For the purposes of this project permit (the Permit), the Project is understood to include the following works on Vancouver Fraser Port Authority (VFPA) property:

**General Description**
- Construction of a new three-berth marine Terminal including new pile supported berth structures extending approximately 250 m (820 ft) into Burrard Inlet, new circular sheet pile retaining wall, and land infill in Burrard Inlet
- The construction of associated office and control building, utilities, fire suppression systems and mechanical systems
- Construction of new marine habitat and riparian planting areas
- Sections of new transfer and delivery pipelines and related equipment
- Decommissioning and demolition of certain facilities at the Terminal.

**Site Preparation**
- Modifications and relocation of existing utilities; no VFPA owned utilities would be impacted
- Modifications to existing mechanical systems at the Terminal
- Removal of existing Pier 59
- Temporary re-location of an existing utility dock from Pier 59 to Pier 61
- Surface soils and vegetation clearing along the foreshore extension area
- Installation of an in-water circular sheet pile retaining wall
- Densification of existing soils, placement of new imported fill, and compaction of fill behind the retaining wall to create new land in Burrard Inlet
- Rip-rap removal in the foreshore area for construction of a new dock complex and extension into the water
- Removal of abandoned culverts within the foreshore extension area.

**Marine Berth Expansion and New Operations Facilities**
- Demolition and decommissioning of the existing Terminal berth and associated facilities
- Installation of approximately 152 in-water piles to support new berth structures (piles range in size from approximately 1.4 m (4.59 ft) to 2.0 m (6.56 ft) in diameter)
- Construction of a new three-berth dock complex encompassing approximately 275,000 m² (2,960,172 sqft) of water lot area
• New mooring dolphins, pipeline loading and delivery infrastructure, fender systems, vehicular access and utility connections as part of the new dock complex
• Construction of new in-water rock habitat areas (approximately 9,000 m² (96,878 sqft)) and riparian plantings (approximately 2,350 m² (25,296 sqft))
• Construction of a new crude oil receiving and transfer facility consisting of:
  o A two-story operations building to house offices, a control room for the facilities, first aid facilities and washrooms
  o New ancillary buildings including storage, equipment buildings and electrical kiosks
  o Construction of containment areas for spill protection beneath equipment
  o New Marine Vapor Control System for handling ship vapors during loading operations
  o Foundation construction including foundations for vapor recovery mechanical equipment, electrical buildings and transformers, metering area equipment and piping
  o Installation of structural steel and concrete, mechanical equipment, piping and fire-protection systems
  o A backup generator capable of running core functions and firefighting systems
• A new utility dock including a new float and steel gangway for support vessels of approximately 500 m² (5,382 sqft)
• A new concrete railway derailment protection barrier north of the property line to protect the facility from existing train tracks (320 m (1,050 ft) long by 2.2 m (7.2 ft) high)
• Emergency response booms and areas for deployment of emergency response equipment
• Installation of pre-fabricated dock trestles and platforms
• Modification and relocation of portions of the existing 6.0 m (20 ft) wide access driveway north of the existing CP rail tracks (main access from Bayview Drive)
• New parking spaces for employees/contractors, visitors and maintenance personnel
• Perimeter security fencing with new vehicle access gates.

**Lighting and Utilities**

• New lighting at the Terminal on buildings, new area lights on dock structures and new marine navigation lighting
• Upgrades to the Terminal fire protection system and new perimeter fire hydrants
• New electrical transformers
• New dock delivery lines and metering equipment
• Emissions management equipment and control system
• A new fire-water and foam pumping system
• New electrical equipment and control system
• A stormwater management system including new oil water separators
• Stormwater detention on berths to collect water that is pumped to an oil water separator system on foreshore
• Extension of one existing stormwater outfall, relocation of one existing stormwater outfall and installation of one new stormwater outfall
• Installation of new underground wastewater and sanitary holding tanks
• New utilities including stormwater, sanitary tank connections, water, communications and electricity
• Installation of new electrical systems such as cable trays and cabling.

**Onshore and Marine Construction Temporary Facilities**

• Barges with office, lunchroom and washroom facilities
• Storage barges with equipment and material storage areas
• Marine equipment including barge mounted derricks for pile driving and supporting barges
• Installation of a safety boom around marine work areas during construction extending approximately 350 m into Burrard Inlet and anchored at each end by a new pile
• Office trailers
• Washroom trailers
• Equipment storage trailers
• Water treatment plants.

