

PER No.:	14-247-2
Tenant:	Cargill Ltd.
Project:	Cargill Rail Improvement Project Second Permit Amendment
Project Location:	801 Low Level Road, North Vancouver
VFPA SID No.:	CNV073
Land Use Designation:	Port Terminal
Applicant(s):	Ray Kroeker, Senior Project Engineer, Cargill Ltd.
Applicant Address:	801 Low Level Road, North Vancouver
Category of Review:	B
Date of Approval:	October 21, 2016
Date of Expiry:	November 30, 2018

1 INTRODUCTION

The Vancouver Fraser Port Authority (VFPA), a federal port authority, manages lands under the purview of the *Canada Marine Act*, which imparts responsibilities for environmental protection. VFPA 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 VFPA's project and environmental review of **PER No. 14-247-2**: Cargill North Vancouver Rail Improvement Project Second Permit Amendment (**the Project**) proposed by Ray Kroeker, Senior Project Engineer working on behalf of **Cargill Ltd. (the Applicant)**.

This project and environmental review was carried out to address VFPA's responsibilities under the *Canada Marine Act*, and to meet the requirements of the *Canadian Environmental Assessment Act, 2012* (CEAA 2012), as applicable. The proposed Project is not a CEAA 2012 "designated project" and an environmental assessment as described in CEAA 2012 is not required. However, VFPA authorization is required for the proposed Project to proceed and in such circumstances, where applicable, Section 67 of CEAA 2012 requires federal authorities to assure themselves that projects will not likely cause significant adverse environmental effects. This review provides that assurance. In addition, VFPA 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 VFPA and other consultations carried out by VFPA. 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

Cargill Ltd., the Applicant, proposes to excavate, abandon, and relocate several existing underground utilities as well as install additional utility protection measures to facilitate construction of their lead rail track. This amendment is part of Cargill's North Vancouver Rail Improvement Project, previously approved by VFPA under Project Permit 14-247. This amendment is to replace existing Project Permit Amendment 14-247-1 which was previously issued to Cargill for additional storm sewer manhole relocation and protection works.

The scope of work includes abandonment of some existing underground utilities, followed by excavation and relocation of others including associated piping and manholes, and installation of additional utility protection measures as shown on attached drawings. Utilities to be relocated include portions of the existing VFPA owned water ring main and Neptune Bulk Terminals owned coal water line as well as the existing sanitary and storm sewer lines. The project will also install additional protection measures for the existing Fortis gas line and underground electrical ducts owned by Neptune Bulk Terminals Canada Ltd. The VFPA owned water ring main connects to the municipal water system and also serves Lynnterm West Gate. As such both the City of North Vancouver and VFPA's current tenant, Western Stevedoring, have been notified of the project.

The project will require excavation and reinstatement of a portion of the internal roadway access to Neptune Bulk Terminals including paving, well as removal and reinstatement of the existing security fence. During the excavation, Cargill Ltd. will follow the procedures identified in their Soil Disposal Management Plan and Excavation Dewatering Plan. This includes environmental monitoring of soil quality, and management of potentially contaminated soil and groundwater.

The proposed design has been approved by Neptune Bulk Terminal. CN Rail, who will be servicing the new lead rail track, has also approved the proposed design. The Applicant has committed to coordinating construction with both parties and will maintain vehicular access on the internal access road to Neptune Terminals at all times throughout the construction period. Construction of the proposed works is not anticipated to significantly impact CN's rail operations and the works will not require a disruption to Neptune Terminal's rail tracks.

The work is expected to be undertaken following permit issuance and will be completed in the Fall of 2016. All work is expected to occur in a portion of lease area recently acquired by the Applicant to facilitate the rail track construction. Work is expected to be undertaken during regular VFPA hours of work with use of temporary construction lighting where needed during periods of low daylight. The temporary construction lighting will be directional, focused to illuminate only the work area.

In this project permit, the Project means the physical activities authorized by VFPA to be carried out pursuant to **PER No. 2014-247-2**, as described below.

