PORT of vancouver	VANCOUVER FRASER PORT AUTHORITY PROJECT AND ENVIRONMENTAL REVIEW REPORT AND PERMIT

PER No.:	**20-070**
Tenant:	**Neptune Bulk Terminals (Canada) Ltd.**
Project:	**Neptune maintenance dredging at Berth 2 and 3**
Project Location:	**1001 Low Level Road, North Vancouver, BC V7L 1A7**
Vancouver Fraser Port Authority SID No.:	**CNV074**
Land Use Designation:	**Port Terminal**
Applicant/Permit Holder:	**Stantec Consulting Ltd.**
Category of Review:	**B**
Date of Approval:	**August 25, 2020**
Date of Expiry:	**August 31, 2022**

1 INTRODUCTION

The Vancouver Fraser Port Authority (the port authority), a federal port authority, manages lands under the purview of the *Canada Marine Act*, which imparts responsibilities for environmental protection. The port authority accordingly conducts project and environmental reviews of works and activities undertaken on these lands to ensure that the works and activities will not likely cause significant adverse environmental effects. This project and environmental review report and project permit (the Permit) documents the port authority's project and environmental review of [insert PER No. 20-070: Neptune maintenance dredging at Berth 2 and 3 (the Project) proposed by Stantec Consulting Ltd. working on behalf of Neptune Bulk Terminals (Canada) Ltd. (the Applicant).

This project and environmental review was carried out to address the port authority's responsibilities under the *Canada Marine Act*, and to meet the requirements of the *Impact Assessment Act*, as applicable. The proposed Project is not considered a "designated project" under the *Impact Assessment Act* and an impact assessment as described in the *Impact Assessment Act* is not required. However, the port authority authorization is required for the proposed Project to proceed and in such circumstances, where applicable, Section 82 of *Impact Assessment Act* requires federal authorities to assure themselves that projects will not likely cause significant adverse environmental effects. This review provides that assurance. In addition, the port authority considers other interests, impacts and mitigations through the project and environmental review.

The project and environmental review considered the application along with supporting studies, assessments and consultations carried out or commissioned by the Applicant, as well as other information provided by the Applicant. In addition, this project and environmental review considered other information available to the port authority and other consultations carried out by the port authority. A full list of information sources germane to the review is provided in the following pages of this report.

This Permit is the authorizing document allowing the Applicant to proceed with the Project subject to the listed project and environmental conditions.

2 PROJECT DESCRIPTION

Neptune Bulk Terminals (Canada) Ltd. proposes to conduct maintenance dredging at Berth 2 and 3 of its terminal in North Vancouver, BC. The purpose of the project is to dredge and remove accumulated sediment to achieve appropriate vessel clearance at the berths. The dredgeate will be disposed at an upland facility.

In this project permit, the Project means the physical activities authorized by the port authority to be carried out pursuant to **PER No. 20-070**, as described below.

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2.1 Proposed Works

The applicant will complete the following works:

- Dredging of approximately 25 cubic metres of sediment at Berth 2 using an 8 cubic metre environmental clamshell bucket. The target depth is -15.5 m chart datum.
- Dredging of approximately 75 cubic metres of sediment at Berth 3 using an 8 cubic metre environmental clamshell bucket. The target depth is -14.0 m chart datum.
- Deployment of partial depth sediment curtains to reduce dispersion of sediment during dredging.
- Containment of dredged sediment and water on a barge or scow.
- Disposal of dredged sediment at an upland facility outside of Vancouver Fraser Port Authority jurisdiction.

Dredging is proposed to be completed by clamshell environmental bucket to mitigate dispersion of sediment. Dredgeate will be loaded onto a self-contained barge. There will be no dewatering at the Project site. The water collected with the dredgeate and the dredgeate itself will be transported in a water-tight barge to a licensed upland disposal facility. All works will be completed during standard port operating hours. The Project is scheduled to occur within the least risk in water work window for Burrard Inlet (August 16 to February 28).

3 VANCOUVER FRASER PORT AUTHORITY INTERNAL REVIEWS

The following port authority departments have undertaken and completed a review of these works and confirm that the proposal meets their requirements, subject to the listed project and environmental conditions.

☒ Planning	☒ Environmental Programs	☐ Engineering
☒ Marine Operations	☒ Public Engagement	☐ Indigenous Consultation

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4 INDIGENOUS CONSULTATION

The port authority has reviewed the proposed works and determined that adverse impacts to Indigenous or Treaty rights are not expected.