**PROJECT AND ENVIRONMENTAL CONDITIONS**

The VFPA has undertaken and completed a review of the Project in accordance with the *Canada Marine Act* and Section 5 of the Port Authorities Operations Regulations.

If at any time the Permit Holder fails to comply with any of the project and environmental conditions set out in the Permit below, or if VFPA determines that the Permit Holder has provided any incomplete, incorrect or misleading information in relation to the Project, VFPA may, in its sole and absolute discretion, cancel its authorization for the Project or change the project and environmental conditions to which such authorization is subject.

Furthermore, pursuant to Section 29 of the Port Authorities Operations Regulations, VFPA reserves the right to cancel its authorization for the Project, or change the project and environmental conditions to which this authorization is subject, at any time if new information is made available to VFPA in relation to the potential adverse environmental effects or other effects of the Project.

The following are the project and environmental conditions that must be followed by the Permit Holder to mitigate potential or foreseeable adverse environmental effects and other effects.

**GENERAL CONDITIONS**

<table>
<thead>
<tr>
<th>No.</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The Permit Holder must have a valid lease, licence, or access agreement for the Project site prior to accessing the Project site or commencing construction or any other physical activities on the Project site. This Permit shall in no way limit any of the Permit Holder’s obligations, or VFPA’s rights, under such lease, licence, or access agreement.</td>
</tr>
<tr>
<td>2.</td>
<td>The Permit Holder shall at all times and in all respects, comply with and abide by all applicable statutes, laws, regulations and orders from time to time in force and effect, including all applicable environmental, labour and safety laws and regulations.</td>
</tr>
<tr>
<td>3.</td>
<td>This Permit in no way endorses or warrants the design, engineering, or construction of the Project and no person may rely upon this Permit for any purpose other than the fact that VFPA has permitted the construction of the Project, in accordance with the terms and conditions of this Permit.</td>
</tr>
<tr>
<td>4.</td>
<td>The Permit Holder shall indemnify and save harmless VFPA in respect of all claims, losses, costs, fines, penalties or other liabilities, including legal fees, arising out of: (a) any bodily injury or death, property damage or any loss or damage arising out of or in any way connected with the Project; and (b) any breach by the Permit Holder of its obligations under this Permit.</td>
</tr>
<tr>
<td>5.</td>
<td>The Permit Holder shall adhere to Certificate of Public Convenience and Necessity OC-65, including all terms and conditions, and any subsequent amending orders.</td>
</tr>
<tr>
<td>6.</td>
<td>The Permit Holder shall provide VFPA with updated mitigation plans for review and approval, such as the Westridge Marine Terminal Environmental Protection Plan, if these plans are modified or new procedures are created to address site conditions not previously addressed in the plans submitted as part of the Application.</td>
</tr>
<tr>
<td>7.</td>
<td>The Permit Holder is responsible for locating all existing site services and utilities including any located underground. The Permit Holder is responsible for repair or replacement of any damage to existing site services and utilities, to the satisfaction of VFPA, that result from construction and operation of the Project.</td>
</tr>
<tr>
<td>8.</td>
<td>The Permit Holder shall undertake and deliver the Project to total completion in a professional, timely and diligent manner in accordance with applicable standards and specifications set out in the sections above entitled Project Description and Information Sources, including the attached plans and drawings numbered PER No. 19-162-A1 to A49. The Permit Holder shall not carry out any other physical activities unless expressly authorized by VFPA.</td>
</tr>
<tr>
<td>9.</td>
<td>The Permit Holder shall cooperate fully with VFPA in respect of any review by VFPA of the Permit Holder’s compliance with this Permit, including providing information and documentation in a timely manner, as required by VFPA. The Permit Holder is solely responsible for demonstrating the Permit Holder’s compliance with this Permit.</td>
</tr>
<tr>
<td>10.</td>
<td>The Permit Holder shall review the Permit with all employees, agents, contractors, licensees and invitees working on the Project site, prior to such parties participating in any construction or other physical activities on the Project site. The Permit Holder shall be solely responsible for ensuring that all such employees, agents, contractors, licensees and invitees comply with this Permit.</td>
</tr>
<tr>
<td>11.</td>
<td>The Permit Holder shall make available upon request by any regulatory authority a copy of this Permit.</td>
</tr>
</tbody>
</table>
12. Unless otherwise specified, the Permit Holder shall provide all plans, documents, and notices required under this Permit to the following email address: per@portvancouver.com and referencing PER No. 19-162.

