



Notice of amendment: Port Information Guide

Notification date: November 13, 2020

Preamble

In accordance with the *Canada Marine Act*, Section 57 – Notice, the Vancouver Fraser Port Authority (port authority) is proposing amendments to the practices and procedures in the *Port Information Guide*. These practices and procedures are applicable to all ship(s) 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.

This notice is posted publicly for a 30-day period to notify industry, stakeholders and the public of the intended amendments to the practices and procedures in the *Port Information Guide*.

Anyone affected by these amendments may comment in writing by December 13, 2020 to the attention of:

Marine operations specialist
portinfoguide@portvancouver.com

All comments received will be taken into consideration before the proposed amendments are implemented.

Summary

As the 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)

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

- Update the definition of “bunkering” and “bunkering checklist”
- Update language regarding critical marine mammal habitat, environmental requirements, and other language related to encounters with marine mammals
- Change the term “Notice to Shipping” to “Navigation Warning”
- Update language regarding shifting vessels along a berth, specifically referencing that, at all times, sufficient personnel dockside are present
- Formalize procedures for the navy buoys in North Vancouver
- Update language for transit windows within Traffic Control Zone 2 (TCZ)

- Designate Anchorage Delta for emergency only
- Formalize best practices for positioning gantry cranes at all container terminals within the port authority's jurisdiction
- Refresh the Port Information Guide with general updates that will not affect intent or application

The proposed amendments are listed in chronological order 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 amendments

Section	Current language	Proposed language
Definitions: Bunkering	The planning and actual safe transfer of bunker oil from a bunker vessel to another vessel.	The planning and actual safe transfer of bunker marine fuel from a bunker vessel to another vessel.
Definitions: Bunkering checklists	The bunkering checklist as referred to in the latest edition of <i>International Safety Guide for Oil Tankers and Terminals</i> (ISGOTT).	The bunkering checklist as referred to in the latest edition of the <i>International Safety Guide for Oil Tankers and Terminals</i> (ISGOTT) and the International Association of Port and Harbours (IAPH) Clean Marine Fuels Working Group.
4.11 Marine mammal critical habitat	<p>British Columbia's coastal ecosystem sustains populations of whales, porpoises and dolphins (cetaceans). Marine mammals common to BC's coast include southern and northern resident killer whales, humpback, fin, blue and sei whales. Fisheries and Oceans Canada (DFO) has published Species at Risk Act Recovery Strategies and Action Plans for a number of at-risk whale species in the region designating critical habitat. Information can be found here.</p> <p>We are committed to conducting operations in a responsible and sustainable manner that safeguards and promotes continual protection of the environment. For these reasons, the Enhancing Cetacean Habitat and Observation (ECHO) program was developed in 2014. Information about the ECHO program can be found on our website.</p> <p>Vessels navigating to, from or within the Port of Vancouver are required to navigate with care and are requested to report issues with marine mammals as per Section 6.2 of the Port Information Guide. (map).</p>	<p>Canada's west coast is home to populations of whales, porpoises, and dolphins (cetaceans). Marine mammals common to B.C.'s coast include northern and southern resident killer whales, humpback, fin, blue, and sei whales. Fisheries and Oceans Canada (DFO) published <i>Species at Risk Act</i> recovery strategies and action plans, which support a number of at-risk whale species in the region through the designation of critical habitat. Information can be found here.</p> <p>We are mandated to conduct operations in a responsible and sustainable manner that safeguards and promotes continual protection of the environment. For these reasons, the port authority developed the Enhancing Cetacean Habitat and Observation (ECHO) Program in 2014. Information about the ECHO program can be found on our website.</p> <p>Vessels navigating throughout the port are required to use caution and report any issues with marine mammals as per Section 6.2 of the Port Information Guide.</p>



Image: Southern resident killer whale critical habitat and shipping lanes. Navigate with care.

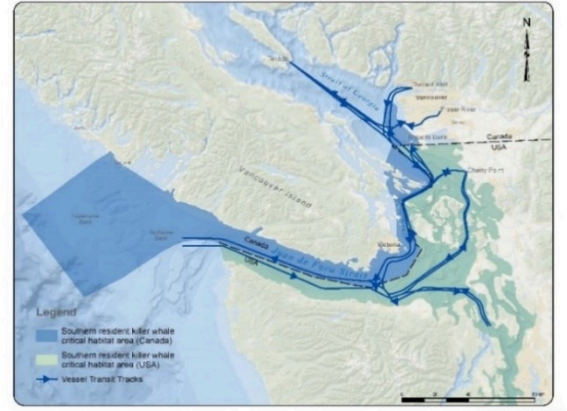


Image: Southern resident killer whale critical habitat and shipping lanes. Navigate with care.

