



**VANCOUVER FRASER PORT AUTHORITY
PROJECT AND ENVIRONMENTAL REVIEW PROJECT
PERMIT**

PER No.:	17-407
Tenant:	Seaspan ULC
Project:	Ship Load-out Gravel Bed and Shoreline Protection
Project Location:	10 Pemberton Avenue, North Vancouver
Vancouver Fraser Port Authority SID No.:	DNV059, CNV061
Land Use Designation:	Industrial and Port Terminal
Permit Holder(s):	Seaspan ULC
Category of Review:	C
Date of Approval:	September 28, 2020
Date of Expiry:	December 31, 2022

PROJECT DESCRIPTION

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

Seaspan ULC proposes to construct a ship load-out gravel bed and install shoreline protection in Burrard Inlet adjacent to their facility located at 10 Pemberton Avenue in North Vancouver. The gravel bed (7,500 m²) is proposed in order to launch newly constructed Canadian Coast Guard and Royal Canadian Navy vessels. Vessels will be launched by submerging a careen to rest on the gravel bed, allowing the vessels to launch. Seaspan also proposes to install slope protection using rip-rap (1,500 m²) as part of a proposed infill of the east basin at the site. The slope protection works are part of a broader project that also includes an infill of the east basin of the site. Those works are within District of North Vancouver lands and waters and are outside of the scope of this review. The project will require marine habitat offsetting under a *Fisheries Act* Authorization. The proposed marine habitat is designed to enhance kelp and juvenile salmonid habitat at the estuary of MacKay Creek.

The project construction phase is proposed for August 2021 to March 2022.

PROJECT AND ENVIRONMENTAL CONDITIONS

The Vancouver Fraser Port Authority (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 the Permit Holder fails to comply with any of the project and environmental conditions set out in 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 project and environmental conditions that must be followed by the Permit Holder to mitigate potential or foreseeable adverse environmental and other effects.

All the 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.17-407 .
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.
11.	<p>The Permit Holder shall prepare and submit a self-report form to the port authority demonstrating compliance with conditions at each of the following project phases:</p> <ul style="list-style-type: none"> a) Prior to construction Conditions (self-report shall be submitted a minimum of 15 business days prior to the commencement of construction, or any physical activities, to a maximum of 90 business days prior to construction, or any physical activities) b) Construction Conditions (self-report shall be submitted at 50% of construction) c) Conditions Upon Project Completion (self-report shall be submitted within 60 business days of completion of construction)

12.	The port authority shall have unfettered access to environmental compliance documentation and the Project site at all times during construction without notice.	
13.	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.	
14.	All conditions in this Permit which expressly or by their nature survive expiration or termination of this Permit will remain in effect after the expiration or termination of this Permit.	
	CONDITIONS - PRIOR TO COMMENCING CONSTRUCTION OR ANY PHYSICAL ACTIVITIES	SUBMISSION TIMING (business days)
15.	The Permit Holder 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 business days before commencing construction or any physical activities
16.	The Permit Holder shall provide a draft construction notice to the port authority's satisfaction in accordance with the port authority's Public Consultation Guidelines.	20 business days before commencing construction or any physical activities
17.	The Permit Holder shall distribute an approved construction notice to residents and businesses to an area to the port authority's satisfaction. The Permit Holder shall notify the port authority when such distribution has been completed.	10 business days before commencing construction or any physical activities
18.	At least two days prior to commencing any physical activities, the Permit Holder shall notify the Harbour Master and Environmental Programs, email: Harbour_Master@portvancouver.com EnvironmentalPrograms@portvancouver.com.	2 days before commencing construction or any physical activities
19.	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: NAVWARN.MCTSPRinceRupert@innav.gc.ca; 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
20.	The Permit Holder shall submit a marine construction and staging plan, including the following, for port authority review and approval: (a) staging and construction areas; (b) dates and hours of operations; (c) description of activities taking place; (d) participating equipment and vessels (dimensions must be included); (e) method of preferred communication; and (f) 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 amendments approved by the port authority.	30 business days prior to commencing construction activities
21.	The Permit Holder shall provide a Project schedule to the port authority showing the anticipated start dates for all major phases of the Project as identified by the port authority. The Permit Holder shall notify the port authority of any material	20 business days before commencing