13. Unless otherwise specified, all plans, schedules, and other Project-related documentation that the Permit Holder is required to provide under this Permit must be to VFPA's satisfaction.

14. The Permit Holder shall prepare and submit a self-report form to VFPA demonstrating compliance with conditions at each of the following project phases:
   a) Prior to construction conditions (self-report shall be submitted prior to the commencement of construction, or any physical activities);
   b) Construction conditions (self-report shall be submitted bi-annually during construction);
   c) Conditions upon Project completion (self-report shall be submitted within 60 business days of completion of construction); and
   d) Conditions prior to commissioning (self-report shall be submitted 15 business days prior to operation).

15. VFPA shall have unfettered access to environmental compliance documentation and the Project site at all times during construction without notice. The Permit Holder shall cooperate with VFPA during the course of the visit or inspection.

16. The Permit Holder must maintain and retain any records associated with, or produced by, actions or activities undertaken to achieve compliance or that indicate non-compliance with Permit conditions. These records must be made available at the request of VFPA.

17. All conditions in this Permit which expressly or by their nature survive expiration or termination of this Permit shall remain in effect after the expiration or termination of this Permit.

18. The Permit Holder shall strictly comply with all enforcement actions issued by VFPA in response to the Permit Holder’s failure to comply with this Permit.

19. The Permit Holder shall carry out the Project in accordance with the approved mitigation plans and shall provide VFPA with updated mitigation plans for review and approval, such as the Westridge Marine Terminal Environmental Protection Plan, if these plans are modified or new procedures are created to address site conditions not previously addressed in the plans submitted as part of the Application.

<table>
<thead>
<tr>
<th>CONDITIONS - PRIOR TO COMMENCING CONSTRUCTION OR ANY PHYSICAL ACTIVITIES</th>
<th>SUBMISSION TIMING</th>
</tr>
</thead>
<tbody>
<tr>
<td>20. The Permit Holder shall submit signed and sealed drawings for each phase of the proposed works prior to start of construction of each phase. Drawings shall be approved for construction by a professional engineer licensed to practice in the Province of British Columbia.</td>
<td>Before commencing construction or any physical activities for each phase of construction</td>
</tr>
<tr>
<td>21. The Permit Holder must install and maintain a Marine Construction Safety Boom around the perimeter of the work area. The Marine Construction Safety Boom must be secured to the sea bed in a manner which does not create a hazard to navigation, and be lit from dusk to dawn and during periods of restricted visibility by flashing yellow lights (2 NM range) installed at distances no greater than 50 metres apart.</td>
<td>Before commencing construction of any in-water works</td>
</tr>
<tr>
<td>22.</td>
<td>The Permit Holder shall submit final design drawings for rail crossing modifications signed and sealed by a professional engineer licensed to practice in the Province of British Columbia, for VFPA review and approval.</td>
</tr>
<tr>
<td>23.</td>
<td>The Permit Holder shall submit a dimensioned site plan and master fire department access plan signed and sealed by a Fire Protection Engineer licensed to practice in the Province of British Columbia for VFPA review and approval. The Fire Department Access Plan is required to reference the applicable vehicle access requirements from the 2015 NBC and applicable requirements from either the Burnaby Fire Department or consultant(s) having experience with municipal firefighting command and control, and firefighting in an industrial setting similar to the Project. Any conditions of the access route on Bayview Drive or within the VFPA boundary that do not comply with the acceptable solutions of the NBC are required to be addressed by the Permit Holder on an alternative solution basis pursuant to NBC Division A, Article 1.2.1.1.</td>
</tr>
<tr>
<td>24.</td>
<td>The Permit Holder shall submit a signed and sealed Approach to Building and Fire Code Compliance Report prepared by the Permit Holder’s Building Code Consultant for VFPA review and approval. The Building and Fire Code Compliance Report is required to address the 2015 NBC and 2015 NFC requirements noted in the correspondence from VFPA during the review of the Permit application, including compliance with NFPA 11 for foam/water system capacities. The report is required to provide a consolidated summary of the firefighting strategy, required fire protection equipment and foam/water supplies and delivery systems for various fire scenarios including the credible worst case. This report should have input from the Director, Emergency Management, Trans Mountain from Kinder Morgan Canada. If possible, this report should also include input from the local fire service. If the local fire service is unable to participate in the consultation process, the Permit Holder’s Building Code Consultant should consider consultation with an additional consultant(s) having experience with municipal firefighting command and control, and firefighting in an industrial setting similar to the Project.</td>
</tr>
<tr>
<td>25.</td>
<td>The Permit Holder shall submit a Construction Fire Safety Plan for VFPA review and approval.</td>
</tr>
<tr>
<td>26.</td>
<td>For construction activities in and around the City of Burnaby’s underground sewer facilities generally shown on Lease Plan 2017-127, dated July 31, 2017 and licensed under VFPA’s Wastewater System License to the City of Burnaby under License No.BBY093-0008F-002, dated May 1, 2011, the Permit Holder shall contact the City of Burnaby Planning and Building Department (Ph: 604.294.7944) to advise the City of the activities and work in order to ensure there are no adverse impacts to the sewer system.</td>
</tr>
<tr>
<td>27.</td>
<td>For construction activities in and around the Greater Vancouver Sewerage and Drainage District’s wastewater outfall system as generally shown on License Plan No. 2004-111 dated October 12, 2004 and Lease Plan No. 2017-123 dated July 31, 2017, and licensed</td>
</tr>
<tr>
<td>Paragraph</td>
<td>Text</td>
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</table>
| 28. | The Permit Holder shall submit a final construction communications plan in accordance with VFPA's Public Consultation Guidelines. The plan shall outline how the Permit Holder shall continue to engage and communicate with the public and stakeholders from the date of permit issuance to the completion of construction. The Plan shall include the following information:  
  - About the project and current status;  
  - Proposed mitigations;  
  - Status of satisfying permit conditions;  
  - Communication and engagement activities during major phases of construction;  
  - Addressing inquiries during construction;  
  - Any other topic that may be deemed by VFPA to be of relevance; and  
  - A draft construction notification for review.  