Section 7.13
 Shipping
 announcements
 for the port area

NOTICES TO SHIPPING
 The Canadian Coast Guard (CCG) issues Notices to shipping (NOTSHIP) to inform mariners about hazards to navigation and to share other important information. Verbal NOTSHIP alerts are broadcast by radio by MCTS and written NOTSHIP alerts are issued when the hazard location is beyond broadcast range or when the information remains in effect for an extended period of time.

Navigation warnings
 The Canadian Coast Guard (CCG) issues navigation warnings (NAVWARN) to inform mariners about navigation hazards and share other important information. Verbal NAVWARN alerts are broadcast by radio by the Marine Communications and Traffic Services Centre (MCTS). Written NAVWARN alerts are issued when the hazardous location is beyond broadcast range or when the information remains in effect for an extended period of time.

Section 7.19
 Encounters with
 marine
 mammals

Killer whales in B.C. and Pacific Ocean
 A minimum distance approach of 200m for all killer whale populations in B.C. and the Pacific Ocean is now mandatory. The 200m approach distance for killer whales on the Pacific coast is supported by published studies and evidence that this distance will reduce noise and vessel interference with whale foraging activities. For more information click [here](#).

Killer whales in the Pacific Ocean
 As of July 2018, the Government of Canada amended the *Marine Mammal Regulations* to require that all vessels stay at least 100 metres away from most whales, porpoises, and dolphins, and at least 200 metres away from killer whales in the Pacific Ocean off the coast of British Columbia. In past years, annual seasonal measures have required vessels to stay 400 metres away from all killer whales in southern B.C. coastal waters between Campbell River and just north of Ucluelet between June 1 – November 30. To reduce underwater noise, vessels are also asked to turn off their echo sounders and turn engines to neutral idle, if safe to do so, when a whale is within 400 metres. Additionally, the regulations stipulate mandatory (and immediate) reporting of all vessel contact with marine mammals using the DFO's incident report hotline. Anyone in contravention of the regulations can be charged with an offence under the *Fisheries Act*.

Issues / Events To Be Reported	Section	To	Via	How
Whale, dolphin or porpoise sighting	14.5	BC Cetacean Sightings Network and Fisheries and Oceans Canada	WhaleReport App, call 1.866.I SAW ONE (1.866.472.9663) Report a whale sighting here	Call, email or online form.
Marine Mammal found dead or in distress	14.5	BC Marine Mammal Response Network	Telephone: 1.800.465.4336	Verbal

Contact DFO's B.C. Marine Mammal Response Network Incident Reporting Hotline

		<p>if your vessel strikes a whale, or if you observe a marine mammal in distress or entangled (1.800.465.4336 or VHF Channel 16).</p> <p>If you see a marine mammal, please call the B.C. Cetacean Sightings Network (1.866.I.SAW.ONE or 1.866.472.9663) or submit your sighting through the WhaleReport App (available on iOS and Android devices). Make sure you note important details and characteristics that might help with identification and location:</p> <ul style="list-style-type: none"> • Date, time, and location (latitude/longitude) of animal • Type of animal (species if possible) • Sighting distance • Behaviours of the animal observed (and your degree of confidence in the identification) • Number of individuals • If possible, from a safe location and abiding by the <i>Marine Mammal Regulations</i>, please provide photographs and video of the animal, especially close-ups of the tail, flukes and flippers <p>The WhaleReport Alert System (WRAS) is a mobile and desktop-based program that alerts commercial mariners to the presence of whales—such as slowing down or diverting course—to reduce the risk of disturbance and collision. If you belong to a professional marine organization and are a pilot or member of the bridge crew of a ship, please contact the WRAS Project Manager at WRAS@ocean.org to request access to the WhaleReport Alert System.</p> <p>For more information click here.</p> <table border="1" data-bbox="943 1495 1453 1663"> <thead> <tr> <th>Issues / Events To Be Reported</th> <th>Section</th> <th>To</th> <th>Via</th> <th>How</th> </tr> </thead> <tbody> <tr> <td>Whale, dolphin or porpoise sighting</td> <td>14.5</td> <td>BC Cetacean Sightings Network and Fisheries and Oceans Canada</td> <td>WhaleReport App, call 1.866.I.SAW.ONE (1.866.472.9663) Report a whale sighting here</td> <td>Call, email or online form.</td> </tr> <tr> <td>Marine Mammal found dead or in distress</td> <td>14.5</td> <td>BC Marine Mammal Response Network</td> <td>Telephone: 1.800.465.4336</td> <td>Verbal</td> </tr> </tbody> </table>	Issues / Events To Be Reported	Section	To	Via	How	Whale, dolphin or porpoise sighting	14.5	BC Cetacean Sightings Network and Fisheries and Oceans Canada	WhaleReport App, call 1.866.I.SAW.ONE (1.866.472.9663) Report a whale sighting here	Call, email or online form.	Marine Mammal found dead or in distress	14.5	BC Marine Mammal Response Network	Telephone: 1.800.465.4336	Verbal
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Marine Mammal found dead or in distress	14.5	BC Marine Mammal Response Network	Telephone: 1.800.465.4336	Verbal													
8.2 Speed	<p>Every vessel or ship in the port must at all times:</p> <ul style="list-style-type: none"> • Move at a safe speed so that she can take proper and effective action to avoid collision and be stopped 	<p>Every vessel or ship in the port must at all times:</p> <ul style="list-style-type: none"> • Move at a safe speed so that proper and effective action can be taken to avoid collision and stop within a 															

