# Pilbara Ports Marine Safety Bulletin Port Hedland 04/2024



# Chafe Protection on Mooring Lines - Safety Concerns and Operational Impact

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Mariners and Port users,

The Port of Port Hedland prioritises safety in all maritime operations. Recent evaluations have raised significant concerns regarding the installation and maintenance of chafe protection on mooring lines at the Port Hedland berths. While chafe protection aims to safeguard mooring lines from wear and tear, its implementation has inadvertently introduced substantial risks, particularly regarding crew safety and operational efficiency.

# **Key Findings:**

## 1. Crew Safety Risks:

- Extreme Risk of Injury: Reports from pilots and first-hand experiences indicate that the installation and handling of chafe protection can pose severe risks to crew members. The process often requires crew members to work in precarious positions, increasing the likelihood of falls and other injuries.
- Close Proximity to Tensioned Lines: Installing or maintaining chafe
  protection necessitates crew members being in very close proximity to
  tensioned lines, which poses a significant risk of severe injury should a line
  snap or shift suddenly.
- Additional Pressure and Tension: Adjusting or reinstating chafe protection on loosened lines can inadvertently place additional pressure and tension on other lines. This can lead to an increased risk of line failure.
- **Hand Injuries:** There is a notable risk of hand injuries, as crew members' fingers can get caught between lines and mooring leads during the installation and adjustment of chafe protection. This risk is heightened during adverse weather conditions or when working under pressure.

## 2. Operational Delays:

- Increased Time for Mooring Operations: The additional steps involved in installing chafe protection have resulted in noticeable delays in mooring operations. This has a cascading effect on overall port efficiency, causing disruptions in vessel scheduling and turnaround times.
- **Complicated Maintenance:** Regular maintenance and adjustments of chafe protection add to the operational workload, further delaying mooring processes and increasing the risk of operational errors.

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#### **Recommendations:**

#### 1. Discontinuation of Chafe Protection Use:

 Due to the significant safety and operational risks identified, it is recommended that the use of chafe protection on mooring lines be discontinued immediately. The potential benefits do not outweigh the extreme risks posed to crew safety and port operations.

## 2. Enhanced Crew Training:

- Provide port-specific training for crew members on safe mooring practices
  without the use of chafe protection, this can include tidal range, frequency of
  attending the mooring lines, monitoring the port schedule for passing
  vessel's impact and application of correct winch brake render test and render
  set point.
- Use of appropriate risk mitigation measures as per vessel risk assessment and Mooring Lines Management Plan,

## 3. Operational Adjustments:

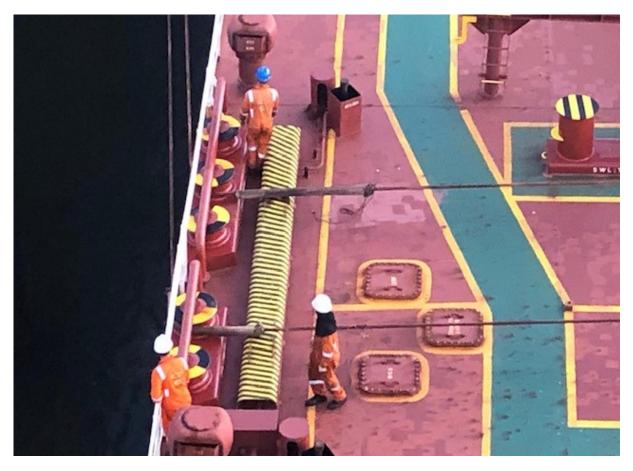
- Review and revise current mooring procedures to ensure safety and efficiency in the absence of chafe protection.
- Implement strict monitoring and reporting mechanisms to quickly identify and address any issues arising during mooring operations.

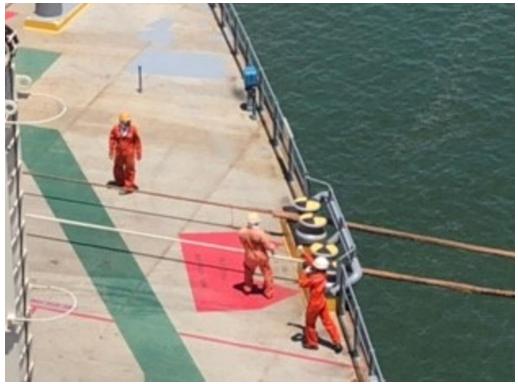
#### 4. Types of Chafe Protection:

There are various types of chafe protection that are not attached to the
mooring lines and can be installed on or removed from mooring
arrangements i.e. on a chock or fairleads which must be done well before a
vessel enters the Port or after the vessel departs. These alternatives can
mitigate the risks associated with handling chafe protection under tension
and reduce operational delays.

While the intention behind using chafe protection is to extend the lifespan of mooring lines, the unintended consequences on crew safety and operational efficiency cannot be overlooked.







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Please address any questions on this marine safety bulletin to the Port Hedland Harbour Master Team
Email: PH.HMTeam@pilbaraports.com.au

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The Port of Port Hedland is committed to ensuring the highest standards of safety and efficiency. We urge all stakeholders to adhere to the recommendations outlined above and remain vigilant in identifying and mitigating risks associated with mooring operations.

Pilbara Ports appreciates your cooperation and commitment to maintaining the highest standards of marine safety at the Port of Port Hedland. For further information or to report any concerns, please contact the Port of Port Hedland Harbour Master Team.

Stay Safe, Stay Vigilant.

Behrouz Daei Zadeh

**Harbour Master East (Port Hedland)**