

<b>PER No.:</b>	<b>17-091</b>
<b>Tenant:</b>	<b>Imperial Oil Limited</b>
<b>Project:</b>	<b>Burrard Inlet Pipeline Removal</b>
<b>Project Location:</b>	<b>Burrard Inlet, northeast of Reed Point Marina</b>
<b>VFPA SID No.:</b>	<b>PTM110 (and PTM097)</b>
<b>Land Use Designation:</b>	<b>Port Water</b>
<b>Permit Holder(s):</b>	<b>Alistair Kirk, Project Manager, Imperial Oil Limited</b>
<b>Applicant Address:</b>	<b>P.O. Box 2480, Station 'M', Calgary, Alberta, T2P 3M9</b>
<b>Category of Review:</b>	<b>C</b>
<b>Date of Approval:</b>	<b>January 19, 2018</b>
<b>Date of Expiry:</b>	<b>October 31, 2018</b>

**PROJECT DESCRIPTION**

For the purposes of this project permit, the Project is understood to include the following works on Vancouver Fraser Port Authority Property:

- Approximately 1,000 m<sup>3</sup> of material with concentrations of polycyclic aromatic hydrocarbons (PAHs) exceeding Disposal at Sea screening criteria would be dredged, using a clamshell, in an area of approximately 2,000 m<sup>2</sup>. The material would be transported by barge and disposed of at a regulated upland landfill facility;
- Confirmatory sediment samples would be taken and tested;
- The pipes would be filled with sea water to weigh them down;
- The overburden over the pipeline sections to be removed would be dredged using a clamshell derrick, sealed spoil scow, and assist tug;
- The remainder of the dredged sediment would be disposed of by side-casting the material next to the trench, or at an approved Disposal at Sea site (Point Grey), upon approval of either option by Environment and Climate Change Canada (ECCC);
- Water jetting would be conducted to expose the pipe cut locations. The pipes would be cut, and the abandoned pipe segments capped, by divers along with surface support equipment;
- The abandoned pipe stubs would be buried with rock;
- The pipe segments would be cut to segments approximately 20 m in length and lifted by a crawler crane to a spud barge for disposal at a regulated upland landfill facility; and
- Remaining pipes would be capped and abandoned in place, in accordance with the BC Oil and Gas Commission requirements. The associated anode bed would also be abandoned.

The work is proposed to be completed in 2018, during the fisheries least risk window (i.e., before March 1 and after August 15), in two phases:

- Phase A: Removal of the PAH impacted sediment, over approximately 5 to 10 days before March 1, 2018; and
- Phase B: Dredging and removal of pipelines, over approximately 4 to 6 weeks, after August 15, 2018.

**PROJECT AND ENVIRONMENTAL CONDITIONS**

The Vancouver Fraser Port Authority (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 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 project and environmental conditions that must be followed by the Applicant to mitigate potential or foreseeable adverse environmental and other effects.**

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 VFPA'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 VFPA 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 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.
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 VFPA.

6.	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.
7.	The Permit Holder 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.
8.	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.
9.	The Permit Holder shall make available upon request by any regulatory authority (such as a Fishery Officer) a copy of this Permit.
10.	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 <b>PER No.17-091</b> .
11.	The Permit Holder shall be aware that portions of the work area are located within a deep-sea navigation channel designated by VFPA and that the VFPA may provide notice of navigational concerns in and around the work area. The Permit Holder must comply with any and all directions by the Authority deemed necessary or desirable to maintain the safety, security, and good order of port operations.
	<b>CONDITIONS - PRIOR TO COMMENCING CONSTRUCTION OR ANY PHYSICAL ACTIVITIES</b>
	<b>SUBMISSION TIMING (business days)</b>
12.	The Permit Holder shall distribute an approved construction notice to residents and businesses, in an area to VFPA's satisfaction for both phases of work. The distribution list shall include Flavelle Sawmill Company Limited, Reed Point Marina, and marina subtenants including the Marine Mammal Research Unit and Reed Point Marina Education Centre. The Permit Holder shall notify VFPA when such distribution has been completed.
	10 days prior to distribution (the draft notice shall be provided for review) and 10 days before commencing construction or any physical activities for each phase of work (the notice shall be distributed)
13.	Prior to the commencement of any vessel-related activities, the Permit Holder must contact the appropriate Canadian Coast Guard (“CCG”) Marine Communications and Traffic Services (“MCTS”) centre regarding the issuance of a Notice to Shipping (“NOTSHIP”) to advise the marine community of potential hazards associated with the Project.
	As per Coast Guard requirements

