



PORT METRO  
**vancouver**

## **Project and Environmental Review Report**

PER No. 15-029

Global Container Terminals Canada  
Limited Partnership- Intermodal  
Yard Reconfiguration, Roberts  
Bank, Delta BC

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*Date: **October 8, 2015***

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 <b>PORT METRO vancouver</b>		<b>VANCOUVER FRASER PORT AUTHORITY (VFPA)</b> <b>PROJECT AND ENVIRONMENTAL REVIEW PROJECT REPORT</b>
<b>PER No.:</b>	<b>15-029</b>	
<b>Tenant:</b>	<b>Global Container Terminals Canada Limited Partnership</b>	
<b>Project:</b>	<b>Intermodal Yard Reconfiguration, Roberts Bank</b>	
<b>Project Location</b>	<b>2 Roberts Bank, Deltaport Way, Delta BC</b>	
<b>VFPA SID No.:</b>	<b>DEL-034</b>	
<b>Land Use Designation:</b>	<b>Port Terminal</b>	
<b>Applicant(s):</b>	<b>Guy Buzzoni, Vice President Development, GCT Canada LP</b>	
<b>Applicant Address:</b>	<b>Suite 610, 375 Water Street V6B 5C6, Vancouver, BC</b>	
<b>Category of Review:</b>	<b>C</b>	
<b>Recommendation:</b>	<b>That PER No. 15-029 for Intermodal Yard Reconfiguration at Roberts Bank be approved.</b>	

## 1. INTRODUCTION

The Vancouver Fraser Port Authority (VFPA), a federal port authority doing business as Port Metro Vancouver (PMV), 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 are not likely to result in significant adverse environmental effects. This project and environmental review report documents VFPA's project and environmental review of **PER No. 15-029: Intermodal Yard Reconfiguration at Roberts Bank (the Project)** proposed by **Guy Buzzoni, Vice President Development working on behalf of Global Container Terminals Canada Limited Partnership (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 are not likely to 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 Appendix B.

This project and environmental review report is NOT a project authorization. It is a prerequisite to the issuance of a project permit ("the Permit") and the conclusions described in this report require compliance with the conditions in the Permit.

## 2. PROJECT DESCRIPTION

Global Container Terminals Canada Limited Partnership (GCT Canada LP), the Applicant, proposes to reconfigure and expand their rail intermodal yard at their Deltaport container terminal at Roberts Bank as part of the Deltaport Road and Rail Improvement Project (DTRRIP). The new overpass completed in 2014 was the first phase of the DTRRIP project which allowed grade separation over the rail tracks that access the terminal. In this second phase of DTRRIP, the new rail intermodal yard at Deltaport will enable the existing marine container terminal to handle an additional 600,000 TEU (twenty foot equivalent units) annually largely within the existing terminal footprint and enhance workplace safety by eliminating terminal tractor blockages with trains arriving and departing Deltaport terminal every hour of the current 24 hours per day, 7 days per week operation.

The Project scope also includes a new proposed 4000 m<sup>2</sup> (42,300 sq. ft.) rail maintenance building on the west side of POD 3 with exterior signage built to a maximum height of 14.6 m (48.0 ft.) to service rail container handling equipment with associated office space for terminal employees as well as upgrades to lighting throughout the terminal.

The proposed rail works consist of reconfiguring the intermodal rail track and adding additional container handling equipment at the terminal. The existing eight working tracks that are currently arranged in two distinct sets of four tracks will be combined into one set of eight tracks. The seven existing ten to twenty year old manually-operated container cranes will be replaced with eight modern semi-automated container cranes. Two additional temporary tracks will be constructed and used only during the construction period, following construction these tracks will be decommissioned.