The plan shall be updated as necessary and upon request by VFPA to ensure public and stakeholders are provided with relevant information as it becomes available. The Permit Holder shall carry out the Project in accordance with the construction communications plan, and any subsequent amendments approved by VFPA. The Permit Holder shall provide quarterly updates to VFPA which detail all complaints, how they were dealt with/resolved and a summary of any additional communications undertaken by the Permit Holder. |
| 29. | The Permit Holder shall distribute a final construction notice to residents and businesses within approximately two kilometres from Westridge Marine Terminal describing the works and activities, hours of operation, and contact information, in accordance with an approved Construction Communications Plan. This includes residents and businesses within the District of North Vancouver and City of Burnaby as shown on VFPA North Vancouver and Burnaby Location maps which can be found in Section 5 of the 19-162 PER Report located here:  
The notice shall be approved by VFPA prior to distribution. The Permit Holder shall copy VFPA when construction notices are distributed.  
5 business days before commencing construction or any physical activities |
| 30. | The Permit Holder shall submit a marine construction and staging plan, including the following for VFPA review and approval:  
  - Staging and construction areas;  
  - Dates and hours of operation;  
  - Description of activities taking place;  
  - Equipment and vessels (dimensions must be included);  
Before commencing construction or any physical activities |
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<tbody>
<tr>
<td>Method of preferred communication with marine users; Proposals to accommodate Indigenous traditional marine resource use activities potentially affected by construction activities; and Special requests and/or additional information.</td>
<td></td>
</tr>
<tr>
<td>31.</td>
<td>For structures and proposed interior changes to structures that are reviewable under the National Building Code and National Fire Code, the Permit Holder shall apply for a VFPA Building Permit. Each Building Permit package is required to be complete with VFPA letters of assurance and signed and sealed drawings by a BC Certified Engineer as noted in the Building Permit list provided for the Project. 40 business days before commencing construction or any physical activities on structures reviewable under code.</td>
</tr>
<tr>
<td>32.</td>
<td>Prior to the commencement of any vessel-related activities, the Permit Holder shall contact Canadian Coast Guard (CCG) Marine Communications and Traffic Services (MCTS), (email: <a href="mailto:NAVWARN.MCTSPrinceRupert@innav.gc.ca">NAVWARN.MCTSPrinceRupert@innav.gc.ca</a>; Phone: 250-627-3070) regarding the issuance of a Navigational Warning (NAVWARN) to advise the marine community of potential hazards associated with the Project. As per Coast Guard requirements.</td>
</tr>
<tr>
<td>33.</td>
<td>If the Permit Holder intends to discharge hydrostatic testing water to Burrard Inlet or another water body located within VFPA jurisdiction, a Hydrostatic Testing Plan shall be submitted for VFPA review and approval. 15 business days before commencing intake or discharge of hydrostatic testing water.</td>
</tr>
<tr>
<td>34.</td>
<td>The Permit Holder shall submit an updated Stormwater Pollution Prevention Plan, PER Submission TR.04, for VFPA review and approval. The updated Stormwater Pollution Prevention Plan shall: Address comments included in the July 14, 2017 technical memorandum prepared by Kerr Wood Leidal on behalf of Tsleil-Waututh Nation. Confirm that stormwater collection sump pumps on the loading wharves are connected to emergency power supplies. Containment and appropriate treatment shall be provided for: Utility wash down water that may potentially contact hydrocarbons. All parts of the hydrocarbon conveyance systems, including pipe rack pipe joints, valves and inspection/maintenance ports, where leaks or spills may occur. 30 business days prior to construction of the new stormwater system.</td>
</tr>
<tr>
<td>35.</td>
<td>Any proposed alterations to the Marine Construction and Safety Boom footprint, anchoring system or design must be submitted to and approved by VFPA. 20 business days prior to implementing alterations.</td>
</tr>
<tr>
<td>36.</td>
<td>The Permit Holder shall provide a Project schedule to VFPA showing the anticipated start dates for all major phases of the Project as identified by VFPA. The Permit Holder shall notify VFPA of any material changes to the Project schedule and, upon request, shall provide an updated Project schedule. Before commencing construction or any physical activities.</td>
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</table>
### CONDITIONS - DURING CONSTRUCTION OR ANY PHYSICAL ACTIVITIES

