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03 May 2023

Good day

Dalrymple Bay Coal Terminal (DBCT) – Mooring Line & Vetting Requirements – Update Two

Further to the previous update on 14 October 2022, DBCT has now reached the implementation stage of the Phase One Vetting Requirement Changes.

Since the last update, DBCT has had extensive positive engagement with several shipping companies relating to the specifics of the updated requirements. DBCT greatly appreciates this engagement and continues to use it to inform our approach to ensuring safe shipping operations whilst enhancing safety for all persons working on and around vessels at our terminal.

To facilitate these vetting changes, a revised Form *FM0104 Shipping Vetting Questionnaire Version 13* has been developed with additional questions contained to support the updated requirements. Improvements to the layout of the form have also been made. These changes are incorporated in the online version of the form available on the DBCT P/L website.

As a reminder, the following changes for all vessels nominated are now in-force:

Phase One

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 required to be of good quality, fit for purpose, tended appropriately and not fabricated onboard.
- Mooring lines fitted to a vessel should, where possible, be of the same type, Minimum Breaking Load (MBL) and construction, however reciprocal lines at least must be of the same type (eg, headlines and sternlines, fore and aft springs, or fore and aft breastlines)
- Lines required to be inspected for condition at least every 3 months – evidence of inspection records must be provided upon request
- All mooring lines required 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 spare lines and vessels over 225m LOA to have a minimum 5 spare lines.
- Confirmation that fairleads, chocks and bitts are well maintained and free from rust or abrasive surfaces prior to berthing. Roller fairleads required 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.

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- 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[1] requirements to render under high load.

DBCT is aware of challenges in the procurement and timely delivery of both ship mooring lines and of good quality chafe protection. If a vessel cannot conform with these aspects of the above requirements, then provided that supporting evidence is supplied in the way of a purchase or supply order, that the ship has conducted best endeavours to procure the necessary equipment, the terminal will conditionally accept the vessel on a single voyage basis.

Phase Two – to be implemented in April 2024

Vetting Requirement Changes

- Vessel to have a Mooring System 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 4th 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

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Note that a previous requirement scheduled to come into force with the phase two vetting requirements around nylon (polyamide) lines being no longer acceptable has been amended.

The future restriction on these lines will now only apply to nylon lines other than nylon double-braided construction lines. This exception has been made following discussions with a number of shipping companies' vessels regarding the use of high-quality nylon double-braided construction lines and will remain provided that the risks are managed effectively through enhanced mooring line maintenance and Line Management Plan requirements.

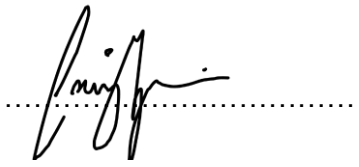
The above changes will be implemented as part of a suite of measures that DBCT P/L are developing to minimise the risk of parted lines including guidelines to vessels of best practices and those to be avoided during mooring operations.

Summary

- Phase one vetting requirement changes are now in force.
- 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 unless they are high quality nylon lines of double braided construction with stretch characteristics comparable to other synthetic lines and are accompanied with an effective line management plan and enhanced mooring line maintenance.
- Phase two ship vetting requirements will be implemented from end of April 2024.

DBCT P/L remains 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
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Appendix – A

Vetting Requirements – Frequently Asked Questions

General

Question - The new standards will be operational after 6 months (April 2023) and 18 months (April 2024). What is the basis for these intervals?

Answer *- Two dates were chosen to allow sufficient time to implement changes. The first tranche of changes are less complex and should be easier to meet whilst ensuring that the implementation timeframe is not extended. The terminal recognises that the 2nd tranche of changes may require further impost to owners/operators and that is why an additional 12 months to implement - 18 months from notification should be sufficient.*

Phase One

Requirement - 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.

Question - What does good condition mean and why can't we use protectors made by the vessel's crew?

Answer *- Good condition means free from damage and abrasion. Good quality chafe protection should be suited for the line type and material as well as the leads/chocks used onboard the vessel. It should be of adequate length to allow for reasonable time to tend lines considering draft and tidal variations.*

We have seen examples of very poor chafe protection fabricated by ship's crew (old mooring ropes, inverted fire hoses, etc). As there are currently no existing standards for chafe protection then properly fabricated and manufactured chafe protection is seen as the best way to ensure it is of adequate quality. Further data will be collated on the success of this chafe protection in practice.

Requirement - Mooring lines fitted to a vessel should, were possible, be of the same type, Line Design Break Force (LDBF) and construction, however reciprocal lines at least must be of the same type (e.g., headlines and sternlines, fore and aft springs, or fore and aft breastlines)

Question – Is it my understanding that the same mooring line type must be used for head line and stern line?

Answer *- Yes – intent is to ensure that the mooring system remains balanced. The head lines and the stern lines should be of the same type and strength, therefore have the same elasticity and strength.*

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Question – I have been unable to procure lines of the exact same LDBF, what options do I have?

Answer *– When replacing lines, they should be of a similar LDBF (+/10%) to the existing mooring lines and meet the minimum requirements for a vessel of its size. They should be of the same material and construction type to ensure that they have similar elasticity properties. It may be possible to move lines between winch locations onboard to ensure that a vessel can comply with the reciprocal line requirements.*

Requirement - Winch brakes should be set in accordance with the mooring matrix and OEM[1] requirements to render under high load.

Question – Can you please explain the background behind the introduction of this regulation?

Answer *- Correctly set Brake rendering to prevent overloading of ships lines and other shipboard mooring equipment is an important safety consideration to reduce the risk of extremely high-tension line parting events. OCIMF recommendations are that the primary brake should be set to hold at 60 %of the ship design MBL on the first layer.*

Requirement - Lines required to be inspected for condition at least every 3 months – evidence of inspection records must be provided on request

Question – What items should be included in the inspection record?

Answer *- Routine inspection should be carried out of the full length of the line on the in-service section of the line (typically the tension side of the mooring winch) this is a visual inspection externally and internally where possible (i.e. unjacketed lines) and in accordance with manufacturers recommendations. Jacketed lines will require a routine inspection as recommended by line manufacturer. The report should detail any areas of damage to the line, including signs of abrasion damage, crushing, kinking or heavy contamination from iron ore/coal-dust or oil/chemicals. Photographic evidence is recommended.*

Phase Two

Requirement - 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.

Question – When do spare mooring lines commence their service life to comply with the 5-year age requirement?

Answer *- Mooring line age can be based on introduction of line into service, provided that the line:*

(i) has been inspected regularly and remains in good condition;
(ii) has valid certificate;

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(iii) has been stored out of sun and in well ventilated area to prevent degradation;
(iv) introduction date into service has been recorded in Line Management Plan;
(v) a corresponding date of the line it replaced being retired from service

Requirement - All winch brake render points are to be set as per the Mooring Equipment Guidelines 4th Edition (MEG.4) recommendations

Question – Which part of MEG.4 applies to this regulation?

Answer *- Section 6.3.4 – Winch Brakes – 6.3.4.1 – Brake Holding Load applies to this and recommends that the primary brake should be set to hold at 60% of the ship design MBL on the first layer.*

Requirement - 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

Question – What items should be included in the Mooring System Management Plan?

Answer *– A Mooring System Management Plan is recommended to be developed consistent with requirements in OCIMF MEG 4. and contain the following;*
Part A - General ship particulars
Part B - Mooring equipment design philosophy
Part C - Detailed list of mooring equipment
Part D - Inspection, maintenance, and retirement strategies/principles
Part E - Risk and change management, safety of personnel and human factors
Part F - Records and documentation
Part G - Mooring system Management Plan Register

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