Harbour Master Instruction

HMI 22-003 E

Title: **Tanker Information – Pre-Arrival and In-port requirements**

Reference:
Shiphandling Safety Guidelines – Part 1 Definitions
Shiphandling Safety Guidelines – Part 2 General Information
Shiphandling Safety Guidelines – Part 3 Tug Requirements
Shiphandling Safety Guidelines – Parts 4-6
Shiphandling Safety Guidelines – Parts 7
Shiphandling Safety Guidelines – Part 9 Specific Berthing Parameters
OCIMF Mooring Equipment Guidelines Edition 4
ISGOTT
Terminal Handbooks
HMI 19-004E Newcastle Harbour – Berthed Vessels Moorings and Hydrodynamic Interaction

Background:

At the Industry's request, simulations were undertaken to accommodate larger LR 2 oil tankers at M 7 berth at Port of Newcastle with existing requirements and procedures including the use of inbound tanker route and active escort towage.

Definitions:

PBG Charlie	A position 4.1 NM and 102.4 degrees from Nobbys Head Lighthouse
Active Escort Tug	A suitably certified and equipped Escort Tug attached to the vessel's stern by a towline. This tug is fitted with an approved render/recovery winch that allows the tug, to safely apply full power load in a seaway.
Active Escort Tug Rendezvous Point	At a minimum distance of 2.5 nm from the Entrance Buoy.
SAUCS	Swell and Under keel Clearance System

Description:

All tankers of LOA 170 m and above must be able to comply with the OCIMF Mooring Equipment Guidelines for Escort Towage. The ships towage fittings for escort tug must comply with:

Tanker Type	Bitts SWL	Chock (Fairlead) SWL & Size
LR 1 & LR 2	200 T	200T (600 x 300)
MR	100 T	100T (600 x 300)

Note: With advance consultation, Harbour Master may on a case-by-case basis agree to reduce SWL on an MR, however, no less than 64T.

All tankers arriving at Newcastle with drafts 11.0m or greater are required to have a SAUCS approval prior to pilot confirming entry. Agents are to ensure the pre arrival information and SAUCS form is completed and returned to VTS in advance of ships visit.

Please refer to berth / terminal information for maximum arrival draft information specific to berth. The port channel maximum draft is 13.5m for tankers based on ship handling and swell and under keel clearance requirements at entry.

Pilot Passage Plans

Passage Plans and Inbound Tanker Routes are available on Port Authority website.

It is generally expected from PBG Charlie, a course of 301 degrees is to be maintained for 2.8 miles which will allow time to secure the Escort Tug. A 1.0-mile radius turn to port will be made to make a final approach to the Harbour entrance on a course of 242 degrees. Entry speed of the vessel is expected to be between 6 – 7.5 knots for normal operations. Any amendments to this will be discussed and agreed at the Master Pilot Exchange.

Arrival Information:

In addition to SAUCS approval, the allocated marine pilot will assess weather conditions and ensure they can comply with the requirements for safe ship handling in prevailing conditions.

VTS will require Tankers to report at PBG Bravo before being requested to embark Marine Pilot via Pilot Vessel in the vicinity of PBG Charlie.

The Master is to arrive at Pilot Boarding Ground **with the ships centre lead aft chock clear and ready to make fast escort tug.**

On boarding the tanker marine pilot will conduct normal Master / Pilot exchange. The Pilot will confirm with the Master suitability of the escort tug and availability of designated escort tug chock and bitts on the stern, and advise of Active Escort Tug rendezvous point. Marine Pilot will then exchange information with the Active Escort Tug master and confirm tug and ship suitability for the proposed entry.

If the active escort tug is not made fast for any reason, then the entry of the tanker is to be aborted before reaching 1.5 nautical miles from the Entrance Buoy.

Provided that the Escort Tug is tethered, a final Abort point exists at a distance not closer than 1.0 nautical mile seaward of the Entrance Buoy should the Pilot choose to abort the Port Entry. At any distance less than 1.0 nautical mile from the Entrance Buoy, the vessel is deemed as 'committed to entry' and the appropriate contingency process is to be followed to maintain vessel control.

Restrictions for LR 1 and LR2

LR1 and LR2 Tankers are to be scheduled inbound for pilot onboard during daylight hours*.
LR 1 and LR2 Tankers are to depart berth and swing in daylight hours*.

**daylight means same as SHSG definitions*

In Port requirements

Tankers must maintain 0.5m UKC while berthed alongside, and static UKC is not less than 10% of the vessels deepest draft when within the navigational channels of the port. Loaded arrival drafts must be a maximum of berth depth minus under keel clearance requirement.

As each berth is different, where a terminal and berth owner wish to implement a policy for increasing arrival drafts based on a tidal allowance, they will need to consult directly with harbour master for requirements to seek agreement on this.

Tankers carrying cargo or slops of a volatile nature, may only berth at terminals berths that meet the requirements for flammable cargo operations.

Terminal Operators are to ensure ships are securely berthed for forecasted conditions and exposure to passing ships interaction. This includes ensuring ships mooring equipment and brake holding capacity are appropriate to terminal requirements. Straight Polypropylene mooring ropes or mixed moorings are not to be used. Where a ship has wires, additional mooring time will be included as necessary in the scheduling parameters.

Where ships at a berth are susceptible to hydrodynamic interactions of passing ships, terminals are to provide detailed information in ships shore safety agreement to safely manage any necessary precautions and provide up-to-date advice to Ships Master of intended passing movements

	Dyke 1	K2	K3*	M7
Berth Depth	Refer to **latest depths promulgations** for up to date berth depth information.			
Maximum Vessel Size				
LOA	190.0 m	190.0 m	245.0 m	250.0 m
Beam	32.30 m	40.0 m	43.0 m	45.50 m
Displacement	-	-	90,000 T	120,000 T
Mooring Requirements	As detailed in Terminal Handbook *(see special headline arrangements)*	As detailed in Terminal Handbook	As detailed in Terminal Handbook	As detailed in Terminal Handbook
Min. UKC (alongside)	50cm	50cm	50cm	50cm
Max. Draft – Berth	Berth Depth – UKC	Berth Depth – UKC	Berth Depth – UKC	Berth Depth - UKC
Arrival Drafts >11m	SAUCS Approval including manoeuvring margin allowance at berth pocket			
Max. Draft – Channel**	13.5 m			
Flammables (as per terminal handbook)	Yes	No	No	Yes
Slops (as per terminal handbook)	Terminal Approval	No	No	Terminal Approval
Cargo Stop during passing ships	Refer to Terminal Handbook	Refer to Terminal Handbook	Refer to Terminal Handbook	Refer to Terminal Handbook

*K3 – Vessels more than LOA 235.0 m and Beam more than 40.0 m will require harbour master assessment and approval

** Port channel maximum draft

Please note this information is in addition to the information available in Ship handling Safety Guidelines and Terminal Handbooks.

This HMI supersedes HMI 19-010 E and HMI 19-011 E