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<tbody>
<tr>
<td>37.</td>
<td>The Permit Holder shall notify VFPA upon commencement of construction, or any physical activities (e.g., mobilization to the Project site).</td>
</tr>
<tr>
<td>38.</td>
<td>The Permit Holder shall discuss with the Indigenous Advisory and Monitoring Committee (IAMC), or relevant Sub-Committee, potential opportunities for their input or involvement in monitoring efforts during construction. As directed by VFPA, monitoring reports submitted to VFPA by the Permit Holder under this permit shall be shared with IAMC, potentially affected Indigenous groups, and/or other persons or entities as specified by VFPA, from time to time.</td>
</tr>
<tr>
<td>39.</td>
<td>All general construction and physical activities related to the Project shall be conducted from <strong>Monday to Saturday</strong> between the hours of 7:00 am and 8:00 pm. Pile driving, other activities that are impulsive in nature, and activities containing strong low frequency, shall only occur within regular hours (<strong>Monday to Saturday</strong> between the hours of 7:00 am to 8:00 pm). No construction works shall occur on Sundays or statutory holidays.</td>
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<td></td>
<td>The following exceptions apply for the duration of the Permit:</td>
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<td>• Non-motorized hand labor activities, which do not increase the background noise levels within the surrounding community, can be carried out at all times; and</td>
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<td></td>
<td>• Welding works related to shear lug installation for the mooring dolphins can be undertaken outside of regular hours as follows: <strong>Monday to Saturday</strong> between the hours of 8:00 pm and 7:00 am, including between 8:00 pm Saturday and 7:00 am Sunday.</td>
</tr>
<tr>
<td></td>
<td>These hours shall not be modified without prior approval of VFPA. To request permission to conduct activities outside these hours, the Permit Holder must submit a written request no less than 20 business days prior to the desired start date.</td>
</tr>
<tr>
<td>40.</td>
<td>The Permit Holder shall ensure that noise levels within the surrounding community as identified in <em>Noise Management Plan for Construction at Pump Stations and Terminal</em>, PER Submission TR.07, table C-3 and as described in the memo dated April 1, 2019 (as applicable), remain below the following thresholds:</td>
</tr>
<tr>
<td></td>
<td>• <strong>WMT_1;</strong> Location of Northcliffe Crescent and North Clide Ave, Burnaby</td>
</tr>
<tr>
<td></td>
<td>o Daytime limit (7 am to 10 pm) – 61 dBA</td>
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<tr>
<td></td>
<td>o Nighttime limit (10 pm to 7 am) – 51 dBA</td>
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<tr>
<td></td>
<td>• <strong>WMT_2;</strong> Location of Bayview Drive and Malibu Drive, Burnaby</td>
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<tr>
<td></td>
<td>o Daytime limit (7 am to 10 pm) – 62 dBA</td>
</tr>
<tr>
<td></td>
<td>o Nighttime limit (10 pm to 7 am) – 51 dBA</td>
</tr>
<tr>
<td></td>
<td>• <strong>WMT_3;</strong> Location of Bayview Drive and Barnet Road, Burnaby</td>
</tr>
<tr>
<td></td>
<td>o Daytime limit (7 am to 10 pm) – 68 dBA</td>
</tr>
<tr>
<td></td>
<td>o Nighttime limit (10 pm to 5 am) – 60 dBA</td>
</tr>
<tr>
<td></td>
<td>o Morning limit (5 am to 7 am) – 68 dBA</td>
</tr>
</tbody>
</table>