Specifics of the proposed Project include:

- Reconfiguration of eight (8) intermodal rail tracks within the terminal, the existing eight (8) rail tracks that are currently arranged in two (2) distinct sets of four (4) tracks are proposed to be combined into one set of eight (8) tracks;
- Removal of seven (7) existing manually-operated rail mounted container cranes in the intermodal yard;
- Installation of eight (8) modern wide span rail mounted container cranes;
- Construction of a new 4000m<sup>2</sup> (42,300 sq. ft.) rail maintenance building on the west side of terminal POD 3. The proposed rail maintenance building will be 15 m (48.0 ft.) high to service container handling equipment and house GCT Canada workforce;
- Construction of truck portal equipment with two drive through lanes in the intermodal yard. The proposed truck portal equipment will scan trucks entering the yard;
- Replacement of existing site lighting within the intermodal yard with energy efficient LED light fixtures. Two (2) existing high mast light poles would be relocated and four (4) existing low mast light poles having flood lamps would be replaced with high mast poles having LED light fixtures to provide greater uniformity of light at ground level within the intermodal yard and reduce light glare;
- No new connections and utility services are proposed. Modification of existing water, sewer, stormwater and electrical utilities will be done inside the terminal;

- Road access within the terminal would be reconfigured including access to both the intermodal yard as well as to the new rail maintenance facility and adjacent areas in the terminal;
- Demolition of one (1) existing air compressor shed approximately 38 m<sup>2</sup> (400.0 sq. ft.) and one (1) 2.0 m<sup>2</sup> (19.7 sq. ft.) in-gate driver shed;
- 153 passenger vehicle parking spaces are proposed for the new maintenance facility;
- Container transfer staging area consisting of 203 truck parking spaces and 14 overflow parking spaces along the length of the working track within the reconfigured intermodal yard;
- Two (2) temporary rail tracks will be installed in the intermodal yard and will operate during the construction period to maintain terminal operations while the new intermodal yard is being constructed; and
- New train portal will be installed at the terminal for identification of rail cars arriving at the facility.

Construction will take approximately 30 months to complete and will commence immediately should the proposed project be approved. All construction vehicles and equipment will access the site via the new DTRRIP overpass and the Roberts Bank causeway.

### **3. VANCOUVER FRASER PORT AUTHORITY INTERNAL REVIEWS**

The following VFPA departments have reviewed the application and have the following project considerations.

#### **3.1 Planning**

Planning has reviewed the application and has the following land use comments. Generally, Planning supports the recommendation to approve the Project subject to adherence to the listed project and environmental conditions in the Permit.

##### **Land Use Designation**

The proposed Intermodal Yard Configuration use conforms to the designation of "Port Terminal" in Vancouver Fraser Port Authority's Land Use Plan.

##### **Building Permit Requirements**

The proposed development of structural equipment including installation of eight modern rail mounted gantry container cranes, proposed fire hydrant and servicing locations and (1) one proposed 4000 m<sup>2</sup> (42,300 sq. ft.) rail maintenance building require review under the 2010 National Building Code and 2010 National Fire Code of Canada. The Applicant is required to obtain a VFPA building permit before proceeding with construction of those works and cannot occupy those structures until they have obtained a VFPA occupancy permit. The Applicant has submitted a building permit application and the review is currently underway.

### **3.2 Engineering**

Engineering has reviewed the application and requires the Applicant to adhere to the following:

- 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.
- The Applicant shall provide as-built drawings approved by a Professional Engineer licensed to practice in the Province of British Columbia, in both AutoCAD and Adobe (PDF) format to VFPA.

These are reflected in conditions No. 13 and 37 in the Permit.

Engineering supports the recommendation to approve the Project subject to adherence to the listed project and environmental conditions in the Permit.

### **3.3 Transportation**

The proposed Intermodal Reconfiguration Project intends to enable the existing marine container terminal to handle an additional 600,000 TEU (twenty foot equivalent units) annually including additional traffic associated with the project. The Applicant has stated that the project will not directly result in any incremental increase in offsite truck traffic but will directly result in an increase in offsite rail traffic to accommodate the proposed TEU throughput increase. The Project will also require changes to offsite rail infrastructure and operations at Deltaport including rail yard switching as well as to the mechanical rail car inspection and repair area which would be moved off the current terminal footprint as part of the project. In order to support overall increases in traffic at the terminal, future funding for offsite highway improvements will also be required as they relate to the Applicant's proposal.

