

	VANCOUVER FRASER PORT AUTHORITY (VFPA) PROJECT AND ENVIRONMENTAL REVIEW PROJECT PERMIT
PER No.:	15-104
Tenant:	Vancouver Airport Fuel Facilities Corporation
Project:	Vancouver Airport Fuel Delivery
Project Location:	East foot of Williams Road, Richmond BC
VFPA SID No.:	RIC 356
Land Use Designation:	Port Terminal
Applicant(s):	FSM Management Group Inc. on behalf of Vancouver Airport Fuel Facilities Corporation
Applicant Address:	108 – 12300 Horseshoe Way Richmond BC V7A 4Z1
Category of Review:	Legacy
Date of Approval:	February 24, 2016
Date of Expiry:	February 28, 2019
PROJECT DESCRIPTION	
<p>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:</p> <p>General Description</p> <p>Project components proposed under this application include the following:</p> <ul style="list-style-type: none"> • Construction and operation of a new aviation fuel storage facility (jet fuel tanks) • The construction of associated office, utilities, and landscaping • Sections of new transfer and delivery pipelines and related equipment <p>Detailed works in phases are described as follows:</p> <p>Early earthworks (phase 1)</p> <ul style="list-style-type: none"> • Removal of surface soils and vegetation clearing <p>Site preparation (phase 2)</p> <ul style="list-style-type: none"> • Over-excavation and removal of spoil material (up to approximately 150,000 m³) • Soil replacement by filling the site with dredged river sand as quality backfill • Ground densification using stone columns or a combination of other methods to achieve a seismic performance target of 1:2,475 year event <p>Storage Tanks & Operations Facilities (phase 3)</p> <ul style="list-style-type: none"> • A fuel receiving facility consisting of 6 above ground vertical carbon steel single wall tanks. Each has a diameter of approximately 35 m (115 ft.), a height of 14.6 m (48 ft.) and a useable storage capacity of 13.3 million litres, with a combined capacity of 80 million litres • A one-storey operations building approximately 64 m² (689 ft²) to house offices, a control room for the facilities, first aid facilities and washrooms • A one-storey water treatment building of approximately 64 m² (689 ft²) • An electrical motor control centre building of approximately 64 m² (689 ft²) • A containment basin and lift station as part of oil/water separator system • A filtration system and three transfer pumps • A fire protection system and perimeter fire hydrants around the facility 	

- A foam storage and incident command centre(s) of approximately 60 m² (646 ft²)
- A backup generator capable of running core functions and firefighting systems
- Spill containment infrastructure
- A storm water detention basin
- A section of the 600 mm jet fuel pipeline used to transfer fuel from the marine terminal to the proposed fuel receiving facility
- A section of the 350 mm jet fuel pipeline used to transfer fuel from the proposed fuel receiving facility to Vancouver International Airport
- Utilities including storm water, sewer, water, communications, and electricity
- Two driveway access points (main access from Williams Road, and emergency access from Dyke Road)
- Eight employee parking spaces
- Removal of rear downstream range light currently located on the site
- Perimeter security fencing, site lighting, and landscaping

PROJECT AND ENVIRONMENTAL CONDITIONS

The Vancouver Fraser Port Authority (VFPA), a federal port authority doing business as Port Metro Vancouver (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 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.	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. 15-104-A to K . The Applicant shall not carry out any other physical activities unless expressly authorized by VFPA.
7.	The Applicant shall adhere to the specific mitigations designed into the Project as identified in the Environmental Assessment Certificate Application for the Vancouver Airport Fuel Delivery Project (the Application), the Certified Project Description and the Vancouver Airport Fuel Delivery Project Assessment Report and Screening Report (the EAR), relevant conditions of the Environmental Assessment Certificate No. E13-02 (http://a100.gov.bc.ca/appsdata/epic/html/deploy/epic_document_346_36636.html), and all of the General Conditions listed in Attachment 1 of the Vancouver Airport Fuel Delivery Project Environmental Assessment Decision Statement.
8.	The Applicant shall be solely responsible for reviewing DFO's Projects Near Water website (http://www.pac.dfo-mpo.gc.ca/habitat/know-savoir-eng.htm) to assess whether the Project requires DFO's involvement. The Applicant is solely responsible for submitting any necessary information through DFO's Project Review Process.
9.	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.
10.	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.
11.	The Applicant shall make available upon request by any regulatory authority (such as a Fishery Officer) a copy of this Permit.
12.	No in-water works below the high water level shall be conducted in the Fraser River as part of the Project.
13.	Unless otherwise noted, the Applicant shall submit all documents required for VFPA approval to email: per@portmetrovanancouver.com; fax: 1-866-284-4271 and referencing PER No. 15-104.