As part of planned monitoring described in *Noise Management Plan for Construction at Pump Stations and Terminal* the Permit Holder shall submit to VFPA the implemented monitoring plan details (locations, equipment specifications, site photos, expected time periods, etc.) and weekly summary.
<table>
<thead>
<tr>
<th>Section</th>
<th>Requirement</th>
</tr>
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<tbody>
<tr>
<td>41.</td>
<td>The Permit Holder shall notify VFPA within 5 business days of any complaints received from the community and stakeholders during construction and indicate how the Permit Holder has responded to such complaints.</td>
</tr>
<tr>
<td>42.</td>
<td>The Permit Holder shall remove all abandoned utilities from the Project site, both underground and aboveground. At locations of connection to municipal work (i.e., at property lines), the abandoned utilities shall be capped.</td>
</tr>
<tr>
<td>43.</td>
<td>The Permit Holder shall establish and define a marine restricted area within the marine construction safety boom around the existing Greater Vancouver Sewage and Drainage district sewage system as generally shown on License Plan No. 2004-111 dated October 12, 2004 and Lease Plan No. 2017-123 dated July 31, 2017. The Permit Holder shall not permit any anchoring or operation of marine vessels or equipment within this restricted area.</td>
</tr>
<tr>
<td>44.</td>
<td>The Permit Holder may place temporary construction trailers on the Project site while this Permit remains in effect, provided that the Permit Holder first obtains a VFPA Building Permit for any trailers reviewable under the 2015 National Building Code of Canada.</td>
</tr>
<tr>
<td>45.</td>
<td>The disturbance to the intertidal foreshore shall be kept to the minimum required to complete the Project. Land-based equipment and machinery should not travel along the intertidal foreshore beyond the footprint of the foreshore extension area. Shoreline modification, temporary or otherwise, to facilitate land/sea equipment or materials transfer or for any other reason is not permitted without prior review and approval by VFPA.</td>
</tr>
<tr>
<td>46.</td>
<td>The Permit Holder shall not permit barges or other vessels used during the Project to ground on the foreshore or seabed or otherwise disturb the foreshore or seabed (including disturbance as a result of vessel propeller wash), excepting only such disturbance as is reasonably required resulting from the use of barge spuds.</td>
</tr>
<tr>
<td>47.</td>
<td>The Permit Holder shall remove any piles completely by extracting the entire length of pile from the seabed. If physical conditions result in the breakage of piles, the Permit Holder shall remove the remaining pile stubs with the least amount of disturbance of the seabed as possible. Particular effort shall be made to extract or reduce the height of pile stubs which may pose a hazard to navigation. If pile stubs are left in place, the location shall be surveyed and the location coordinates provided to VFPA within five days of Project completion.</td>
</tr>
<tr>
<td>48.</td>
<td>Floating portions of the marine construction safety boom shall not be permitted to ground on the seabed or intertidal foreshore with the exception of only such disturbance as is reasonably required as described in the technical memo, dated July 31, 2017, titled “Information provided to Vancouver Fraser Port Authority regarding the proposed marine construction safety boom at Westridge Marine Terminal”. Pontoons at the west end shall be positioned parallel to shore to further limit the potential effects of sweeping.</td>
</tr>
<tr>
<td>49.</td>
<td>The Permit Holder, or their contractor, shall engage a qualified environmental professional to monitor the Project in order to ensure that the works are carried out in compliance with this Permit. Monitoring events shall take place as required by the environmental monitor, the Environmental Protection Plan, or VFPA, provided that monitoring shall be full time when works are underway that have the potential to adversely affect fish or fish habitat.</td>
</tr>
<tr>
<td>50.</td>
<td>The Permit Holder shall provide weekly environmental monitoring reports to VFPA. In addition, a summary report for the whole monitoring period shall be forwarded to VFPA within 30 business days of the conclusion of the monitoring period.</td>
</tr>
</tbody>
</table>
51. **VFPA shall be copied on the offsetting measures monitoring reports required by the DFO Authorization. VFPA shall be consulted during the development of any contingency plans and any measures in those plans that fall within VFPA jurisdiction.**