2.1 Proposed Works

1. Abandon and relocate an approximately 75.0m (247.0 ft.) portion of the existing 300mm (1.0' ft.) diameter VFPA owned water ring main including associated piping and valves;
2. Relocate a 10.0m (33.0 ft.) long portion of the existing Neptune waterline feed and extend 6' of pipe protection from the PMV-owned City of North Vancouver municipal water service under the existing CN Rail tracks to accommodate for the new lead rail track;

3. Abandon and relocate an approximately 75.0m (247.0 ft.) long portion of the existing 250mm (83.0 ft.) diameter Neptune Bulk Terminals coal water line and valves and install new steel waterline casing;
4. Abandon, excavate and relocate an approximately 115.0m (378.0 ft.) long section of the existing sanitary line including associated drains and piping connections, install casing to 55 meters of sewer line where it crosses under the new lead track;
5. Abandon, excavate and relocate an approximately 75.9m (250.0 ft.) long portion of the existing storm drainage system including associated piping connections and catch basins;
6. Extend underground utility protection for underground utilities including the waterlines;
7. Extend underground utility protection for the existing Fortis gas line crossing;
8. Install new concrete underground utility protection for existing Neptune Bulk Terminals underground electrical conduit, vaults and telecommunications conduit;
9. Excavate, remove and reinstall roadway paving, curb and gutter as well as the existing Neptune Bulk Terminals security fence and fence posts; Depth of excavation is approximately 2.0m (6.6 ft.) in previously disturbed soils for the majority of work. 70 m of storm sewer is at a depth of 2.5-3.0 m, and 60 m of water lines will be relocated at a depth of 2.7 m;
10. Both the Neptune waterline and the VFPA ring main will be relocated in a common trench.

3 REVIEWS

The following VFPA departments have reviewed the application and support approval of the Project subject to the listed project and environmental conditions.

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|--|--|--|
| <input checked="" type="checkbox"/> Planning | <input checked="" type="checkbox"/> Environmental Programs | <input checked="" type="checkbox"/> Engineering |
| | <input checked="" type="checkbox"/> Project Communications | <input checked="" type="checkbox"/> Transportation |

4 ABORIGINAL CONSULTATION

Aboriginal Affairs has reviewed the proposed works and determined that adverse impacts to Aboriginal or Treaty rights are not expected.

5 NOTIFICATIONS

5.1 Municipal Notification

The proposed Project was assessed by Planning to have potential impacts to municipal interests. A notification letter was sent to the City of North Vancouver on October 11, 2016, notifying them of the proposed Project. The City of North Vancouver had no response.

5.2 Adjacent Tenant Notification

The proposed Project was assessed by Planning to have potential impacts to adjacent tenant interests. A notification letter was sent to Neptune Bulk Terminals Canada Ltd., Western Stevedoring Company Limited, and CN Rail on October 11, 2016 notifying them of the proposed Project. Neptune Bulk Terminals, CN Rail and Western Stevedoring had no response.

5.3 Community Notification

The proposed Project was assessed by VFPA 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 community consultation was required, and construction notification is not required to be undertaken by the applicant.

6 INFORMATION SOURCES

VFPA has relied upon the following sources of information in its review of the Project.

- Application form and materials submitted by Ray Kroaker on behalf of Cargill Ltd. on September 26, 2016.
- All Project correspondence from September 26, 2016 to October 11, 2016.
- All plans and drawings labelled PER No.14-247-2-A to L.
- “Vancouver Track Expansion Permit Amendment Application 2014-247-2”, September 26, 2016, Cargill.
- “Soil Disposal Management Plan Rev E, Vancouver Track Expansion Project”, August 29, 2016, prepared by Cargill Ltd.
- “Excavation Dewatering Plan, Vancouver Track Expansion Project, Cargill Limited”, August 29, 2016, prepared by Cargill Ltd.
- “Noise Assessment Screening Worksheet”, September 2016, completed by Cargill Ltd.

7 PROJECT AND ENVIRONMENTAL CONDITIONS

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 and, as applicable, Section 67 of the *Canadian Environmental Assessment Act, 2012*.

If at any time the Applicant fails to comply with any of the project and environmental conditions set out in the project permit (the Permit) below, or if VFPA determines that the Applicant 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.

Pursuant to Section 29 of the Port Authorities Operations Regulations, VFPA 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 VFPA 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 Applicant to mitigate potential or foreseeable adverse environmental and other effects.

No.	GENERAL CONDITIONS
1.	This Permit is conditional on a valid tenure agreement with respect to the subject premises being in place. No construction or any other physical activities may commence in the absence of a valid tenure agreement.