Transportation has reviewed the application and requires the Applicant to adhere to the following:

- The Applicant shall submit a Construction Parking and Traffic Management Plan approved for construction by a Professional Engineer licensed to practice in the Province of British Columbia for PMV approval a minimum of (20) twenty business days in advance of the start of construction.
- Prior to commencement of operations, the Applicant is required to provide to the satisfaction of PMV evidence of an offsite rail infrastructure agreement and offsite rail operating model with the British Columbia Railway Company (BCRC) to support and enable the proposed works.
- Prior to commencement of operations, the Applicant is required to provide to the satisfaction of PMV evidence of an agreement with the British Columbia Ministry of Transportation and Infrastructure (BC MOTI) to support and enable the proposed works including any operational vehicular traffic impacts to the Provincial highway system.

These are reflected in conditions No. 15, 34 and 35 in the Permit.

Transportation supports the recommendation to approve the Project subject to adherence to the listed project and environmental conditions in the Permit.

### **3.4 Marine Operations**

There are no in water works associated with the Intermodal Reconfiguration Project. Marine Operations supports the recommendation to approve the Project subject to adherence to the listed project and environmental conditions in the Permit.

### **3.5 Land Operations**

Land Operations has reviewed the proposed Intermodal Reconfiguration Project including traffic management measures at the terminal associated with the project. Land Operations supports the recommendation to approve the Project subject to adherence to the listed project and environmental conditions in the Permit.

### **3.6 Infrastructure Delivery**

Infrastructure Delivery has reviewed the application and has confirmed that the Intermodal Reconfiguration Project can handle an additional throughput increase of 600,000 TEU (twenty foot equivalent units) annually at capacity. Infrastructure Delivery has also confirmed the Project will require changes to offsite rail infrastructure and operations at Deltaport including rail yard switching as well as to the mechanical rail car inspection and repair area which would be moved off the current terminal footprint as part of the project. In order to support overall increases in traffic at the terminal, future funding for offsite highway improvements will also be required as they relate to the Applicant's proposal is supported by Infrastructure Delivery.

Infrastructure Delivery requires the Applicant to ensure the following:

- Prior to commencement of operations, the Applicant is required to provide to the satisfaction of PMV evidence of an offsite rail infrastructure agreement and offsite rail operating model with the British Columbia Railway Company (BCRC) to support and enable the proposed works.
- Prior to commencement of operations, the Applicant is required to provide to the satisfaction of PMV evidence of an agreement with the British Columbia Ministry of Transportation and Infrastructure (BC MOTI) to support and enable the proposed works including any operational vehicular traffic impacts to the Provincial highway system.

These are reflected in conditions No. 34 and 35 in the Permit.

Infrastructure Delivery supports the recommendation to approve the Project subject to adherence to the listed project and environmental conditions in the Permit.

### **3.7 Business Optimization**

Business Optimization has reviewed the application in conjunction with future plans for installation of Shore Power technology at Deltaport and has confirmed that the installation of Shore Power can proceed as intended following the Intermodal Reconfiguration Project. Business Optimization supports the recommendation to approve the Project subject to adherence to the listed project and environmental conditions in the Permit.

## 4. EXTERNAL REFERRALS

The proposed Project was assessed to have potential impacts to stakeholders and the local community and consultation activities were determined to be required. The following sections describe the stakeholder and public consultation activities undertaken by the Applicant and VFPA as part of the project and environmental review.

VFPA has reviewed the record of consultation and related documents and is of the view that the Project has adequately addressed the concerns raised during stakeholder and public consultation.

### 4.1 Stakeholder Consultation

#### 4.1.1 Municipal Referrals

The proposed Project was assessed to have potential impacts to municipal interests. A referral letter was sent to the Corporation of Delta on May 14, 2015 notifying them of the proposed Project.

The Corporation of Delta responded on June 9, 2015 indicating that they had no further comments on the project provided that the Applicant complies with all environmental conditions and mitigation measures and satisfies Delta Fire & Emergency Services access requirements as previously conveyed. PMV's building code consultant and transportation staff have reviewed the proposed access requirements provided by the Applicant and confirmed that they satisfy Delta Fire & Emergency Services standards. The Applicant is required to adhere to all conditions listed in the project permit.