	changes to the Project schedule and, upon request, shall provide an updated Project schedule.	construction or any physical activities
CONDITIONS - DURING CONSTRUCTION OR ANY PHYSICAL ACTIVITIES		
22.	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.	
23.	The Permit Holder shall notify the port authority of any complaints received from the community and stakeholders during construction and indicate how the Permit Holder has responded to such complaints.	
24.	The Permit Holder shall ensure that an appropriately qualified archaeological monitor be on the Project site at all times during ground disturbing activities with the potential to intrude into native soils.	
25.	<p>If the Permit Holder encounters, expects to encounter, or should expect to encounter an actual or potential archaeological resource, the Permit Holder shall:</p> <ul style="list-style-type: none"> 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 the port authority by email and phone. 	
26.	<p>During any vessel-related activities, the Permit Holder shall:</p> <ul style="list-style-type: none"> 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 will 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 and lit in accordance with all applicable regulations. 	
27.	The Permit Holder shall carry out the Project in accordance with the construction environmental management plan provided by the Permit Holder, and any subsequent updates, to the port authority's satisfaction.	
28.	No dredging shall be conducted as part of the Project. Any proposals to dredge shall be the subject of a separate application to the port authority.	
29.	<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"> (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. <p>For the purposes of this condition, "background" means the level at an appropriate adjacent reference site</p>	

	(as determined to the satisfaction of the port authority) 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.
30.	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 of the <i>Fisheries Act</i> ; or (b) adversely affect fish or fish habitat in a manner contrary to Section 35 of the <i>Fisheries Act</i> .
31.	The Permit Holder shall obtain a Fisheries and Oceans Canada (DFO) Paragraph 35(2)(b) <i>Fisheries Act Authorization</i> (DFO Authorization) prior to conducting works that require this Authorization. A copy of the DFO Authorization shall be submitted to the port authority upon receipt.
32.	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 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.
33.	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 the port authority. The port authority shall be notified of any DFO exemptions allowing works within the fisheries sensitive period.
34.	The Permit Holder shall immediately cease work and notify the port authority 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 the port authority.
35.	The Permit Holder shall not disturb the seabed outside the Project site.
36.	The Permit Holder shall repair and/or remediate any damage or erosion resulting from disturbance to the intertidal foreshore during the Project.
37.	Rip rap and other fill materials shall be clean and free of fines and shall be lowered through the water column and deposited near the seabed and not dumped or deposited from above or near the water surface.
38.	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.
39.	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.
40.	The Permit Holder shall maintain equipment in good mechanical condition and free of fluid leaks, invasive species, and noxious weeds.
41.	The Permit Holder shall manage invasive plants in a manner that prevents their spread. Invasive plants and potentially affected materials, such as soil, shall be appropriately contained, collected and disposed of.
42.	The Permit Holder shall use reasonable efforts to retain existing native riparian vegetation and native soil. Disturbance or clearing of vegetation shall be staged and strictly limited to that required for the Project.
43.	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.	
44.	The Permit Holder shall remove 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 river/seabed as possible. Should it be impossible to remove the remaining pile stubs, they are to be cut as close as possible to the nominal bed elevation in the immediate area of each pile. Upon successful completion of the pile extraction work, the location shall be surveyed and the location coordinates provided to the port authority within five days of Project completion.	
45.	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).	
46.	All non-road diesel equipment in use within port authority jurisdiction shall be reported as required under the Non-Road Diesel Equipment Program (https://www.portvancouver.com/environment/air-energy-climate-action/terminal-energy-efficiency/nrde/).	
47.	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 Construction Environmental Management Plan, or the port authority, provided that monitoring will be full time when works are underway that have the potential to adversely affect fish or fish habitat.	
48.	The Permit Holder shall provide environmental monitoring reports to the port authority as specified in the Construction Environmental Management Plan or more frequently if the port authority requires. In addition, a summary report for the whole monitoring period shall be forwarded to the port authority within 30 days of the conclusion of the monitoring period.	
	CONDITIONS - UPON COMPLETION	SUBMISSION TIMING (Business Days)
49.	The Permit Holder shall notify the port authority upon completion of the Project.	Upon substantial completion
50.	The Permit Holder shall provide record drawings in accordance with the port authority's Record Drawing Standards, in both AutoCAD and Adobe (PDF) format to the port authority, including a Project site plan that clearly identifies the location of works.	Within 40 business days of completion
51.	The port authority shall be copied on the offsetting monitoring reports required by the DFO Authorization. The port authority shall be consulted during the development of any contingency plans and any measures in those plans that fall within port authority jurisdiction.	As needed
52.	The Permit Holder must send their as built drawings to the Database Information Office of the CHS at chsdatacentre@dfo-mpo.gc.ca or contact (250) 363-6360 to arrange for the relevant Canadian Hydrographic Service charts to be updated. The port authority's Marine Operations department must be copied on the request (navigation.review@portvancouver.com).	Within 30 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 December 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 days 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.

PROJECT AND ENVIRONMENTAL REVIEW DECISION

Project Permit PER No. 17-407 is approved by:

Original copy signed

September 28, 2020

CARRIE BROWN
DIRECTOR, ENVIRONMENTAL PROGRAMS

DATE OF APPROVAL

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.