5 NOTIFICATIONS

5.1 North Shore Waterfront Liaison Committee – Community Liaison Group Notification

As the project area is within the North Shore Waterfront Lands, and this is a category B project, the port authority will notify the North Shore Waterfront Liaison Committee in tandem with permit issuance.

5.2 Public Engagement

To meet requirements of section 86 of the *Impact Assessment Act*, the port authority posted a description of the Project and notice of public participation to the Canadian Impact Assessment Registry to provide the public 30 calendar days to comment on the project and provide community knowledge. At the close of the 30 calendar day public comment period, no comments were received from the public.

The proposed Project was assessed by the port authority to have minimal or no potential impacts to community interests in the surrounding area either during construction or once the project is completed. Therefore no construction notification was required.

6 INFORMATION SOURCES

The port authority has relied upon the following sources of information in its review of the Project.

- Application form and materials submitted by the Applicant on behalf of the tenant on May 5, 2020.
- All Project correspondence from May 5, 2020 to July 30, 2020
- All plans and drawings submitted.
- "Project and Environmental Review Application Submission – Category B Maintenance Dredging Neptune Bulk Terminals", June 12, 2020, Stantec Consulting Ltd.
- "Neptune Bulk Terminals Maintenance Dredge – Factors Affecting Sediment Quality at Berth 2 and Berth 3", July 27, 2020, Stantec Consulting Ltd.

7 ENVIRONMENTAL REVIEW DECISION

In completing the project and environmental review, the port authority has reviewed and taken into account relevant information available on the proposed project and has considered any adverse impact that the project may have on the rights of the Indigenous peoples, Indigenous knowledge, community knowledge, comments received from the public, and measures that would mitigate any significant adverse environmental effects of the project. We conclude that with the implementation of proposed mitigation measures and conditions described in the project and environmental conditions section below, the Project is not likely to cause significant adverse environmental effects.

ORIGINAL COPY SIGNED

LISA MCCUAIG on behalf of
MANAGER, ENVIRONMENTAL PROGRAMS

August 25, 2020
DATE OF DECISION

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8 CONCLUSION

In completing the project and environmental review, the port authority concludes that with the implementation of proposed mitigation measures and conditions described in the project and environmental conditions section below, the Project has appropriately addressed all identified concerns.

PROJECT AND ENVIRONMENTAL REVIEW DECISION

Project Permit PER No. 20-070 is approved by:

ORIGINAL COPY SIGNED

LISA MCCUAIG on behalf of
MANAGER, ENVIRONMENTAL PROGRAMS

August 25, 2020
DATE OF APPROVAL

9 PROJECT AND ENVIRONMENTAL CONDITIONS

The port authority 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 and, as applicable, Section 82 of the *Impact Assessment Act*.

If at any time Stantec Consulting Ltd. working on behalf of Neptune Bulk Terminals (Canada) Ltd (the Permit Holder) fails to comply with any of the project and environmental conditions set out in the project permit (the Permit) below, or if the port authority determines that the Permit Holder has provided any incomplete, incorrect or misleading information in relation to the Project, the port authority 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.

Pursuant to Section 29 of the *Port Authorities Operations Regulations*, the port authority may also cancel its authorization for the Project, or change the project and environmental conditions to which such authorization is subject, if new information is made available to the port authority at any time in relation to the potential adverse environmental and other effects of the Project.

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

All port authority Guidelines and Record Drawing Standards referenced in this document can be located at: https://www.portvancouver.com/development-and-permits/project-and-environmental-reviews/technical-guidelines/.

No.	GENERAL CONDITIONS
1.	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 the port authority's rights, under such lease, licence, or access agreement.
2.	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.
3.	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 the port authority has permitted the construction of the Project, in accordance with the terms and conditions of this Permit.
4.	The Permit Holder shall indemnify and save harmless the port authority 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.
5.	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. The Permit Holder shall not carry out any other physical activities unless expressly authorized by the port authority.
6.	The Permit Holder shall cooperate fully with the port authority in respect of any review by the port authority of the Permit Holder's compliance with this Permit, including providing information and documentation in a timely manner, as required by the port authority. The Permit Holder is solely responsible for demonstrating the Permit Holder's compliance with this Permit.
7.	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.
8.	The Permit Holder shall make available upon request by any regulatory authority (such as a Fishery Officer) a copy of this Permit.
9.	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.20-070**.
10.	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 the port authority's satisfaction.