	<p>within a distance appropriate to the prevailing circumstances and conditions;</p> <ul style="list-style-type: none"> • Have due regard for towing, log loading, bunkering, diving operations and all other vessels. Notices to Shipping and Notices to Mariners will identify works in progress and vessels are to proceed past these works at the minimum speed at which the vessel can be kept on course; • Approach areas of known or suspected marine wildlife activity with caution and follow the guidelines found here to 'be whale wise'; • The wake and wash from a vessel or ship are not to cause a risk to the safety of life or damage to property. 	<p>distance appropriate to the prevailing circumstances and conditions</p> <ul style="list-style-type: none"> • Be cautious of towing, log loading, bunkering, diving operations and all other vessels. Notices to Shipping and Notices to Mariners will identify works in progress. Vessels are to proceed past these works at the minimum speed at which they can be kept on course • Approach areas of known or suspected marine wildlife activity with caution and follow the 'be whale wise' guidelines found here • Ensure the wake and wash from a vessel or ship does not impose a risk to the safety of life or damage to property
<p>8.10 Shifting vessels Shifting along a berth</p>	<p>SHIFTING ALONG A BERTH Vessels may shift along a berth with a pilot and tugs without restriction.</p> <p>If a vessel wants to shift along a berth without a pilot and tugs, approval from the port authority and clearance from Marine Communications and Traffic Services Centre (MCTS) is required. To gain port authority approval, a vessel service request must be submitted and the following conditions must be met:</p> <ul style="list-style-type: none"> • A Terminal Operator's Representative must call MCTS (250.363.6333) both 60 minutes and 15 minutes prior to each planned shift and be in receipt of vessel traffic information prior to executing shift • The Ship's Master must notify, and receive clearance from MCTS via VHF at the commencement of any shift, and notify at the completion • The berth is free from encumbrances (i.e. cranes, gangways, etc. are moved clear) • The master is on the bridge in overall charge • Main engines are on standby and ready for immediate use • Linesmen are employed 	<p>Shifting along a berth Vessels may shift along a berth with a pilot and tugs without restriction.</p> <p>If a vessel wants to shift along a berth without a pilot and tugs, approval from the port authority and clearance from MCTS is required. To gain port authority approval, a vessel service request must be submitted and the following conditions must be met:</p> <ul style="list-style-type: none"> • A terminal operator's representative must call MCTS (250.363.6333) both 60 minutes and 15 minutes prior to each planned shift and be in receipt of vessel traffic information prior to executing the shift • The ship's master must notify and receive clearance from MCTS via very high frequency (VHF) at the commencement of any shift. The master must also notify MCTS again once the shift is complete • The berth is free from encumbrances (e.g., cranes, gangways) • The master is on the bridge and in charge • Main engines are on standby and ready for immediate use • Sufficient number of trained dockside personnel are available during the shift for safe and effective response