No.	CONDITIONS - PRIOR TO COMMENCING CONSTRUCTION OR PHYSICAL ACTIVITIES	SUBMISSION TIMING (business days)
14.	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.	At least 5 days prior to commencing construction of each phase
15.	The Applicant shall submit a Construction Communications Plan indicating construction communications during each phase of the works, for VFPA review and approval.	Prior to commencing construction or any physical activities
16.	For structures and proposed interior changes that are reviewable under the 2010 National Building Code and 2010 National Fire Code, the Applicant shall apply for a VFPA Building Permit.	At least 40 days prior to commencing construction - phase 3
17.	The Applicant shall provide an updated Landscape Plan indicating a comparable landscape design as shown in the Landscape Plan dated July 24, 2015 but with all proposed landscaping wholly installed within the site boundaries, for VFPA review and approval.	At least 20 days prior to commencing site preparation construction - phase 2
18.	The Applicant shall submit an updated Construction Environmental Management Plan, written in accordance with the guidelines on the port authority website (http://www.portmetrovancover.com/working-with-us/permitting/project-and-environmental-reviews/technical-guidelines/) and to the satisfaction of VFPA, and which includes the general conditions listed in Attachment 1 of the VFPA Project Environmental Assessment Decision Statement and all relevant conditions of the Environmental Assessment Certificate No. E13-02.	At least 20 days prior to commencing site preparation construction - phase 2
19.	The Applicant shall submit an updated Construction Environmental Management Plan, written in accordance with the guidelines on the port authority website (http://www.portmetrovancover.com/working-with-us/permitting/project-and-environmental-reviews/technical-guidelines/) and to the satisfaction of VFPA, and which includes the general conditions listed in Attachment 1 of the VFPA Project Environmental Assessment Decision Statement and all relevant conditions of the Environmental Assessment Certificate No. E13-02.	At least 20 days prior to commencing Fuel Receiving Tank construction - phase 3

20.	The Applicant shall prepare a Storm Water Pollution Prevention Plan for the proposed operations in accordance with the guidelines "Developing Your Stormwater Pollution Prevention Plan" on the port authority website (http://www.portmetrovanancouver.com/working-with-us/permitting/project-and-environmental-reviews/technical-guidelines/) and to the satisfaction of VFPA. The plan must detail the quality and volumes of storm water that may need to be discharged from the site and proposed treatment processes.	At least 20 days prior to commencing Fuel Receiving Tank construction - phase 3
21.	The Applicant shall submit an updated Overall Site Plan and Grading Plan prior to commencing phase 2 of the works for VFPA review and approval.	At least 20 days prior to commencing site preparation construction - phase 2
No.	CONDITIONS - DURING CONSTRUCTION OR ANY PHYSICAL ACTIVITIES	
22.	The Applicant shall notify VFPA upon commencement of construction of each phase of the Project.	
23.	All general construction and physical activities related to the Project shall be conducted between Mondays 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.	
24.	In the event that evidence of what is suspected to be an archaeological resource is encountered, the Applicant shall: <ul style="list-style-type: none"> a) Immediately stop any activities that might disturb the archaeological resource or the site in which it is contained ("Site"). b) Not move or otherwise disturb the artifacts or other remains present at the Site. c) Stake or flag off the Site to prevent additional disturbances. d) Immediately notify VFPA. 	
25.	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.	
26.	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.	
27.	The Applicant shall provide VFPA a copy of the consent of the Provincial Inspector of Dikes with respect to the construction and operation of the facility prior to commencement of Phase 2 site preparation construction.	

