

MARTIN ARMSTRONG DRIVE MS 283, MACKAY QLD 4740 AUSTRALIA

PHONE +61 7 4943 8444 FAX +61 7 4956 3353 ACN 010 268 167 ABN 12 010 268 167

14 October 2022

Good day

### Dalrymple Bay Coal Terminal (DBCT) - Mooring Line & Vetting Requirements - Update

Further to the previous update on 6 August 2021, DBCT P/L has commissioned and completed a mooring assessment and dynamic mooring analysis conducted by independent experts. Input was sought from several vessel operators and carried out with consideration to the vessel classes, equipment, terminal infrastructure and environmental conditions that are encountered at the Terminal and reviewed against relevant guidelines and industry best practices. The report makes recommendations for improvements, including changes to vessel vetting requirements. The recommendations are aimed at enhancing the safety of vessels, their crew, terminal staff and infrastructure.

The report specifically sought to resolve the question around the mandatory implementation of HMPE lines at the terminal. HMPE lines have a number of benefits for vessel operators, crews and terminal, however, to be safely implemented at an open-sea port they require to have suitable synthetic tails fitted to allow for the dynamic loading conditions encountered. Based on the findings of the report, DBCT P/L will not pursue the requirement for HMPE lines as a mandatory requirement, however when fitted with suitable synthetic tails they will continue to be accepted.

The recommendations will be implemented in a phased approach to minimise any potential impact to vessel operators. The first phase contains changes which should be relatively straightforward to implement and are scheduled to come into force at six months from the date of this letter, with a second tranche of changes which may require more effort to implement and will require to be implemented within 18 months from the date of this letter. Terminal documentation and processes will be updated in due course.

#### Phase One – implemented within six months

#### **Vetting Requirement Changes**

- Chafe protection required to be fitted on ships lines at fairleads/chocks and any
  potential chafe points on ships infrastructure. Chafe protection requires to be of good
  quality, fit for purpose, tended appropriately and not fabricated onboard.
- Mooring lines fitted to a vessel should, were possible, be of the same type, Minimum Breaking Load (MBL) and construction, however reciprocal lines at least <u>must be</u> of the same type (e.g., headlines and sternlines, fore and aft springs, or fore and aft breastlines)
- Lines require to be inspected for condition at least every 3 months evidence of inspection records must be provided on request
- All mooring lines require to be a minimum of 200m in length
- Vessel must have spare mooring lines in good condition number of suitable spare lines required to be advised. Minimum 30% spare mooring ropes to be stocked on board. Vessels under 225m length overall (LOA) are to have minimum 4 new spare lines and vessels over 225m LOA to have a minimum 5 new spare lines.



MARTIN ARMSTRONG DRIVE MS 283, MACKAY QLD 4740 AUSTRALIA

PHONE +61 7 4943 8444 FAX +61 7 4956 3353 ACN 010 268 167 ABN 12 010 268 167

- Confirmation that fairleads, chocks and bitts are well maintained and free from rust or abrasive surfaces prior to berthing. Roller fairleads require to be in good condition and free to rotate.
- Evidence that a pre-berthing discussion on mooring operations at the terminal has been conducted between ship's deck officers and deck crew prior to berthing. This is to include berthing, expected weather conditions, monitoring lines alongside and the sailing operation.
- The vessel will require to have sufficient crew to allow mooring lines to be continuously
  monitored 2 hours prior to and 2 hours after slack water. They are to be tended as
  required and monitored for any signs of abrasion or degradation and any evidence of
  damage is to be reported to terminal in a timely manner.
- As far as possible, all lines should be run from mooring winches. Lines are not to be made fast to winch drum-ends. Drum-ends are to be used for adjusting additional line tensions only.
- If necessary to run additional lines, these should be made fast to a set of mooring bitts only and monitored/adjusted on a regular basis.
- Winch brakes should be set in accordance with the mooring matrix and OEM<sup>1</sup> requirements to render under high load.

# Phase Two - implemented within eighteen months

## **Vetting Requirement Changes**

- Vessel to have a Mooring Safety Management Plan (MSMP) and Line Management Plan (LMP) – mooring line manufacturers certificates will be required to be held onboard for each mooring line used
- Confirmation of the Ship Design MBL
- Confirmation that mooring lines MBL is consistent with the Ship Design MBL
- Mooring lines preferred to be less than 5 years old (if lines are more than 5 years old then they will require that a sample of that rope has been tested annually ashore within the previous 12 months and is certified that it is still suitable for use). Mooring lines in all cases should be no older than 6.5 years.
- Mooring lines will require to be end-for-ended after 2.5 years (+/- 6months)
- Any mooring line failures experienced on the vessel within the last 12 months require to be reported and evidence available that they have been investigated
- All winch brake render points are to be set as per the Mooring Equipment Guidelines 4<sup>th</sup> Edition (MEG.4) recommendations
- Confirmation of the winch brake render set point
- Evidence and date of a brake render test within the last 12 months
- HMPE lines will require to be fitted with 11m synthetic tails of a Polyester, Polypropylene, or mixed blend material in accordance with OEM requirements. Tail Design Break Force (TDBF) to be no less than the mooring line MBL. Tails are to be replaced with new tails when the ropes are end-for-ended

Note: Nylon lines (tails or main line) are not acceptable at the terminal due to poor vessel movement dampening characteristics and the elevated snapback risks associated with these lines.



MARTIN ARMSTRONG DRIVE MS 283, MACKAY QLD 4740 AUSTRALIA

PHONE +61 7 4943 8444 FAX +61 7 4956 3353 ACN 010 268 167 ABN 12 010 268 167

The above changes will be implemented as part of a suite of measures that DBCT P/L are developing to minimise the risk of parted lines including guidelines to vessels of best practices and those to be avoided during mooring operations.

# **Summary**

- High Modulus Polyethylene (HMPE) lines will not be a mandatory future requirement for vessels calling at DBCT P/L, however when fitted with suitable synthetic tails in accordance with OEM requirements they will continue to be accepted.
- Nylon lines will not be acceptable for mooring lines or mooring tails.
- Additional ship vetting requirements will be implemented in a two-stage phased approach, with steps at 6 months and 18 months from the date of this letter to facilitate implementation by vessel operators.

DBCT P/L is committed to working with stakeholders to minimise impacts whilst ensuring that safe and efficient shipping is maintained as the cornerstone of terminal operations.

Yours Sincerely,

Craig Longmuir

Shipping Superintendent

DBCT P/L