2.	This Permit is granted subject to the fulfillment of all other requirements of VFPA, relating to the Project. Furthermore, prior to commencing construction or any other physical activities the Applicant shall ensure that it has complied with all other necessary legal requirements and that all necessary regulatory approvals have been obtained.
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 VFPA has permitted the construction of the Project, in accordance with the terms and conditions of this Permit.
4.	In consideration of the granting of this Permit by VFPA the Applicant agrees to indemnify and save harmless VFPA against any and all actions, claims, loss, damages or other expenses in any way arising or following from or caused by the granting of this Permit or the construction or operation of the Project as contemplated by this Permit.
5.	The Applicant is responsible for locating all existing site services and utilities including any located underground and to employ best practices and meet applicable code requirements with respect to protection of existing site services and clearance between existing and proposed site services. The Applicant 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.
6.	The Applicant shall undertake and deliver the Project to total completion in a professional, timely and diligent manner in accordance with the Application submitted by the Applicant and the 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. 14-247-2-A to L . The Applicant shall not carry out any other physical activities unless expressly authorized by VFPA.
7.	The Applicant shall establish a spill prevention, containment and clean-up plan for hydrocarbon products (including fuel, oil and hydraulic fluid) and any other deleterious substances using standards, practices, methods and procedures to a good commercial standard, conforming to applicable law and using that degree of skill and care, diligence, prudence and foresight which would be reasonably and ordinarily expected from a qualified, skilled and experienced person engaged in a similar type of undertaking under the same or similar circumstances. The Applicant shall ensure that appropriate spill containment and clean-up supplies are available on site at all times and that all personnel working on the project are familiar with the spill prevention, containment and clean-up plan.
8.	The Applicant shall cooperate fully with VFPA in respect of any review by VFPA of the Applicant's compliance with these conditions including, without limitation, providing any information or documentation required by VFPA.
9.	The Applicant shall make a copy of this Permit available to all employees, agents, contractors, licensees and invitees prior to commencing any physical activities. The Applicant shall be solely responsible for ensuring that all such employees, agents, contractors, licensees and invitees comply with these conditions.
10.	The Applicant shall make available upon request by any regulatory authority (such as a Fishery Officer) a copy of this Permit.

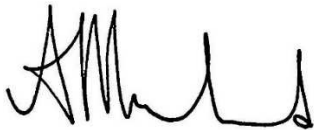
11.	Unless otherwise noted, the Applicant shall submit all documents required for VFPA approval to email: per@portvancouver.com ; fax: 1-866-284-4271 and referencing PER No.14-247-2.	
	CONDITIONS – PRIOR TO COMMENCING CONSTRUCTION OR ANY PHYSICAL ACTIVITIES	SUBMISSION TIMING (business days)
12.	The Applicant shall submit signed and sealed drawings for proposed works approved for construction by a professional engineer licensed to practice in the Province of British Columbia.	5 days before commencing construction or any physical activities
13.	The Applicant shall submit a Construction Parking and Traffic Management Plan for VFPA approval.	10 days before commencing construction or any physical activities
14.	The Applicant shall submit an Archeological Chance Find Procedure which includes the source of any fill material to be used in conjunction with the project for VFPA approval.	30 days before commencing construction or any physical activities
	CONDITIONS – DURING CONSTRUCTION OR ANY PHYSICAL ACTIVITIES	
15.	The Applicant shall notify VFPA upon commencement of construction or any physical activities of the Project.	
16.	All general construction and physical activities related to the Project shall be conducted between Monday to Saturday between the hours of 7:00am to 8:00pm . No construction and physical activities shall occur during Sundays or holidays. These hours shall not be modified without prior approval from VFPA.	
17.	For future location referencing, the Applicant shall record true coordinates of the final alignment of the new high-density polyethylene (HDPE) watermain. This information shall be provided to VFPA on the final record drawings. The spacing for the coordinates must cover curves and bends along the pipe. The Applicant shall also consider incorporation of detectors on HDPE pipes for ease of locating the buried pipes.	
18.	The Applicant may place temporary construction trailers on site while this permit remains in effect, provided that the Applicant shall not connect such trailers to any underground utilities without the prior written consent of VFPA which may include, without limitation and at VFPA's discretion, a VFPA Building Permit.	
19.	The Applicant 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 <i>Fisheries Act</i> ; or (b) adversely affect fish or fish habitat in a manner contrary to Section 35(1) of the <i>Fisheries Act</i> .	