14.	At least two days prior to commencing construction or any physical activities, the Permit Holder shall notify the Harbour Master and VFPA Environmental Programs, email: Harbour_Master@portvancouver.com and EnvironmentalPrograms@portvancouver.com.	2 days before commencing each phase of work
15.	The Permit Holder must provide, to the satisfaction of VFPA, a Dredging Plan and Side-Casting Placement Plan prior to the commencement of phase B.	20 days before commencing phase B
16.	The Permit Holder must organize and host a marine user coordination meeting. The Permit Holder must work with VFPA to identify the appropriate stakeholders.	20 days before commencing phase B
17.	The Permit Holder must provide, to the satisfaction of VFPA, a final Marine Construction and Staging Plan.	20 days before commencing phase B
<b>CONDITIONS - DURING CONSTRUCTION OR ANY PHYSICAL ACTIVITIES</b>		
18.	Without limiting the generality of permit condition #2, the Permit Holder shall dredge/load all material intended for disposal at sea under a valid Disposal at Sea Permit pursuant to the provisions of Part 7, Division 3 of the <i>Canadian Environmental Protection Act, 1999</i> .	
19.	The Permit Holder shall carry out the Project in accordance with the construction environmental management plan (CEMP) provided by the Permit Holder, and any subsequent revision approved by VFPA.	
20.	All general construction and physical activities related to the Project shall be conducted from <b>Monday to Saturday</b> 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 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.	
21.	The Permit Holder 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 construction environmental management plan, or VFPA, provided that monitoring will be full time when works are under way that have the potential to adversely affect fish or fish habitat.	
22.	The Permit Holder shall make opportunities available for qualified members and/or businesses of interested Aboriginal groups to conduct cultural and/or environmental monitoring during Project works.	
23.	The Permit Holder shall provide Aboriginal groups the opportunity to review and provide input into environmental monitoring plans.	
24.	The Permit Holder shall provide environmental monitoring reports to VFPA's satisfaction as specified in the construction environmental management plan or more frequently if VFPA requires. In addition, a summary report for the whole monitoring period shall be forwarded to VFPA within six weeks of the conclusion of the monitoring period.	

25.	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 <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> .
26.	<p>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:</p> <ul style="list-style-type: none"> <li>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</li> <li>b) when background is greater than 50 NTU, induced turbidity shall not exceed the background values by more than 10% of the background value.</li> </ul> <p>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.</p>
27.	There shall be no in-water works during the fisheries sensitive period from March 1 to August 15, inclusive.
28.	The Permit Holder shall manage potential noise impacts on adjacent residents as described in the construction environmental management plan. The VFPA may require that the Permit Holder implements additional measures to the satisfaction of VFPA.
29.	The Permit Holder shall carry out the Project in accordance with the marine construction and staging plan, including any subsequent amendments approved by VFPA.
30.	The Permit Holder shall provide the schedule, route, origin and destination of planned barge traffic, when available, to interested Aboriginal groups for their review and comment.
31.	<p>During any vessel-related activities, the Permit Holder must:</p> <ul style="list-style-type: none"> <li>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;</li> <li>b) exhibit the appropriate lights and day shapes at all times as described by the <i>Collision Regulations</i>;</li> <li>c) monitor the VHF channel used for MCTS communications in the respective area at all times and participate as necessary;</li> <li>d) be familiar with vessel movements in areas affected by the Project;</li> <li>e) plan and execute the Project in a manner that will not impede navigation or interfere with vessel operations;</li> <li>f) 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.</li> </ul>
32.	Side-casted materials must be placed in a manner to not exceed the control depth of 10.5 m below chart datum (CD) within the navigation channel and 8.5 m below CD outside of the navigation channel safety zone.

33.	At regular intervals, not exceeding five (5) business days during side-casting activities, the Permit Holder must undertake, and provide to VFPA and other concerned stakeholders, a hydrographic survey that meets the requirements of a "Special Order" survey with "Type C1 (complete coverage)" as defined by the Canadian Hydrographic Service (CHS) "Standards for Hydrographic Surveys".	
34.	During all underwater pipeline removal operations the Permit Holder must ensure that a sign is displayed on the primary work platform, visible to any approaching mariners stating: <b>WARNING</b> <b>Underwater hazard</b> <b>Proceed with caution</b>	
35.	The Permit Holder must ensure that any floating hazards are lit with a flashing yellow light during periods of darkness and reduced visibility, in accordance with the Canadian Coast Guard's <i>The Canadian Aids to Navigation System</i> (TP 968).	
36.	The Permit Holder may place temporary construction trailers on site while this permit remains in effect, provided that the Permit Holder 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.	
	<b>CONDITIONS - UPON COMPLETION</b>	<b>SUBMISSION TIMING (Business Days)</b>
37.	The Permit Holder shall notify VFPA upon completion of the Project.	Within 10 days of completion
38.	Upon completion the Permit Holder must undertake, and provide to VFPA and other concerned stakeholders, a hydrographic survey of the entire project area that meets the requirements of a "Special Order" survey with "Type C1 (complete coverage)" as defined by the Canadian Hydrographic Service (CHS) "Standards for Hydrographic Surveys".	Within 5 days of completion
39.	Upon completion of the pipeline removal, the Permit Holder must provide all necessary drawings and surveys to the Database Information Office of the Canadian Hydrographic Services at (250) 363-6360 or via <a href="mailto:chsdatacentre@dfo-mpo.gc.ca">chsdatacentre@dfo-mpo.gc.ca</a>	As soon as possible
<b>VFPA reserves the right to rescind or revise these conditions at any time that new information warranting this action is made available to VFPA.</b>		
<b>LENGTH OF PERMIT VALIDITY</b>		
The construction of the Project must be complete no later than October 31, 2018 (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 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.

**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. 17-091 is approved by:

Original Copy Signed

**CARRIE BROWN**  
**DIRECTOR, ENVIRONMENTAL PROGRAMS**

2018-01-19

**DATE OF APPROVAL**

**CONTACT INFORMATION**

Vancouver Fraser Port Authority (VFPA)  
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