



# Notice of amendment: Port Information Guide

Notification date: November 24, 2021

## Preamble

As a steward of Canada's largest port, the Vancouver Fraser Port Authority (port authority) has developed practices and procedures applicable to all ships operating within defined areas to support the safe and efficient movement of trade. These practices and procedures are available in the *Port Information Guide*, in accordance with Section 56 of the *Canada Marine Act*.

Under Section 56 (1) of the *Canada Marine Act*, a Canada Port Authority may, for the purpose of promoting safe and efficient navigation or environmental protection of the waters of the port, with respect to ships or classes of ships,

- a) monitor ships about to enter or within the waters of the port
- b) establish the practices and procedures to be followed by ships
- c) require ships to have the capacity to use specified radio frequencies
- d) establish traffic control zones for the purposes of (a) to (c)

In accordance with the above section of the *Canada Marine Act*, the port authority is proposing amendments to the practices and procedures in the *Port Information Guide*. These practices and procedures are applicable to all ships operating within the jurisdiction of the port authority. A ship, as defined by the *Canada Marine Act* and *Port Information Guide*, means every description of vessel, boat, or craft designed, used, or capable of being used solely or partly for marine navigation, whether self-propelled or not and without regard to the method of propulsion, and includes a seaplane and a raft or boom of logs or lumber.

## Summary of proposed amendment

The port authority proposes to make the following amendments to the *Port Information Guide* to further promote safety at the Port of Vancouver:

- Introduce exhaust gas cleaning systems (EGCS) wash water discharge requirements.
- Updated Definitions of Piloted Vessel, Tankers and the addition of "and/or"
- Updated Second Narrows Rail Bridge light procedures,
- Introduction of new tug and tow minimum tug bollard guidelines,
- Updated TCZ-2 Total Bollard Pull requirements,
- Introduction of standardized mooring plans for all Container Terminals.
- Refresh the *Port Information Guide* with general updates that will not affect intent or application

The proposed amendments are detailed in the table below as they appear in the *Port Information Guide*. The table is organized to include the relevant section, current language (if applicable) and proposed new or revised language.

## Proposed amendment

Section	Current language	Proposed language
Definitions: And/Or	Not Applicable	Means that either one of two things or both of them is possible.
Definitions: Piloted Vessel	Means a vessel that is under the conduct of a pilot in accordance with the Pacific Pilotage Authority.	Means a vessel that is under the conduct of a pilot or an individual with a Pilotage Waiver in accordance with the Pacific Pilotage Authority Regulations.
Definition: Tanker	Means a ship designed to carry liquid cargo in bulk, including a combination carrier when being used for this purpose.	Means a ship designed to carry liquid cargo in bulk, (including barges and articulated tugs and barges – ATBs) when being used for this purpose.
Section 8.15 TCZ-2 Communication: Second Narrows Bridge	<p>When the vessel's request has been received, the Second Narrows Rail Bridge operator will be required to:</p> <ul style="list-style-type: none"> <li>• Verbally confirm understanding on VHF Channel 12</li> <li>• Display one flashing red light on that side of the lift span facing the approaching vessel which indicates that the lift span is in the process of being raised to the fully raised position for every piloted vessel unless advised otherwise.</li> <li>• Display one flashing green light on that side of the lift span facing the approaching vessel which indicates that the lift span has been raised to the requested height.</li> <li>• Display a sector light for westbound TCZ vessels that require the lift span in the fully raised position.</li> </ul>	<p>When the vessel's request has been received, the Second Narrows Rail Bridge operator will be required to:</p> <ul style="list-style-type: none"> <li>• Verbally confirm understanding on VHF Channel 12</li> <li>• Display one flashing red light on that side of the lift span facing the approaching vessel which indicates that the lift span is in the process of being raised or lowered to the required position for every piloted vessel unless advised otherwise.</li> <li>• Display one flashing green light on that side of the lift span facing the approaching vessel which indicates that the lift span has been raised to the requested height.</li> <li>• Display a sector light for westbound TCZ vessels that require the lift span in the fully raised position.</li> </ul>

Section 8.15  
 Second Narrows  
 TCZ Procedures  
 (TCZ-2)

TABLE 2: SECOND NARROWS TCZ (TCZ-2)  
 DEEP SEA VESSEL - TUG AND BOLLARD  
 PULL REQUIREMENTS MATRIX

LOA less than 200m and moulded breadth less than 35m

Vessel draft	No. of tugs	Bollard pull tonnes	No. of tugs	Bollard pull tonnes
	Bow		Stern	
<8m	1	20	1	30
>8m <10m	1	30	1	40
>10m	1	30	1	50