20.	The Applicant shall conduct all work associated with the Project involving the use of concrete, cement, mortars and other Portland cement or lime-containing construction materials so as to ensure that sediments, debris, concrete (cured or uncured), and concrete fines are not deposited into the aquatic environment, either directly or indirectly. Water that has contacted uncured or partly cured concrete or Portland cement or lime-containing construction materials, such as the water that may be used for exposed aggregate wash-off, wet curing, equipment and truck washing, etc. shall not be permitted to enter the aquatic environment. The Applicant shall provide containment facilities at the site for the wash-down water from concrete delivery trucks, concrete pumping equipment, and other tools and equipment, as required.
21.	The Applicant shall ensure that debris and waste material resulting from the Project are contained, collected, and disposed of at suitable upland locations using standards, practices, methods and procedures to a good commercial standard, conforming to applicable law and using that degree of skill and care, diligence, prudence and foresight which would be reasonably and ordinarily expected from a qualified, skilled and experienced person engaged in a similar type of undertaking under the same or similar circumstances.
22.	The Applicant shall ensure that all equipment is in good mechanical condition and maintained free of fluid leaks, invasive species, and noxious weeds.
23.	The direct or indirect release or deposit of sediment or sediment laden water into the aquatic environment shall be minimized during the works. In this regard, reference should be made to the water quality criteria described in the British Columbia Water Quality Guidelines (Criteria): May 2015 Edition produced by the BC Ministry of Environment.
24.	Should contaminated materials be encountered, the Applicant shall ensure that all contaminated materials, including contaminated drill cuttings and equipment wash water, are removed, contained, and disposed of at appropriate off-site facilities using standards, practices, methods and procedures to a good commercial standard, conforming to Applicable Law and using that degree of skill and care, diligence, prudence and foresight which would be reasonably and ordinarily expected from a qualified, skilled and experienced person engaged in a similar type of undertaking under the same or similar circumstances. Suspect materials should be treated as contaminated or stockpiled until their environmental quality has been determined.
25.	The Applicant shall dispose of any soils excavated from the site that are not suitable for backfill at appropriate off-site facilities in accordance with Applicable Law.
26.	Materials brought onto the property to be used for backfilling, site preparation, or other uses shall be from sources demonstrated to be clean and free of environmental contamination.
27.	The Applicant shall not conduct refuelling or maintenance activities within 30 metres of any watercourse, or in an area where there is potential for run-off to reach surface water bodies. Fuel and other hydrocarbon inventories shall not be stored in such areas, temporarily or otherwise.
28.	Noise, dust, and air emissions associated with the Project shall be kept to a minimum.

	CONDITIONS – UPON COMPLETION	SUBMISSION TIMING (Business Days)
29.	The Applicant shall notify VFPA upon completion of the Project.	Within 10 days of completion
30.	The Applicant shall submit signed and sealed record drawings by a professional engineer licensed to practice in the Province of British Columbia together with a memo to confirm satisfactory abandonment/ removal of existing utilities. The Applicant shall provide record drawings, in both AutoCAD and Adobe (PDF) format to VFPA.	Within 40 days of completion
VFPA reserves the right to rescind or revise these conditions at any time that new information warranting this action is made available to VFPA.		
LENGTH OF PERMIT VALIDITY		
The Project must commence by November 30, 2017 (the “Commencement Date”) and be completed no later than November 30, 2018 (the “Expiry Date”).		
AMENDMENTS		
<ul style="list-style-type: none"> • 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 VFPA for consideration of an amendment to this Permit. • For an extension to the Commencement Date, the Applicant must apply to VFPA in writing no later than 30 days prior to that date. • For an extension to the Expiry Date, the Applicant must apply in writing to VFPA no later than 30 days prior to that date. <p>Failure to apply for an extension as required may, at the sole discretion of VFPA, result in termination of this Permit.</p>		

8 ENVIRONMENTAL REVIEW DECISION

In completing the environmental review, VFPA has reviewed and taken into account relevant information available on the proposed project, has considered the information and proposed mitigations provided by the Applicant and other information as listed elsewhere in this document, and concludes that with the implementation of proposed mitigation measures and conditions described in the project and environmental conditions section above, the Project is not likely to cause significant adverse environmental effects.



ANDREA MACLEOD
MANAGER, ENVIRONMENTAL PROGRAMS

October 20, 2016
DATE OF DECISION

9 CONCLUSION

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

PROJECT AND ENVIRONMENTAL REVIEW DECISION

Project Permit PER No. 14-247-2 is approved by:



TEGAN SMITH
MANAGER, PLANNING

October 21, 2016

DATE OF APPROVAL

CONTACT INFORMATION

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