PACIFIC PILOTAGE AUTHORITY

1000 – 1130 West Pender Street
Vancouver, B.C
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NOTICE TO INDUSTRY

Date Issued:	06 December 2018	**Notice Number:**	04/2018

Subject: Guideline for use of docking tugs at DP World Centerm, GCT Vanterm, GCT Deltaport and DP World Fairview

Geographic Area: BC coast, Port of Vancouver and Port of Prince Rupert

Background:

There have been a number of near misses over the last year involving Very Large Container Vessels (LOA 330 to 366). This is due to a number of factors which include the large windage, deeper drafts compared to the available depth of water, and the higher displacement of such vessels.

As a result of the above along with the environmental conditions, there have been times when the two assigned tugs have been operating at 100% of their power (no safety reserve power) and were unable to hold the vessels in position. In addition, there have been times when the Safe Working Loads (SWL) of the available hard-points on the vessels were less than the required bollard pull loads to overcome the forces being applied to the vessels from wind and current.

We also expect ultra large container vessels of LOA over 366m to be arriving on our coast and need to be ready for this increased size and deadweight.

There are two Marin calculations attached for your information with a 20 knot wind on the starboard bow and a one knot current on the port bow. As can be seen the bollard requirements are beyond what the present tug packages can sustain.

Guideline: **As an interim measure while the PPA and BCCP conduct simulations and issue a report to the industry, the tug package will be two tractor tugs of adequate power for all vessels over 280m and three on request by the pilot based on the vessel maneuverability, weather conditions and displacement.**
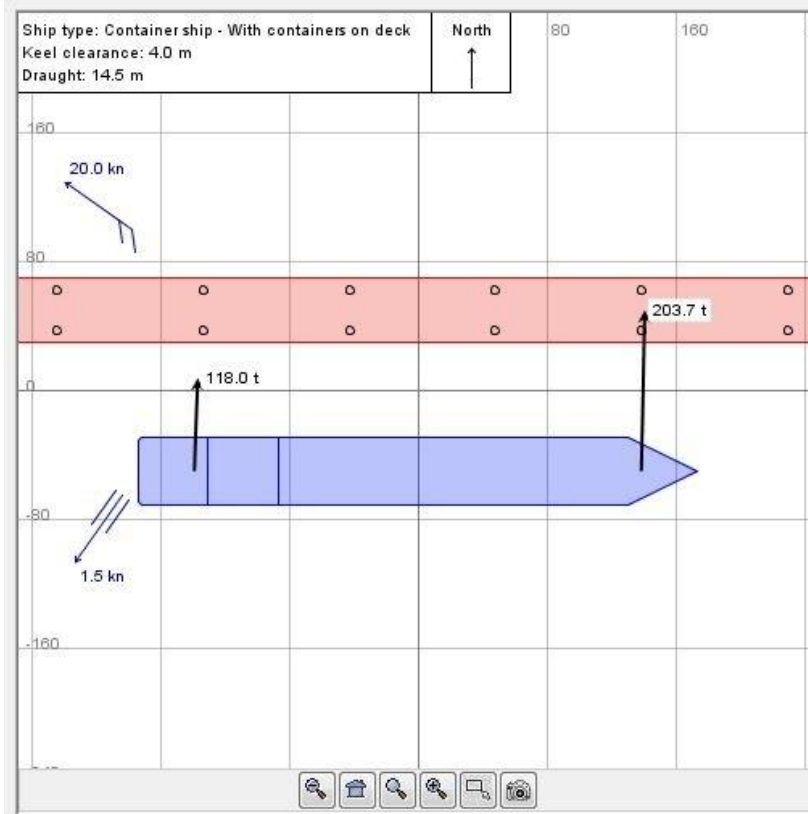
When placing pilot orders for container vessels with an LOA of 280m and above, please provide the vessels' summer draft displacement, the displacement for the existing draft and the windage area. This information will assist the pilots in making an informed judgment on the tug package required for berthing/unberthing.

