Port Hedland Mooring Management Standard

Purpose

BHP values safety, and keeping our people, the communities where we operate, and everyone across our value chain safe is our most important priority.
This standard sets out the revised mandatory mooring requirements that will be applicable to all vessels and crew onboard calling at the BHP Port Hedland Terminal, from 15 Aug 2024.

Background

In 2018, BHP released a Port Hedland mooring line standard which has been in operation for the last 6 years. This standard has significantly reduced mooring line related incidents in Port Hedland terminal operations.

Requirements

1. Vessel must comply with this standard and other applicable mooring system related requirements established by the relevant regulatory authorities.
2. Compliance will be verified during the vessel vetting, terminal vessel questionnaire, and inspection processes, as applicable.

Certification

Certificates for all mooring lines, mooring tails, including spares and winch brake rendering test report must be available onboard for verification.

Mooring lines

1. No mooring line shall exceed 5 years from the date of the certificate. However, mooring line may be acceptable for use beyond 5 years from the date of certificate, provided vessel meets the following conditions.
    i. Vessel had no mooring line related incident or adverse feedback from terminals or port officials during the last 12 months, and
    ii. Mooring line manufacturer has authorized the use of the mooring line beyond 5 years from certificate date, and
    iii. BHP authorize the use of the mooring line after completion of mooring line verification process, and
    iv. Each mooring line must be maintained in accordance with the mooring line maintenance plan authorized by the manufacturer or regulatory authority.

2. At all times, the minimum length of the mooring line must be 200 meters.

3. The maximum diameter of the mooring line must not exceed 110 mm.

4. For vessel equal to or greater than 120,000 DWT, mooring line must have an MBL of at least 75 Tons. For vessel less than 120,000 DWT, mooring line must meet the terminal's risk assessment and port regulations, as applicable.

5. 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. Allowance of 5% of MBL and 5 mm of diameter is permissible.

6. Each mooring line (including spares) must be in good condition and free from knots, bends, splices, and wear/abrasion damage. Only factory set splice at the eye is allowed, unless authorized by the terminal.

7. Each vessel must carry a minimum of 2 spare mooring lines of each type of mooring line in use and the spare mooring lines must meet all the same requirements as the lines in use.

8. Use of fit for purpose chafe protection on mooring lines or alternate means of protection is mandatory. Chafe protection to be installed at the eye and areas where the lines are prone to chafing (fairlead rollers, chocks, etc.). Crew training on the safe usage and handling of chafe protection during the mooring operation must be provided.

9. Wire rope will not be accepted.

High modulus synthetic fibre lines (HMPE Mooring lines)

Lines with limited stretch (elasticity), such as high modulus polyethylene (HMPE) line, must be used with mooring tail in line with the recommendations of the manufacturer.

Mooring tails

1. Each mooring tail must be maintained in accordance with the requirements of the manufacturer or regulatory authority.
2. Mooring tail must have a breaking force appropriate for the mooring line that they are connected to as required by the mooring line manufacturer and/or regulatory authorities. The diameter and MBL of the mooring tail must be aligned with point 3 and 4 (Section – Mooring lines) of this standard.
3. Mooring tail must be changed every 24 months from the date of certificate or subject to the rope condition assessed by BHP, whichever comes first.
4. Mooring tail must have a minimum length of 11 meters.
5. Metal shackle will not be accepted.
6. Each vessel must carry a minimum of 2 spare mooring tails of each type of tail in use.

Winch brakes

1. All mooring winches onboard must be subject to brake rendering test every 12 months OR whenever mooring lines in the same service area are changed OR winch brake linings are renewed, whichever comes first.
2. Mooring winch brake rendering limit must be set in accordance with manufacturer's requirements OR vessel safety management requirements, OR regulatory requirements, but in no case less than 45 Tons[1] *(see footnote below).*
3. At all times, the render point must not exceed the brake holding capacity (BHC) of the winch.
4. Render point must be marked permanently on the winch for operational awareness.

Vessel crew and line management

1. Adequate vessel crewing must be made available to ensure mooring line can always be monitored.
2. Mooring line must be directed from storage or tension drums only, and not from crucifixes or warping drums (drum ends).
3. The full length of all mooring lines must undergo at least one detailed inspection at intervals of not more than 12 months and records must be kept on board and made available for inspection upon request. In addition, each mooring line must be inspected by vessel crew before every Port Hedland call, and records maintained.
4. Mooring line must be turned end to end every 2.5 years from the time of first use and records must be made available for verification by BHP.

Questions

For questions regarding these requirements, please contact your BHP representative or BHP Vetting team at maritime@bhp.com

[1] Split drum – brake to be set to render at first layer.
Conventional drum – Vessel should set the brake to render considering the mooring operational parameters. Setting of brake to render at first layer should be avoided since this is not a plausible operational scenario for vessel carrying mooring lines of at least 200 meters in length.