LOA 200m – 229.9m and moulded breadth less than 35m

Vessel draft	No. of tugs	Bollard pull tonnes	No. of tugs	Bollard pull tonnes
	Bow		Stern	
<8m	1	30	1	50
>8m <10m	1	60	1 or 2	65
>10m <12m	1 or 2	60	1 or 2	80
>12m	1 or 2	60	2	110

LOA 230m – 250m and moulded breadth less than 45m

Vessel draft	No. of tugs	Bollard pull tonnes	No. of tugs	Bollard pull tonnes
	Bow		Stern	
<10m	1 or 2	60	1 or 2	65
>10m <12m	1 or 2	60	1 or 2	80
>12m	1 or 2	60	2	110

TABLE 2: SECOND NARROWS TCZ (TCZ-2)  
 DEEP SEA VESSEL - TUG AND BOLLARD PULL  
 REQUIREMENTS MATRIX

LOA less than 200m and moulded breadth less than 35m

Vessel draft	No. of tugs	Bollard pull tonnes	No. of tugs	Bollard pull tonnes
	Bow		<b>(Total)</b>	
	Bow		Stern	
<8m	1	20	1	30
>8m <10m	1	30	1	40
>10m	1	30	1	50

LOA 200m – 229.9m and moulded breadth less than 35m

Vessel draft	No. of tugs	Bollard pull tonnes	No. of tugs	Bollard pull tonnes
	Bow		<b>(Total)</b>	
	Bow		Stern	
<8m	1	30	1	50
>8m <10m	1	60	1 or 2	65
>10m <12m	1 or 2	60	1 or 2	80
>12m	1 or 2	60	2	110

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Vessel draft	No. of tugs	Bollard pull tonnes	No. of tugs	Bollard pull tonnes
	Bow		<b>(Total)</b>	
	Bow		Stern	
<10m	1 or 2	60	1 or 2	65
>10m <12m	1 or 2	60	1 or 2	80*
>12m	1 or 2	60	2	110*

- \* When two tugs are employed, similar bollard pull figures will be used. e.g. 60BP & 50BP

Section 8.16 Eastern Burrard Inlet TCZ procedures (TCZ-3)	<p>Table 1: TCZ-3 DEEP SEA VESSEL TUG AND BOLLARD PULL REQUIRMENTS – SUMMARY MATRIX</p> <p><b>LOA less than 200m and beam less than 35m</b></p> <table border="1"> <thead> <tr> <th>Vessel draft</th> <th>No. of tugs</th> <th>Bollard pull tonnes</th> <th>No. of tugs</th> <th>Bollard pull tonnes</th> </tr> <tr> <td></td> <td colspan="2">Bow</td> <td colspan="2">Stern</td> </tr> </thead> <tbody> <tr> <td>&lt;8m</td> <td>1</td> <td>20</td> <td>1</td> <td>30</td> </tr> <tr> <td>8m or &gt; but &lt;10m</td> <td>1</td> <td>30</td> <td>1</td> <td>30</td> </tr> <tr> <td>10m or &gt;</td> <td>1</td> <td>30</td> <td>1</td> <td>50</td> </tr> </tbody> </table> <p><b>LOA 200m – 229.9m and beam less than 35m</b></p> <table border="1"> <thead> <tr> <th>Vessel draft</th> <th>No. of tugs</th> <th>Bollard pull tonnes</th> <th>No. of tugs</th> <th>Bollard pull tonnes</th> </tr> <tr> <td></td> <td colspan="2">Bow</td> <td colspan="2">Stern</td> </tr> </thead> <tbody> <tr> <td>&lt;8m</td> <td>1</td> <td>30</td> <td>1</td> <td>50</td> </tr> <tr> <td>8m or &gt; 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Section 8.21 Towing	Not Applicable	<p>Tugs and Tows – Minimum tug bollard guidelines:</p> <p>The overall adequacy of the towing arrangement in the context of voyage conditions is a key planning aspect for an intended voyage. Inadequate tug power may result in unsafe operating practices and increase the risk of navigational incidents. In order to enhance safety in tug and barge operations VFPA in partnership with National</p>																																																																																																																																																																