	<ul style="list-style-type: none"> • There are two headlines and two stern lines and one spring each end under tension at all times • The appropriate VHF channel is monitored throughout the shift (ch.12 – Vancouver Harbour, ch.11 – Roberts Bank, ch.74 – Fraser River). <p>At the following terminals: Vancouver Wharves, Cascadia, Lynnterm or Univar, the maximum distance a vessel may shift without a pilot and tugs is 30 metres.</p> <p>In situations where a vessel expects to carry out multiple shifts along a berth without a pilot and tugs, and all the conditions above will be met for each shift, VFPA may grant approval for multiple shifts with one service request for a period of up to one day. A new service request must be submitted for each shift(s) occurring the next day starting at 0700.</p>	<ul style="list-style-type: none"> • There are two headlines, two stern lines and one spring on each end under tension at all times • The appropriate VHF channel is monitored throughout the shift (channel 12 – Vancouver Harbour, channel 11 – Roberts Bank, channel 74 – Fraser River). <p>At the following terminals, the maximum distance a vessel may shift without a pilot and tugs is 30 metres: Vancouver Wharves, Cascadia, Lynnterm, and Univar.</p> <p>In situations where a vessel expects to carry out multiple shifts along a berth without a pilot and tugs and all conditions above are met for each shift, the port authority may grant approval for multiple shifts with one service request for a period of up to one day. A new service request must be submitted for each shift(s) occurring the next day starting at 0700.</p>
<p>8.15 Second Narrows TCZ procedures (TCZ-2)</p>	<p>TCZ-2 RESTRICTIONS</p> <p>a) Transit Windows</p> <p>A TCZ-2 transit is defined as a movement within TCZ-2 that includes passing under the Second Narrows Iron Workers Memorial Bridge and the Second Narrows Railway Bridge.</p> <p>Transit windows are established on either side of high and low water slack tides and are based on predicted slack water or stemming a predicted limiting current of one or two knots. Reference should be made to Table 1: Second Narrows TCZ (TCZ-2) transit procedures deep sea vessels – Summary matrix.</p> <p>All Tier 1 vessels are subject to observing TCZ-2 transit windows during their transit and when maneuvering within TCZ-2.</p> <p>Predicted transit windows for vessels restricted by air draft can be provided by VPFA on request to port authority Operations Centre well in advance of the actual transit.</p> <p>For planning purposes only, agents can use the Coast Tidal Windows on-line tool available on the PPA's website.</p> <p>All available navigational information, including that gained from Portable Pilotage</p>	<p>TCZ-2 Restrictions</p> <p>a) Transit windows</p> <p>A TCZ-2 transit is defined as a movement within TCZ-2 that includes passing under the Second Narrows Iron Workers Memorial Bridge and the Second Narrows Railway Bridge.</p> <p>Transit windows are established on either side of high and low water slack tides and are based on predicted slack water or stemming a predicted limiting current of one or two knots. Reference should be made to Table 1: Second Narrows TCZ (TCZ-2) transit procedures deep sea vessels – Summary matrix.</p> <p>All Tier 1 vessels are subject to observing TCZ-2 transit windows for the portion of the transit that involves passing under the Second Narrows Iron Workers Memorial Bridge and the Second Narrows Railway Bridge.</p> <p>The port authority can provide predicted transit windows for vessels restricted by air draft. A request for transit windows can be made to the port authority's Operations Centre well in advance of the actual transit.</p> <p>For planning purposes only, agents can use the Coast Tidal Windows online tool available on the Pacific Pilotage Authority's (PPA) website.</p>

	<p>Units along with real time tide and current information, should be used in conjunction with predicted transit windows to improve the safety and efficiency of TCZ-2 operations.</p>	<p>All available navigational information, including that gained from Portable Pilotage Units along with real time tide and current information, should be used in conjunction with predicted transit windows to improve the safety and efficiency of TCZ-2 operations.</p>
<p>Section 11.5 Mooring</p>	<p>MOORING BUOYS There are mooring buoys located in North Vancouver, called the navy buoys, which are managed by T&B Moorings. Users may secure appropriately insured barges to the navy buoys for short periods of time whenever space is available. T&B Moorings will invoice users of the buoys directly.</p> <p>There is another mooring buoy located in English Bay near the entrance to False Creek. Users may secure barges to this buoy as well, but are expected to self-report the length of barge and duration of mooring directly to T&B moorings at 604.687.9677 or cmc@comc.cc.</p>	<p>Mooring buoys There are mooring buoys located in North Vancouver, called the navy buoys, which are managed by T&B Moorings. Users may secure appropriately insured barges to the navy buoys for a short period of time when space is available. The following procedures must be followed when using navy buoys:</p> <ul style="list-style-type: none"> • No cargo operations are permitted to take place while moored at any buoy • Loaded or partially loaded oil barge moorage at the buoys is strictly prohibited • All lines used to secure barges at the navy buoys are to be of acceptable quality and condition, sufficient strength, diameter, and appropriate length to ensure mooring is maintained throughout the length of stay at the buoy • All mooring lines need to be appropriately protected from chafing forces or other potential damages • No more than four barges, two per mooring point, are allowed to be moored to a buoy either directly or rafted to another barge moored to the buoy, at any time • Buoy lines are to be secured to the bow or stern of barges • There is to be a minimum of one headline and one stern line between barges secured to the navy buoys • Buoy lines shall not be secured to the side deck mooring fixtures of barges • Whenever possible, standing buoy lines of good condition, adequate length, diameter, and strength should be used for securing barges to the buoys. • Rafted barges, i.e., a barge secured with no buoy lines alongside a barge secured directly to a buoy, shall use a minimum of four lines between barges.