Note: *This notice will be amended and clarified once the Marin Tug Matrix has been developed for the very large and ultra large container vessels and a full simulation carried out.*

Please contact the undersigned at oberkev@ppa.gc.ca if there are any queries or concerns.

Kevin Oberrmeyer
Chief Executive Officer

347 m vessel

Ship type: Container ship - With containers on deck	North	80 160 2
Keel clearance: 4.0 m	↑	
Draught: 14.5 m		

160

20.0 kn

80

○   ○   ○   ○   ○   ○

○   ○   ○   ○   ○   ○

203.7 t

118.0 t

0

-80

1.5 kn

-160

Result of required bollard pull calculation
(speed = 0.0 kn)

Ship heading for which maximum occurs:	90 deg
BOW	
Required bollard pull:	203.7 t
Calculated load:	142.6 t
Tow angle:	1 deg
STERN	
Required bollard pull:	118.0 t
Calculated load:	82.6 t
Tow angle:	2 deg

367 m vessel
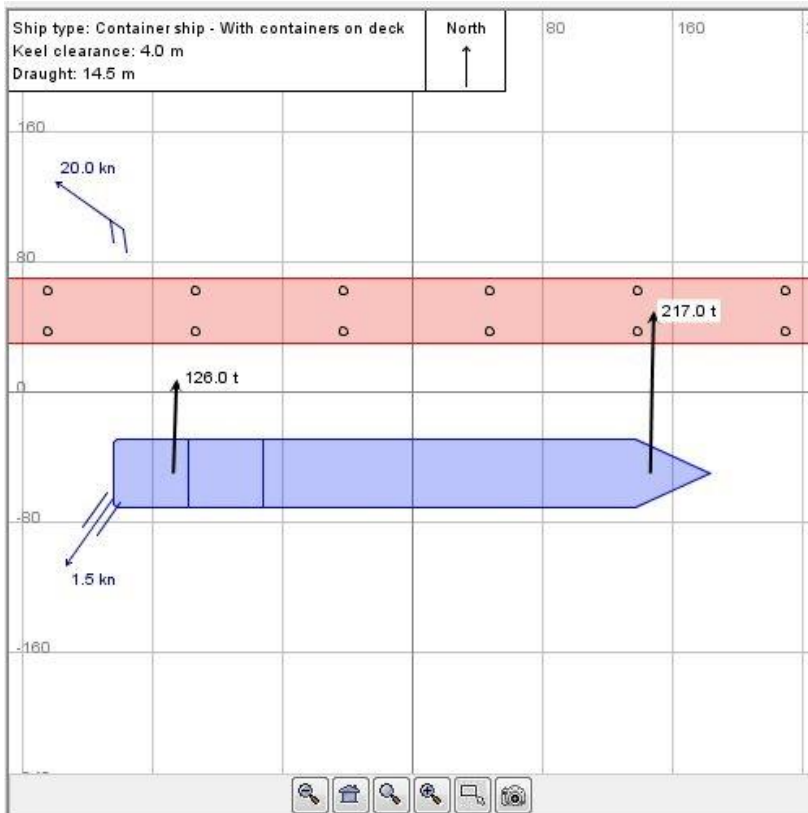
Ship type: Container ship - With containers on deck	North	80 160 2
Keel clearance: 4.0 m	↑	
Draught: 14.5 m		

160

20.0 kn

80

○   ○   ○   ○   ○   ○

○   ○   ○   ○   ○   ○

217.0 t

0

126.0 t

-80

1.5 kn

-160

Result of required bollard pull calculation
(speed = 0.0 kn)

Ship heading for which maximum occurs:	90 deg
BOW	
Required bollard pull:	217.0 t
Calculated load:	151.9 t
Tow angle:	1 deg
STERN	
Required bollard pull:	126.0 t
Calculated load:	88.2 t
Tow angle:	2 deg