		<p>Research Council, Coastal and Engineering Research Centre (NRC-OCRE) has developed minimum tug bollard pull guidelines. The main focus of the NRC study was to investigate into existing methodologies and their applicability to barge towing operations in the Port of Vancouver navigational jurisdiction and develop a simplified formula to estimate tug powering requirements. Tug operators in the port provided the vessel data and input for this study.</p> <p>Any tug transiting the region with a tow must meet the minimum bollard pull requirement "Figure 1" to perform station-keeping against the worst-case current and wind forecast along their route for their given transit time.</p> $BP = 1.122 \times 10^{-4} (574.5(B_{hull} \times T_{hull})C_{nut}V_{water}^2 + 0.6125(B_{sup} \times T_{sup})C_{sup}V_{wind}^2)$ <p>Figure 1</p> <p>The Bollard Pull Estimator can be found <a href="#">here</a>.</p> <p>These guidelines apply to all tugs and tows engaged in barge towing operations. The procedures do not relieve the Master from compliance with the Canada Shipping Act 2001 or other regulations, requirements, or standards regarding vessels operating in Canadian ports.</p> <p>The NRC report can be found <a href="#">here</a>.</p>
<p>Section 14.5                  Environmental requirements - exhaust gas cleaning system (EGCS) wash water discharges</p>	<p>Not Applicable</p>	<p><b>Exhaust gas cleaning system (EGCS) wash water discharges</b></p> <p>The discharge of wash water from exhaust gas cleaning systems (EGCS) from all fuel combustion machinery (excluding main engines) into the environment is not permitted while a vessel is at anchorage or at berth within the Port of Vancouver. This applies to the wash water from open-loop and closed-loop EGCS. It does not apply to inert-gas scrubbers required by tankers for cargo operations and safety reasons.</p> <p>While in the Port of Vancouver, ships fitted with hybrid scrubbers shall switch to the closed-loop mode and operate the scrubber in a zero-discharge mode. Bleed-off from closed-loop scrubbers is prohibited and all EGCS wash water must be retained on the</p>

		<p>vessel in a holding tank or be disposed of at an authorized shore reception facility. If wash water cannot be recirculated, vessels must switch over to compliant fuel or shore power (where available). The change-over should be effected as soon as possible after arrival to anchorage or berth and as late as possible before departure. ECGS overboard discharge valves should be shut and secured/sealed in closed position while the vessels are in the Port of Vancouver.</p> <p>All vessels are required to electronically submit a 24-hour pre-arrival declaration through the '<i>Pacific Gateway Portal</i>'.</p>
Terminal Data Sheet – DP World Centerm	Not Applicable	<p>Mooring Plans:</p> <p>All container terminals within VFPA jurisdiction must provide PPA dispatch, BCCP and VFPA Operations Center a standardized mooring arrangement 12hrs in advance of vessel arrival. Terminals can find the standardized mooring plans <a href="#">here</a>.</p>
Terminal Data Sheet – GCT Vanterm	Not Applicable	<p>Mooring Plans:</p> <p>All container terminals within VFPA jurisdiction must provide PPA dispatch, BCCP and VFPA Operations Center a standardized mooring arrangement 12hrs in advance of vessel arrival. Terminals can find the standardized mooring plans <a href="#">here</a>.</p>
Terminal Data Sheet – GCT DeltaPort	Not Applicable	<p>Mooring Plans:</p> <p>All container terminals within VFPA jurisdiction must provide PPA dispatch, BCCP and VFPA Operations Center a standardized mooring arrangement 12hrs in advance of vessel arrival. Terminals can find the standardized mooring plans <a href="#">here</a>.</p>
Terminal Data Sheet – DP World Fraser Surrey	Not Applicable	<p>Mooring Plans:</p> <p>All container terminals within VFPA jurisdiction must provide PPA dispatch, BCCP and VFPA Operations Center a standardized mooring arrangement 12hrs in advance of vessel arrival. Terminals can find the standardized mooring plans <a href="#">here</a>.</p>

Terminal Data Sheet – Univar Berth #4 High Wind procedures	Not Applicable	High Wind Procedures <ul style="list-style-type: none"> <li>• Terminal Regulations for Vessels require Terminal operations staff, vessel masters &amp; pilots to review what the anticipated maximum windspeed may be in the inner harbour and should not proceed to berth the vessel if sustained speeds are expected to be greater than 40knots.</li> <li>• After berthing, Terminal Regulations for Vessels require that terminal operations staff and vessel masters monitor the windspeed at the dock, and as per the Terminal specific Isgott ship/shore safety checklist, operations will be adjusted as windspeeds increase. Any sustained windspeed greater than 40knots will require tugs to assist the vessel in remaining safely berthed.</li> </ul>
Terminal Data Sheet – Univar Berth #4 BCM	Not Applicable	BCM “Bow to Center Manifold”  Maximum BCM is 105m

### Comments and questions

This notice will be posted publicly for a 90-day period to notify industry, stakeholders and the public of the intended amendment to the practices and procedures in the Port Information Guide.

Anyone affected by these amendments may comment in writing by **January 8, 2022** to the attention of the marine operations specialist at [portinfo@portvancouver.com](mailto:portinfo@portvancouver.com).

All comments received will be taken into consideration before the proposed amendments are implemented. The amended Port Information Guide and consideration report will be posted by **January 31, 2022**, with the new requirements coming into effect on **March 1, 2022**.