		<p>These lines will consist of a bowline, two spring lines and a stern line</p> <ul style="list-style-type: none"> • Rafted barges shall be positioned so that their forward ends are aligned with one another • If standing lines are unavailable at a buoy, it is the towing master's responsibility to ensure that the barge to be rafted to is safely moored and that the second barge is adequately secured as described above • All barges secured at the buoys must have adequate liability insurance coverage • Barges secured at the buoys remain in the care and custody of the tug and/or the company securing the barge to the buoys • All loads overhanging the perimeter of the barges must be lit to advertise their presence to mariners in the area <p>T&B Moorings will invoice users of the buoys directly. There is another mooring buoy located in English Bay near the entrance to False Creek. Users may secure barges to this buoy as well, but are expected to self-report the length of barge and duration of mooring directly to T&B Moorings at 604.687.9677 or cmc@comc.cc.</p>										
<p>14.5 Environmental requirements</p>	<p>For more information, and to see the infographic below, please go to the ECHO Program webpage.</p>	<p>For more information and to see the infographic below, please go to the ECHO Program webpage.</p> <p>Since 2014, the ECHO Program has undertaken numerous collaborative research initiatives to better understand and manage the cumulative effects of shipping activities on whales in our region, in particular the southern resident killer whales. Initiatives include voluntary seasonal slowdown and lateral displacement through key southern resident killer whale critical habitat. Check to see if the slowdown is active on the ECHO Program.</p> <p>Stay up to date on the ECHO Program initiatives by subscribing to the ECHO newsletter.</p>										
<p>Section 14.6 Anchorage procedures</p>	<p>Anchorage (Tables)</p> <table border="1" data-bbox="386 1776 919 1896"> <tr> <td>Inner Harbour Anchorage Delta (D)</td> <td>49 17 39 N 123 05 03 W</td> <td>300</td> <td>35</td> <td>29.8</td> </tr> </table>	Inner Harbour Anchorage Delta (D)	49 17 39 N 123 05 03 W	300	35	29.8	<p>Anchorage (Tables)</p> <table border="1" data-bbox="946 1776 1469 1896"> <tr> <td>Inner Harbour Anchorage Delta (D)</td> <td>49 17 39 N 123 05 03 W</td> <td>300</td> <td>35</td> <td>29.8</td> </tr> </table>	Inner Harbour Anchorage Delta (D)	49 17 39 N 123 05 03 W	300	35	29.8
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		Emergency anchorage - assigned at discretion of the harbour master
<p>Section 14.7 Bunkering and fueling</p> <p>Bunkering with liquid natural gas (LNG)</p>	<p>BUNKERING WITH LIQUID NATURAL GAS (LNG)</p> <p>Vessels utilizing liquid natural gas as a fuel must have received approval from Transport Canada to use LNG and must comply with all operating practices and procedures requirements as established by Transport Canada particular to the vessel, the company.</p> <p>The authority is a member of the <i>Society for Gas as a Marine Fuel</i> (SGMF) and recognizes the recommended competence guidelines for the supply and bunkering of LNG for marine vessels.</p> <p>Vessels transferring LNG ship-to-ship, shore-ship or truck-to-ship must use a recognized bunkering checklist. Included in this guide, Appendix E LNG Bunker Checklist, is an example of a recognized bunkering checklist for ship-to-ship transfers. Recognized checklists for ship-to-ship, shore-ship and truck-to-ship can also be found online at: http://lngbunkering.org/lng/bunker-checklists A recognized LNG bunkering checklist must be kept on file for at least one year and a copy emailed to the Operations Center at harbour_master@portvancouver.com after bunkering is completed. Any incidents involving LNG used as a fuel on a vessel must be reported to the operations centre at 604.665.9086 or harbour_master@portvancouver.com.</p>	<p>Bunkering with liquid natural gas (LNG)</p> <p>Vessels using liquid natural gas as a fuel must receive approval from Transport Canada. They must also comply with all operating practice and procedure requirements that pertain to their specific vessel type and company, as established by Transport Canada.</p> <p>The port authority is a member of the Society for Gas as a Marine Fuel (SGMF) and recognizes the recommended competence guidelines for the supply and bunkering of LNG for marine vessels.</p> <p>Vessels transferring LNG ship-to-ship, shore-to-ship or truck-to-ship must use a recognized bunkering checklist. Included in this guide, Appendix E LNG Bunker Checklist, is an example of a recognized bunkering checklist for ship-to-ship transfers. Recognized checklists for ship-to-ship, shore-to-ship and truck-to-ship can also be found online.</p> <p>After bunkering is completed, a recognized LNG bunkering checklist must be kept on file for at least one year and a copy must be emailed to the Operations Center at harbour_master@portvancouver.com. Any incidents involving LNG used as a fuel on a vessel must be reported to the Operations Centre at 604.665.9086 or harbour_master@portvancouver.com.</p>
<p>Section: 16.8 De-ratting</p>	<p>Section 16.8 De-Ratting</p> <p>In accordance with the <i>International Health Regulations</i> 2005, from the World Health Organization, all international vessels stopping in Canada must have a valid "Ship Sanitation Certificate". These certificates, the Ship Sanitation Control Exemption Certificate or a Ship Sanitation Control Certificate (formerly known as De-ratting/Deratification Certificates), must be renewed every six months. In Canada, these certificates are issued by Health Canada and inspection can be requested via the appropriate form thru the vessel's agent.</p>	<p>Section 16.8 Ship sanitation certificate</p> <p>In accordance with the World Health Organization's <i>International Health Regulations</i> 2005, all international vessels stopping in Canada must have a valid Ship Sanitation Certificate. These certificates, such as the Ship Sanitation Control Exemption Certificate or a Ship Sanitation Control Certificate (formerly known as De-ratting/Deratification Certificates), must be renewed every six months. In Canada, these certificates are issued by Health Canada and inspection can be requested via the appropriate form from the vessel's agent.</p>

