessel is berthed portside to, the vessel shall be swung prior to loading commencing and this manoeuvre will be undertaken nominally at high water or low water slack.
- 11. For normal operations a minimum UKC of 1.2m shall be retained throughout vessel arrivals and departures.
- 12. The vessel shall be loaded such that a minimum UKC of 0.3m for the swing basin and channel shall be retained at all times while the vessel is alongside the berth to ensure the vessel can be removed from the berth to the Targinie Swing Basin in the event of an emergency. A minimum of 2 x 62t bollard pull tugs will be required to remove the vessel from the berth and hold the vessel in the swing basin until such time as additional tugs are able to assist.
- 13. The Clinton Bypass Channel will be used under normal operations. The main Clinton Channel can be used as an alternative at reduced speeds (about 3 knots) and any other restrictions that may apply.
- 14.A berthing display board (rate, angle, distance off berth) located on wharf shall be provided to be visible from the vessel's bridge in all conditions of daylight and dark.
- 15. Two escort tugs will be utilised for both inbound and outbound transits. These tugs shall be a minimum of 80 tbp. Two harbour tugs in addition to the escort tugs shall be utilised for vessel manoeuvring west of G4 buoy.



In general, the operation of LNG carriers within the Port of Gladstone shall comply with the industry recommendations as agreed by Maritime Safety Queensland

These Gladstone Ports Corporation – LNG Vessel Operating Parameters are also subject to the Gladstone Port Procedures and powers of the Regional Harbour Master under the *Transport Operations (Marine Safety) Act 1994.*

The provisions of Port Notice 02/18 Gladstone Ports Corporation – LNG Vessel Operating Parameters, dated 1 May 2018 are hereby revoked.

Craig Walker Chief Executive Officer <u>31 May 2020</u> Date