28.	The environmental monitor (an appropriately qualified environmental professional) shall provide monitoring reports to VFPA on a monthly basis or more frequently if circumstances warrant. In addition, annual summary reports shall be provided at the end of each calendar year, and a summary report for the whole monitoring period shall be forwarded to the VFPA within six weeks of the conclusion of the monitoring period. The VFPA reserves the right to rule on the adequacy of the monitoring and the content of the reports.
29.	Invasive plants, including English ivy and Japanese knotweed, shall be handled in a manner that will prevent their spread and shall be appropriately contained, collected and disposed of.
30.	Where Project specifics permit, the Applicant shall replant disturbed areas with appropriate native species as soon as practical and prior to operations, in a manner that maximizes the likely success of the plantings.
31.	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.
32.	During construction activities, the Applicant shall position equipment associated with the Project in such a manner so as not to obstruct line of sight to navigational aids or markers.
33.	The Applicant shall conduct the following: <ul style="list-style-type: none"> • Finalize sector light specifications with Canada Coast Guard Aids to Navigation (CCG). • Purchase and install a sector light in cooperation with CCG. • Operate the sector light for a defined period together with existing lights, as directed by CCG. • Obscure existing light and operate only sector light for a defined trial period, as directed by CCG. • If operation is to the satisfaction of CCG, remove rear light once the defined trial period has expired. • Reinstall rear light or equivalent, post-construction, as directed by CCG.
No.	CONDITIONS – PRIOR TO OPERATION
34.	The Applicant shall develop a comprehensive Operations Environmental Management Plan, including accidents and malfunctions at all facilities, to the satisfaction of VFPA. The plan must be submitted to VFPA for review 30 business days prior to operations commencing.

35.	The Applicant shall prepare a Fire Safety Plan, to the satisfaction of VFPA and in consultation with Richmond Fire Rescue, that applies the recommendations of American Petroleum Institute 2021, which will assist operators and third party responders with response procedures, including operation of the fire pump units. The Fire Safety Plan shall also address post-seismic event operations of fire suppression equipment and include an inspection schedule of the fire detection and suppression equipment.	
36.	The Applicant shall provide an Oil Pollution Emergency Plan that will cover spill scenarios, response techniques for on-water spills to the satisfaction of VFPA. The plan must be submitted to VFPA for review 30 business days prior to operations commencing.	
37.	The Applicant shall provide an Emergency Response Plan for on-land emergencies, including spills, to the satisfaction of VFPA. The plan must be submitted to VFPA for review 30 business days prior to operations commencing.	
38.	The Applicant shall provide VFPA with a copy of an agreement with the City of Richmond to construct an emergency access from Dyke Road and to locate a portion of the Williams Road driveway within Lot K. Should the Applicant not obtain such agreement with the City, the Applicant shall provide a written summary of their efforts to do so along with a description of their alternate proposal to the satisfaction of VFPA.	
39.	The Applicant shall provide VFPA with a copy of the CN Rail Track Specifications and Design Proposal for the adjacent Ewen extension alignment, and provide written confirmation to VFPA that CN Rail is satisfied with the Williams Road driveway arrangement.	
40.	The Applicant shall provide to VFPA a copy of the final Servicing Agreement with the City of Richmond prior to the commencement of operations.	
No.	CONDITIONS - UPON COMPLETION	SUBMISSION TIMING (business days)
41.	The Applicant shall notify VFPA upon completion of the Project.	Within 10 days of completion
42.	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 construction of the Project must commence by February 28, 2017 (the "Commencement Date") and be complete no later than February 28, 2019 (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 in writing 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. 15-104 IS APPROVED BY:

Original signed by Peter Xotta

February 24, 2016

**Peter Xotta,
Vice President, Planning and Operations,
Chair of Project and Environmental Review Committee**

DATE OF APPROVAL

CONTACT INFORMATION:

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