

Port Hedland Mooring Management Standard

Purpose

BHP values safety and strives to ensure that everyone ends each day safe from harm.

This standard sets out the revised mandatory mooring requirements, that will apply to all vessels calling at the BHP Port Hedland Terminal (Terminal) and the crew on board from 17 May 2021, along with details of an incentive program for the adoption of new mooring line technology.

Background

In 2018, BHP released a Port Hedland mooring line standard and incentive scheme following an increasing trend of mooring related incidents. The initiative was successful in tackling the underlying causes of these incidents and resulted in a reduction in incident frequency. We consider that further updates to this standard will continue to deliver improvements. The introduction of new incentives for adoption in innovative technology is aimed at encouraging further safety developments in the industry.

Requirements

All vessels calling at the Terminal and their crew must comply with the mandatory requirements described below from 17 May 2021 at 0001 AWST. Verification that the vessel and crew are compliant with the requirements will occur through the vessel vetting process, the Terminal Questionnaire and/or an inspection on board the vessel.

Certification

1. Vessels shall have on board, valid and up-to-date makers certificates for all mooring lines and mooring tails that are in use or kept as spares. These certificates must be produced for inspection if requested by BHP.

Mooring lines

2. Mooring lines shall not exceed a maximum duration of 5 years from the date stated in each line certificate, unless the vessel can demonstrate to BHP's satisfaction that:
 - i. (A) Mooring lines are stowed and maintained in accordance with the vessel's mooring lines management plan, after taking into account the weather (shipping seas, exposure to sunlight, air humidity and free air circulation) and trade (penetration of iron ore cargo residues in mooring lines, number of port operations, exposure to dynamic forces during cargo operation) related factors, or (B) Mooring lines manufacturers have certified for the usage beyond 5 years from the certificate date due to (a) higher quality of mooring lines, and (b) mooring lines are subject to manufacturers' systemic inspection and maintenance program; and
 - ii. The vessel had no mooring lines related incidents or adverse feedback from terminals or port officials during the last 12 months, and
 - iii. Material evidence (certificates, mooring lines management plan, maintenance records, photographs, mooring line inventory, schematic drawing of the mooring system) is available and verified by BHP vetting officer during the vetting stage of the nomination process.
3. At all times, the minimum length of the mooring line shall be 200 metres.
4. The maximum diameter of the mooring line must not exceed 110mm.
5. The guaranteed minimum breaking load (GMBL) on all lines shall be >75T, if vessel DWT>=120k.
6. Mooring lines on the vessel in the same service area (e.g. headlines, spring lines, breast lines and stern lines) must be uniform in all respects i.e. the same type of material, diameter and have the same minimum breaking load (MBL).
7. All mooring lines (including spares) shall be in good condition and free from knots, bends, splices and wear/abrasion damage.
8. Each vessel shall carry a minimum of 2 spare mooring lines of each type of mooring line carried on board, and the spare mooring lines must meet all the same requirements as the lines in use.
9. Wire ropes will not be accepted.

High modulus synthetic fibre lines

10. Lines with limited stretch (elasticity), such as high modulus polyethylene (HMPE) lines, must be used with mooring tails in line with the recommendations of the original equipment manufacturer (OEM).

Mooring tails

11. Vessels shall ensure that all tail (pendant) connections to the main line are in accordance with the requirements of the OEM.
12. Tail end ropes must have a breaking force that is recommended by the OEM and suitable for the mooring line that they are joined to AND Tail end ropes must be changed in accordance with the OCIMF guideline or every 24 months from the date of certificate, subject to the rope condition assessed by BHP; whichever comes first.
13. Tails must have a minimum length of 11 metres.
14. Metal shackles will not be accepted.

Winch brakes

15. Winch rendering limits are to be in accordance with the requirements of:
 - i. The mooring winch manufacturer, and
 - ii. The vessel's safety management system.And, the winch brakes must complete and pass brake-rendering tests once every 12 months; or after mooring ropes in the same service area are changed; or after mooring winch break lining are changed, whichever comes first.
16. Mooring winch brakes shall be set at 60% of the vessel's design and MBL >45T if DWT ≥ 120k.

Vessel crew and line management

17. Adequate vessel crewing shall be made available to ensure moorings can be monitored at all times.
18. Mooring lines shall not be secured on crucifixes or on to warping drums (drum ends).
19. The full length of all mooring lines shall undergo at least one detailed inspection at intervals of not more than 12 months and all records shall be kept on board and made available for inspection upon request.
20. Mooring lines shall be turned/rotated end to end every 2.5 years from the time in first use and records shall be made available for verification by BHP.

New mooring line technology incentive

BHP will discount the line handling fee from AU\$ 1600 to AU\$ 600 per Terminal call for certain new technology adoption, to incentivise the advancement of mooring line safety improvements.

The incentive will apply to the use of products incorporating technology aimed at reducing the probability and/or associated danger of snap back of mooring lines together with appropriate line management plan, as determined or approved by BHP.

The 2018 Terminal mooring line incentive scheme will be superseded by the above incentive scheme on 1 April 2021 at 0001 AWST.

The new mooring line technology incentive will be valid for all vessels calling the Terminal meeting this option from 1 April 2021 until 30 June 2022 at 2359 AWST.

Questions

For questions regarding these requirements, please contact your BHP representative.