52. **During any vessel-related activities, the Permit Holder shall:**
   
   a) Position vessels and equipment associated with the Project in such a manner so as not to obstruct line of sight to navigational aids or markers;
   
   b) Exhibit the appropriate lights and day shapes at all times;
   
   c) Monitor the VHF channel used for MCTS communications in the respective area at all times and participate as necessary;
   
   d) Be familiar with vessel movements in areas affected by the Project.
   
   e) Plan and execute the Project in a manner that shall not impede navigation or interfere with vessel operations; and,
   
   f) During night hours, unless working 24 hours per day, ensure that the rig and associated equipment is moored outside the navigation channel, approaches to adjacent terminal facilities and/or anchorage areas, and lit in accordance with all applicable regulations.
   
   g) All temporary piles, false works, silt curtains, construction material or debris, etc. are to be appropriately marked and sufficiently illuminated in periods of darkness and reduced visibility.

53. **The Permit Holder shall retain a qualified environmental professional to act as an Independent Monitor responsible for reviewing the construction environmental records and on-site construction activities for compliance with the Environmental Protection Plan and this Permit. The Independent Monitor shall possess the following qualifications:**
   
   a) Suitable education and knowledge demonstrating that they may be reasonably relied on to provide advice within their area of expertise;
   
   b) A minimum of five years of experience monitoring related types of construction activities in similar environments.

   The Independent Monitor shall not be an employee of the Permit Holder’s organization or of a contractor/consultant retained by the Permit Holder to work on the Project in other capacities.

54. **The Permit Holder shall submit a Monitoring Work Plan. At a minimum, the Monitoring Work Plan shall describe the following:**
   
   a) The role and responsibilities of the Independent Monitor, including the following provisions:
      
      i. The Independent Monitor shall have unfettered access to environmental compliance documentation and the Project site at all times during construction without notice.
      
      ii. The Independent Monitor shall have the authority to direct the Permit Holder to stop a construction activity that is causing an adverse effect.
      
      iii. The Independent Monitor shall report directly to VFPA and obtain direction from VFPA on matters that arise during construction that are not described in the Permit and cannot be resolved by discussion with the Permit Holder.
      
      iv. The Independent Monitor shall concurrently submit compliance reports directly to the Permit Holder and VFPA within one week of site visits.
   
   b) The frequency of site visits by the Independent Monitor, with a higher frequency of site visits to occur during in-water works as compared to those scheduled for
The Permit Holder shall carry out the Project in accordance with the approved Monitoring Work Plan, and any subsequent amendments, to the satisfaction of VFPA.

### CONDITIONS – PRIOR TO OPERATION

55. The Permit Holder shall submit a Project Energy Study Report in accordance with VFPA’s guidelines, or provide a copy of the New Plant Design Engineering Study, at the time of the Study submission to BC Hydro.