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11.	The port authority shall have unfettered access to environmental compliance documentation and the Project site at all times during construction without notice.	
12.	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 project permit conditions. These records must be made available at the request of the port authority.	
	CONDITIONS – PRIOR TO COMMENCING CONSTRUCTION OR ANY PHYSICAL ACTIVITIES	**SUBMISSION TIMING (business days)**
13.	At least two days prior to commencing any physical activities, the Permit Holder shall notify the Harbour Master and VFPA Environmental Programs, email: Harbour_Master@portvancouver.com EnvironmentalPrograms@portvancouver.com	At least 2 business days before commencing physical activities
14.	Prior to the commencement of any vessel-related activities, the Permit Holder shall contact Canadian Coast Guard (CCG) Marine Communications and Traffic Services (MCTS) (NAVWARN.MCTSPrinceRupert@innav.gc.ca or 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
15.	The Permit Holder shall submit a marine construction and staging plan to VFPA's satisfaction, which includes: a) identification of navigation related hazards and risk mitigation measures; b) staging and construction areas; c) dates and hours of operations; d) description of activities taking place; e) participating equipment and vessels (dimensions must be included); f) method of preferred communication with marine users; g) method of communicating updates to relevant marine users; and h) special requests and/or additional information. The Permit Holder shall carry out the Project in accordance with the marine construction and staging plan, including any subsequent updates made to VFPA's satisfaction.	20 business days before commencing vessel related activities
16.	Prior to the commencement of any vessel-related activities, the Permit Holder shall inform the BC Coast Pilot (bccp@bcpilots.com) providing them with the following information: a) staging and construction areas; b) dates and hours of operations; c) description of activities taking place; d) participating equipment and vessels; e) method of preferred communication.	20 business days prior to any vessel-related activities.
	CONDITIONS – DURING CONSTRUCTION OR ANY PHYSICAL ACTIVITIES	
17.	All general construction and physical activities related to the Project shall be conducted from **Monday to Saturday** between the hours of **7:00 am and 8:00 pm**. No construction and physical activities shall take place on Sundays or holidays. These hours shall not be modified without prior approval of the port authority. 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.	
18.	The Permit Holder shall notify the port authority within two business days of any complaints received from the community and stakeholders during construction and indicate how the Permit Holder has responded to such complaints.	

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19.	Without limiting the generality of permit condition #2, the Permit Holder shall not, directly or indirectly: (a) deposit or permit the deposit of a deleterious substance of any type in water frequented by fish in a manner contrary to Section 36(3) of the *Fisheries Act*; or (b) adversely affect fish or fish habitat in a manner contrary to Section 35(1) of the *Fisheries Act*.
20.	The Permit Holder shall not permit sediment, sediment-laden waters, or other deleterious substances to enter the water during the Project. The Permit Holder shall carry out all physical activities in a manner that prevents induced sedimentation of foreshore and near shore areas and induced turbidity of local waters, and the release of sediment, sediment-laden waters, and turbid waters to the aquatic environment. The Permit Holder shall manage turbidity in compliance with the following water quality criteria: (a) when background is less than or equal to 50 nephelometric turbidity units (NTU), induced turbidity shall not exceed 5 NTU above the background values; and (b) when background is greater than 50 NTU, induced turbidity shall not exceed the background values by more than 10% of the background value. For the purposes of this condition, "background" means the level at an appropriate adjacent reference site (as determined to the satisfaction of VFPA) that is affected neither by physical activities at the project site, nor sediment-laden or turbid waters resulting from physical activities at the project site.
21.	Prior to commencing construction or any physical activities, the Permit Holder shall have in place a spill prevention, containment and clean-up plan for hydrocarbon products (including fuel, oil and hydraulic fluid) and any other deleterious substances. Appropriate spill containment and clean-up supplies shall be available on the Project site at all times and all personnel working on the Project shall be trained on the spill prevention, containment and clean-up plan. The Permit Holder shall carry out the Project in accordance with the spill prevention, containment and clean-up plan.
22.	The Permit Holder shall maintain equipment in good mechanical condition and free of fluid leaks, invasive species, and noxious weeds.
23.	The Permit Holder shall contain and collect debris and waste material in the immediate working area within the Project site. The Permit Holder shall dispose of waste material at suitable upland locations and maintain records of off-site disposal.
24.	The Permit Holder shall not dewater dredgeate unless a dewatering plan has been submitted to VFPA's satisfaction.
25.	Clamshell dredging shall be completed with an environmental bucket.
26.	Without limiting the generality of permit condition #2, the Permit Holder shall ensure that dredged material that is intended for upland placement complies with all applicable legislation and regulations. The Permit Holder shall appropriately manage any contamination associated with the dredged material and maintain records of off-site disposal.
27.	There shall be no in-water works during the fisheries sensitive period from March 1 to August 15, inclusive, unless otherwise approved in writing by DFO or VFPA. VFPA shall be notified of any DFO exemptions allowing works within the fisheries sensitive period.
28.	The Permit Holder shall not disturb the river/seabed outside the Project site.
29.	The Permit Holder shall use an environmentally clean excavator bucket. The bucket and any portion of the excavator arm that will be in contact with or near the water shall be cleaned of any residual hydrocarbons or other contaminants prior to the start of works.