<p>Terminal data sheet: Gantry crane positioning berthing/ unberthing Appendix K-N All container terminals</p>	<p>Not Applicable</p>	<p>Appendices K, L, M, and N added to Terminal data sheets include berthing and unberthing requirements</p>
<p>Terminal data sheet: Lynnterm West/G3 Terminal</p>	<p>LYNNTERM – WEST GATE (<i>G3 Terminal – under construction</i>)</p>	<p>G3 Terminal</p>
<p>Terminal data sheet: All terminals</p>	<p>Date – September 2017</p>	<p>To be deleted</p>
<p>Terminal data sheet All container terminals mooring arrangements</p>	<p>Not Applicable</p>	<p>Mooring arrangements – All container terminals Minimum spacing distance of 25 metres between vessels must be maintained for LOA up to 350 metres. For vessels LOA greater than 350 metres, a minimum distance of 10% of LOA of the larger vessel must be used to determine the spacing requirements.</p>
<p>Terminal data sheet: All container terminals container crane positioning arrival and departure</p>	<ul style="list-style-type: none"> • Cranes should be stowed at the mid-ship point at the arrival/departure berth and boomed up, i.e. away from the bow/stern of the vessel. • If the crane booms are in the lowered position due to breakdown, maintenance or other reasons, the PPA and pilots must be informed well in advance and provided with the height of the crane boom from CHS vertical datum. A joint discussion between PPA, VFPA, the terminal and pilots will determine if additional mitigation measures are required, and the dispatched pilot will be informed. • Cranes in operation at the adjacent berths should be as far away as is practical from the arriving / departing vessel. • If the adjacent berth is vacant, cranes at that berth should be stowed at the mid-ship position and boomed up or as far away as practical from the berth being approached. • The decision to move with a boom down shall be made jointly between 	<p>To be deleted</p> <p>Add:</p> <ul style="list-style-type: none"> • Appendix K – Centerm • Appendix L – Vanterm • Appendix M – DP World Fraser Surrey • Appendix N – Deltaport <p>Berthing and unberthing requirements</p>

	<p>the pilots, PPA, VFPA, the terminal and ship's master.</p> <ul style="list-style-type: none">• If the pilot arrives to find such a situation without notification, the decision will be made as above.	
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Appendix K: Centerm

Positioning of dock gantry cranes during berthing and unberthing operations

To minimize the risk of an allision between a vessel and a terminal gantry crane, the port authority recommends that terminal operators adopt the following best practices:

1. Prior to a vessel's arrival or departure from a berth, gantry cranes should be positioned in close proximity as near as practicable to the parallel mid-body section of the vessel and well clear vessel's bow and stern flares.
2. Crane booms should be raised to their maximum design position.
3. Cranes should not be moved until the vessel is fully secured or clear of the berth. If cranes must be moved to allow access to mooring bollards, this should not occur until the vessel is in position alongside.
4. Gantry cranes should be unmanned during berthing or unberthing operations.
5. A dock exclusion zone for the safety of non-essential personnel should be established at the berth in question during berthing and unberthing operations.
6. It should be noted that as the beam and air draft of container vessels continues to increase, gantry cranes operating in the boom down position at adjacent berths can also be exposed to allision with passing vessels. This may on occasion result in a request for booms to be temporarily raised to allow safe passage. Failure to comply with such request may result in delayed berthing or unberthing.
7. Idle crane booms should normally be raised to their maximum design position at vacant berths. If operations require a boom to be lowered over an empty berth, PPA dispatch office should be informed as early as possible and not later than at the time of pilot dispatch. Pilots should be notified of the likely duration and subsequent notification should be made if or when the boom is raised. Dock personnel working on gantry cranes that are lowered over an empty berth should be aware of the risks posed by passing vessels.
8. Should a vessel's ETA at berth materially change, thereby affecting known crane maintenance operations, such change in ETA shall be notified directly to the terminal by the pilot or via the PPA dispatch office.
9. When on occasion it is requested to berth or unberth a vessel with a crane boom down at the intended berth, such request (if known at the time) shall be made to the pilot dispatch office at the time of pilot ordering and copied to the harbour master's office at the port authority's Operations Centre along with the following information:
 - a. The precise dock location of the crane in question and the distance from bow and stern of the vessel's intended docking position.
 - b. The minimum vertical clearance between the underside of the crane boom or spreader and the container deck stow (minimum allowable clearance two metres).
 - c. Confirmation that the crane in question will not otherwise impact the docking operation and will remain unmanned until the vessel is secured alongside or clear of the berth.
10. The docking of a large container vessel with a dock crane boom in the lowered position should be deemed an exceptional case and as such may be:
 - a. Tidal restricted
 - b. Wind restricted
 - c. Daylight and/or visibility restricted