56. The Permit Holder shall submit a berthing simulation study for VFPA review and approval.

57. The Permit Holder shall submit an updated Operational Emergency and Fire Safety Plan for VFPA review and approval.

### CONDITIONS – UPON COMPLETION

<table>
<thead>
<tr>
<th>Subdivision</th>
<th>Description</th>
<th>Submission Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>58.</td>
<td>The Permit Holder shall notify VFPA upon completion of the Project.</td>
<td>Within 10 business days of substantial completion</td>
</tr>
<tr>
<td>59.</td>
<td>Upon completion of the deep-sea berth(s) construction, the Permit Holder must undertake a hydrographic survey that meets the requirements of a “Special Order” survey with “Type C1” coverage as defined by the Canadian Hydrographic Service (CHS) “Standards for Hydrographic Surveys”, to the satisfaction of VFPA.</td>
<td>Upon substantial completion</td>
</tr>
<tr>
<td>60.</td>
<td>The Permit Holder must contact the Database Information Office of the CHS at (250) 363-6360 or <a href="mailto:chdatacentre@dfo-mpo.gc.ca">chdatacentre@dfo-mpo.gc.ca</a> to arrange for the relevant CHS charts to be updated.</td>
<td>Upon substantial completion</td>
</tr>
<tr>
<td>61.</td>
<td>The Permit Holder shall provide record drawings in accordance with VFPA’s Record Drawing Standards, in both AutoCAD and Adobe (PDF) format to VFPA, including a Project site plan that clearly identifies the location of works.</td>
<td>Within business 40 days of completion</td>
</tr>
<tr>
<td>62.</td>
<td>With respect to terminal lighting, lighting type and luminaire orientation and tilt shall be adjusted as needed to mitigate any adverse effects on fish, wildlife and neighbouring residents that become evident after commencement of operations.</td>
<td>Within 40 business days of completion</td>
</tr>
<tr>
<td>63.</td>
<td>The Permit Holder shall provide to VFPA reports and all follow up correspondence related to NEB condition 141 Post-construction noise surveys as applicable to the Westridge Marine Terminal. Any required mitigations as a result of NEB condition 141 and applicable to the Westridge Marine Terminal shall be to VFPA’s satisfaction prior to implementation.</td>
<td>Within 3 months of commencing operations</td>
</tr>
</tbody>
</table>
64. The Permit Holder shall provide to VFPA reports and all follow up correspondence related to NEB condition 151 Post-construction environmental monitoring reports as applicable to the Westridge Marine Terminal. Any required mitigations as a result of NEB condition 151 and applicable to the Westridge Marine Terminal shall be to VFPA’s satisfaction prior to implementation.

On or before 31 January following the first, third, and fifth growing season after completing final clean up

**LENGTH OF PERMIT VALIDITY**

The Project must commence by 30 September 2020 (Commencement Date) and be completed no later than 31 December 2022 (Expiry Date).

**AMENDMENTS**

- Details of any material proposed changes to the Project, including days and hours when construction and any physical activities shall be conducted, must be submitted to VFPA for consideration of an amendment to this Permit.
- For an extension to the Commencement Date, the Permit Holder must apply to VFPA in writing no later than 30 days prior to that date.
- For an extension to the Expiry Date, the Permit Holder must apply in writing to VFPA no later than 30 days prior to that date.

**Failure to apply for an extension as required may, at the sole discretion of VFPA, result in termination of this Permit.**

**PROJECT AND ENVIRONMENTAL REVIEW DECISION**

Project Permit PER No. 19-162 is approved by:

*Original Copy Signed*

PETER XOTTA  
VICE PRESIDENT, PLANNING & OPERATIONS  
CHAIR OF PROJECT AND ENVIRONMENTAL REVIEW COMMITTEE  

**DATE OF APPROVAL**

September 27, 2019

**CONTACT INFORMATION**

Vancouver Fraser Port Authority  
100 The Pointe, 999 Canada Place  
Vancouver BC V6C 3T4 Canada

Project & Environmental Review  
Tel.: 604-665-9047  
Fax: 1-866-284-4271  
Email: PER@portvancouver.com  
Website: www.portvancouver.com

After normal business hours:

In the event of any land or marine construction incidents or concerns related to works carried out on-site under this permit, please contact the 24/7 Port Operations Centre 604-665-9086. In the event of an emergency requiring ‘First Responders’, please call 911 first.
This drawing has been reviewed by the Vancouver Fraser Port Authority solely for the purpose of FPRA's issuance of a Project Permit. This permit in no way endorses, design, engineering or structural approval or endorsement.
VANCOUVER FRASER PORT AUTHORITY

This drawing has been reviewed by the Vancouver Fraser Port Authority solely for the purpose of VFP's issuance of a Project Permit. This permit in no way denotes design, engineering or structural approval or endorsement.

PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION

LOADING PLATFORM 3 GENERAL ARRANGEMENT

Concrete Containers w/ Carts
water will in the concrete curb containment area is pumped to the oil-water separator on shore via the 6"表面 water drain shown here.

PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION

VANCOUVER FRASER PORT AUTHORITY
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engineering or structural approval or
endorsement.
NOTE:
1. CONTOURS ARE IN METRES TO GEODETIC DATUM (GD).
   0.0m GD = 3.10m CHART DATUM (CD).

VANCOUVER FRAZER PORT AUTHORITY
This drawing has been reviewed by the Vancouver Fraser Port Authority solely for the purpose of VFPA's issuance of a Project Permit. This permit in no way denotes design, engineering or structural approval or endorsement.

1. CONTOURS ARE IN METRES TO GEODETIC DATUM (GD).
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