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30.	The Permit Holder shall not permit barges or other vessels used during the Project to ground on the foreshore or river/seabed or otherwise disturb the foreshore or river/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.	
31.	The Permit Holder shall immediately cease work and notify VFPA if the Permit Holder has reasonable grounds to believe that the Project has harmed fish or fish habitat, including observation of distressed, injured, or dead fish. The Permit Holder shall not resume work until authorized by VFPA.	
32.	Air emissions from vehicle/equipment exhaust, dust and vapours shall be minimized and managed to avoid effects on and off the Project site. More detailed guidance is available in Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities prepared for Environment Canada (Cheminfo Services Inc. March 2005).	
33.	If the Permit Holder encounters, expects to encounter, or should expect to encounter an actual or potential archaeological resource, the Permit Holder shall: a) Immediately stop any activities that may disturb the archaeological resource or the site in which it is contained (Site); b) Not move or otherwise disturb the archaeological resource or other remains present at the Site; c) Stake or flag the Site to prevent additional disturbances; and, d) Immediately notify VFPA by email and phone.	
34.	During any vessel-related activities, the Permit Holder shall 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; a) Exhibit the appropriate lights and day shapes at all times; b) Monitor the VHF channel used for MCTS communications in the respective area at all times and participate as necessary; c) Be familiar with vessel movements in areas affected by the Project. d) Plan and execute the Project in a manner that will not impede navigation or interfere with vessel operations; and, During night hours, unless working 24 hours per day, ensure that the rig and associated equipment is moored outside the navigation channel and lit in accordance with all applicable regulations.	
	CONDITIONS – UPON COMPLETION	**SUBMISSION TIMING (Business Days)**
35.	The Permit Holder shall notify the port authority upon completion of the Project.	Upon substantial completion

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36.	Upon completion of dredging at a deep-sea berth, 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". The post dredge survey data must be validated by a competent navigation authority. As such, the Permit Holder shall: a. Contract a surveyor of the Permit Holder's choice and email the survey data and associated metadata to VFPA at navigation.review@portvancouver.com and to CHS Hydrographic Data Centre at Chsdatacentre@dfo-mpo.gc.ca. The survey data will only be accepted by CHS when accompanied by suitable metadata (e.g. an ISO19115 metadata standard xml file). CHS will then validate the data based on priorities assigned by CHS' chart production requirements and incorporate the data into CHS' bathymetric database if CHS is confident of its quality. Once CHS incorporates the data into its database, VFPA, Pacific Pilotage Authority (PPA) and British Columbia Coast Pilots (BCCP) will be notified that the data has been approved for navigation purposes and the control depths will be updated accordingly; **or** b) Request VFPA to arrange for a hydrographic survey that meets the navigation requirements and agree to reimburse VFPA for the full cost of the survey. This means VFPA will contract the surveyor, set the survey requirements and ensure the requirements are met. This option allows VFPA to accept the data as soon as it is received and reviewed by VFPA, PPA and BCCP. The control depths will then be updated and the survey data and associated metadata will be supplied to CHS for charting purposes. The Permit Holder must notify VFPA two weeks prior to anticipated Project completion to allow sufficient time for VFPA to arrange a post dredging hydrographic survey at the earliest possible time after the dredge and associated equipment have vacated the area.	Within 40 business days of completion

The port authority reserves the right to rescind or revise these conditions at any time that new information warranting this action is made available to the port authority.

LENGTH OF PERMIT VALIDITY

The Project must be completed no later than **August 31, 2022** (the Expiry Date).

AMENDMENTS

- Details of any material proposed changes to the Project, including days and hours when construction and any physical activities will be conducted, must be submitted to the port authority for consideration of an amendment to this Permit.
- For an extension to the Expiry Date, the Permit Holder must apply in writing to the port authority no later than 40 business prior to that date.

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

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.

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