

6 August 2021

Good day

Dalrymple Bay Coal Terminal – Mooring Line Requirements – Update

Requirement for High Modulus Polyethylene (**HMPE**) lines to be mandatory for all vessels calling at Dalrymple Bay Coal Terminal (**DBCT**) from 01st January 2022 (synthetic tails + 125% main line strength) have been reviewed and an extension for compliance is deferred for a **further 18 months** until **July 2023**.

During this time, analysis and a berthing practices study, specifically involving an analysis of the marine environmental factors and mooring arrangements at DBT will be conducted to determine the best practice approach to safely manage vessels whilst alongside at the Terminal.

Reason for the extension

DBCT P/L's previous stance in relation to mooring line requirements, with a mandated move towards HMPE lines by 01st January 2022, was based primarily on a 'Line Handling Best Practice Study' produced towards the end of 2016 for a number of stakeholders in the region. Since that time, the understanding and best practices associated with modern mooring lines has continued to mature and although there remains some significant benefits associated with HMPE lines, other solutions and maintenance control measures may also effectively minimise the risks presented to the vessel, the terminal, terminal staff and ship's crew when considering mooring arrangements.

DBCT P/L recognises that mooring lines constitute a significant investment and operational overhead for ship owners and operators. As such ensuring that the correct solution for the terminal is implemented first time is a critical requirement.

DBCT P/L is aware that consistency of requirements across terminals in relation to mooring equipment is a key concern for owners and operators of vessels. Assuming that it will not negatively impact safety standards, better alignment of requirements will be a consideration going forward.

An analysis of factors impacting vessels whilst alongside, in particular considerations relating to the exposed open-sea location of the berths and the large tidal range experienced at Hay Point, will form a specific set of requirements relating to best practice mooring equipment requirements and practices to be utilised at DBCT are to be developed.

Mooring line technology and best practice continues to evolve and the considerations in the University of Queensland Line Handling Best Practice Study compiled in 2016 for North Queensland Bulk Ports require to be refreshed.

HMPE lines offer significant advantages over some other typical ship lines, however they may have some limitations dependant on the vessels mooring configuration in relation to use at Hay Point due to the exposed nature of the berths. Although they are very strong for their given

diameter, their low elasticity means that in circumstances where there is high dynamic loading then there may be an increased risk of the lines failing. At the port of Hay Point, this can be challenging due to the vessel's movement under certain sea conditions in particular, with relation to infra-gravity waves (low amplitude, long period waves) related to swell conditions.

Summary

Requirement for High Modulus Polyethylene (**HMPE**) lines to be mandatory for all vessels calling at **DBCT P/L** from 01st January 2022 (synthetic tails + 125% main line strength) have been reviewed and an extension for compliance is deferred for a **further 18 months** until **July 2023**.

Summary plus actions moving forward

Requirement for High Modulus Polyethylene (**HMPE**) lines to be mandatory for all vessels calling at **DBCT P/L** from 01st January 2022 (synthetic tails + 125% main line strength) have been reviewed and an extension for compliance is deferred for a **further 18 months** until **July 2023**.

An analysis and berthing practises study will be completed in this time to determine the best practice approach to safely manage vessels whilst alongside at the Terminal.

Yours sincerely,

Craig Longmuir
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Shipping Superintendent
DBCT P/L