Further mitigation by way of an additional tug(s) may also be required and shall be determined by the vessel's master and pilot.

Appendix L: Vanterm

Positioning of dock gantry cranes during berthing and unberthing operations

To minimize the risk of an allision between a vessel and a terminal gantry crane, the port authority recommends that terminal operators adopt the following best practices:

1. Prior to a vessel's arrival or departure from a berth, gantry cranes should be positioned in close proximity as near as practicable to the parallel mid-body section of the vessel and well clear vessel's bow and stern flares.
2. Crane booms should be raised to their maximum design position.
3. Cranes should not be moved until the vessel is fully secured or clear of the berth. If cranes must be moved to allow access to mooring bollards, this should not occur until the vessel is in position alongside.
4. Gantry cranes should be unmanned during berthing or unberthing operations.
5. A dock exclusion zone for the safety of non-essential personnel should be established at the berth in question during berthing and unberthing operations.
6. It should be noted that as the beam and air draft of container vessels continues to increase, gantry cranes operating in the boom down position at adjacent berths can also be exposed to allision with passing vessels. This may on occasion result in a request for booms to be temporarily raised to allow safe passage. Failure to comply with such request may result in delayed berthing or unberthing.
7. Idle crane booms should normally be raised to their maximum design position at vacant berths. If operations require a boom to be lowered over an empty berth, PPA dispatch office should be informed as early as possible and not later than at the time of pilot dispatch. Pilots should be notified of the likely duration and subsequent notification should be made if or when the boom is raised. Dock personnel working on gantry cranes that are lowered over an empty berth should be aware of the risks posed by passing vessels.
8. Should a vessel's ETA at berth materially change, thereby affecting known crane maintenance operations, such change in ETA shall be notified directly to the terminal by the pilot or via the PPA dispatch office.
9. When on occasion it is requested to berth or unberth a vessel with a crane boom down at the intended berth, such request (if known at the time) shall be made to the pilot dispatch office at the time of pilot ordering and copied to the harbour master's office at the port authority's Operations Centre along with the following information:
 - a. The precise dock location of the crane in question and the distance from bow and stern of the vessel's intended docking position.
 - b. The minimum vertical clearance between the underside of the crane boom or spreader and the container deck stow (minimum allowable clearance two metres).
 - c. Confirmation that the crane in question will not otherwise impact the docking operation and will remain unmanned until the vessel is secured alongside or clear of the berth.
10. The docking of a large container vessel with a dock crane boom in the lowered position should be deemed an exceptional case and as such may be:
 - a. Tidal restricted
 - b. Wind restricted
 - c. Daylight and/or visibility restricted

Further mitigation by way of an additional tug(s) may also be required and shall be determined by the vessel's Master and pilot.

Appendix M: DP World Fraser Surrey

Positioning of dock gantry cranes during berthing and unberthing operations

To minimize the risk of an allision between a vessel and a terminal gantry crane, the port authority recommends that terminal operators adopt the following best practices:

1. Prior to a vessel's arrival or departure from a berth, gantry cranes should be positioned in close proximity as near as practicable to the parallel mid-body section of the vessel and well clear vessel's bow and stern flares.
2. Crane booms should be raised to their maximum design position.
3. Cranes should not be moved until the vessel is fully secured or clear of the berth. If cranes must be moved to allow access to mooring bollards, this should not occur until the vessel is in position alongside.
4. Gantry cranes should be unmanned during berthing or unberthing operations.
5. A dock exclusion zone for the safety of non-essential personnel should be established at the berth in question during berthing and unberthing operations.
6. It should be noted that as the beam and air draft of container vessels continues to increase, gantry cranes operating in the boom down position at adjacent berths can also be exposed to allision with passing vessels. This may on occasion result in a request for booms to be temporarily raised to allow safe passage. Failure to comply with such request may result in delayed berthing or unberthing.
7. Idle crane booms should normally be raised to their maximum design position at vacant berths. If operations require a boom to be lowered over an empty berth, PPA dispatch office should be informed as early as possible and not later than at the time of pilot dispatch. Pilots should be notified of the likely duration and subsequent notification should be made if or when the boom is raised. Dock personnel working on gantry cranes that are lowered over an empty berth should be aware of the risks posed by passing vessels.
8. Should a vessel's ETA at berth materially change, thereby affecting known crane maintenance operations, such change in ETA shall be notified directly to the terminal by the pilot or via the PPA dispatch office.
9. When on occasion it is requested to berth or unberth a vessel with a crane boom down at the intended berth, such request (if known at the time) shall be made to the pilot dispatch office at the time of pilot ordering and copied to the harbour master's office at the port authority's operations Centre along with the following information:
 - a. The precise dock location of the crane in question and the distance from bow and stern of the vessel's intended docking position.
 - b. The minimum vertical clearance between the underside of the crane boom or spreader and the container deck stow (minimum allowable clearance two metres).
 - c. Confirmation that the crane in question will not otherwise impact the docking operation and will remain unmanned until the vessel is secured alongside or clear of the berth.
10. The docking of a large container vessel with a dock crane boom in the lowered position should be deemed an exceptional case and as such may be:
 - a. Tidal restricted
 - b. Wind restricted
 - c. Daylight and/or visibility restricted

Further mitigation by way of an additional tug(s) may also be required and shall be determined by the vessel's Master and pilot.

Appendix N: Deltaport

Positioning of dock gantry cranes during berthing and unberthing operations

To minimize the risk of an allision between a vessel and a terminal gantry crane, the port authority's recommends that terminal operators adopt the following best practices:

1. Prior to a vessel's arrival or departure from a berth, gantry cranes should be positioned in close proximity as near as practicable to the parallel mid-body section of the vessel and well clear vessel's bow and stern flares.
2. Crane booms should be raised to their maximum design position.
3. Cranes should not be moved until the vessel is fully secured or clear of the berth. If cranes must be moved to allow access to mooring bollards, this should not occur until the vessel is in position alongside.
4. Gantry cranes should be unmanned during berthing or unberthing operations.
5. A dock exclusion zone for the safety of non-essential personnel should be established at the berth in question during berthing and unberthing operations.
6. It should be noted that as the beam and air draft of container vessels continues to increase, gantry cranes operating in the boom down position at adjacent berths can also be exposed to allision with passing vessels. This may on occasion result in a request for booms to be temporarily raised to allow safe passage. Failure to comply with such request may result in delayed berthing or unberthing.
7. Idle crane booms should normally be raised to their maximum design position at vacant berths. If operations require a boom to be lowered over an empty berth, PPA dispatch office should be informed as early as possible and not later than at the time of pilot dispatch. Pilots should be notified of the likely duration and subsequent notification should be made if or when the boom is raised. Dock personnel working on gantry cranes that are lowered over an empty berth should be aware of the risks posed by passing vessels.
8. Should a vessel's ETA at berth materially change, thereby affecting known crane maintenance operations, such change in ETA shall be notified directly to the terminal by the pilot or via the PPA dispatch office.
9. When on occasion it is requested to berth or unberth a vessel with a crane boom down at the intended berth, such request (if known at the time) shall be made to the pilot dispatch office at the time of pilot ordering and copied to the harbour master's office at the port authority's Operations Centre along with the following information:
 - a. The precise dock location of the crane in question and the distance from bow and stern of the vessel's intended docking position.
 - b. The minimum vertical clearance between the underside of the crane boom or spreader and the container deck stow (minimum allowable clearance two metres).
 - c. Confirmation that the crane in question will not otherwise impact the docking operation and will remain unmanned until the vessel is secured alongside or clear of the berth.
10. The docking of a large container vessel with a dock crane boom in the lowered position should be deemed an exceptional case and as such may be:
 - a. Tidal restricted
 - b. Wind restricted
 - c. Daylight and/or visibility restricted

Further mitigation by way of an additional tug(s) may also be required and shall be determined by the vessel's Master and pilot.

Specific considerations applicable to Deltaport

- It is recognized that with a clearance from fender to waterside rail of 7.6 metres, the potential for vessel collision with a dock crane is largely mitigated.
- Given the set back of 7.6 metres, while it may not be necessary to fully raise crane booms to their maximum position to achieve a safe clearance during docking and undocking, a minimum horizontal clearance of four metres is recommended, measured from fender to the crane boom.