#### 4.1.2 Provincial Agency Referrals

The proposed Project was assessed to be of potential interest to Federal and Provincial agencies. A referral letter was sent to the following Provincial agencies on May 14, 2015 notifying them of the proposed Project:

- British Columbia Railway Company (BCRC)
- BC Ministry of Transportation and Infrastructure (BC MOTI)

BCRC provided comments on June 16, 2015 and BC MOTI provided comments on August 6, 2015. VFPA responded to both letters on August 20, 2015. Below is a chart summarizing the comments received and how they were considered as part of the project and environmental review.

<i>Provincial Agency Comments</i>	<i>VFPA Considerations</i>
<ul style="list-style-type: none"> <li>• BCRC stated concerns about the required changes to offsite rail infrastructure and operations at Deltaport associated with the proposed Project including relocation of the rail car repair and maintenance area off the current terminal footprint.</li> <li>• BCRC requested that PMV delay issuance of any approval for the project until such time as an offsite rail infrastructure agreement and offsite rail operating model has been agreed to between the Applicant, BCRC and their carrier railways.</li> </ul>	<ul style="list-style-type: none"> <li>• VFPA will not require the completion of an offsite rail operating agreement prior to making a decision on the project. However, should the project be approved, condition No. 34 of the Project Permit, states that prior to commencement of operations, the Applicant will be required to provide to the satisfaction of VFPA evidence of an offsite rail infrastructure agreement and offsite rail operating model with BCRC to support and enable the proposed works. This is condition No. 34 in the project permit.</li> </ul>

<ul style="list-style-type: none"> <li>BC MOTI also reiterated BCRC's concerns about offsite rail operations at Deltaport associated with the proposed project including rail yard switching issues and the mechanical inspection and repair area that would be moved off the current terminal footprint as part of the Applicant's current proposal.</li> </ul>	
<ul style="list-style-type: none"> <li>BC MOTI stated that they are supportive of the application provided that a contribution agreement can be reached with PMV and the Applicant concerning funding contributions to mitigate offsite traffic impacts to the Provincial highway system which BC MOTI describes as being directly required as a result of the operational truck traffic increases associated with the proposed project.</li> </ul>	<ul style="list-style-type: none"> <li>The Applicant has stated that the proposed project is not expected to generate additional truck traffic on the Provincial Highway system however should additional traffic be generated in the future at the Applicant's terminal facility, VFPA is currently in discussions with BC MOTI concerning funding of offsite highway improvements as they relate to the Applicant's proposal.</li> <li>VFPA will not require completion of an offsite highway funding or impact agreement prior to making a decision on the project. However should the project be approved, condition No. 35 of the Project Permit states that prior to commencement of operations, the Applicant will be required to provide to the satisfaction of VFPA evidence of an agreement with BC MOTI to support and enable the proposed works including any operational vehicular traffic impacts to the Provincial highway system.</li> <li>The Applicant will also be required to, as a condition of any approval issued for the project, provide a construction traffic management plan for the duration of the construction period for VFPA review and approval. VFPA will provide a copy of the TMP document to BC MOTI for input regarding any construction traffic impacts to the Provincial highway system including the Roberts Bank Causeway and Deltaport Way.</li> </ul>

#### 4.1.3 Adjacent Tenant Referrals

The proposed Project was assessed to have potential impacts to adjacent VFPA tenant operations. A referral letter was sent to adjacent VFPA tenants, Westshore Terminals and Seaspan ULC on May 14<sup>th</sup>, 2015 notifying them of the proposed Project. Seaspan ULC indicated that they had no further comments regarding the proposed Project.

Westshore Terminals provided comments on June 3, 2015 on the proposed Project. Below is a chart summarizing the comments received and how they were considered as part of the project and environmental review.

<i>VFPA Tenant Comments</i>	<i>VFPA Considerations</i>
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<ul style="list-style-type: none"> <li>• Westshore Terminals stated that as the project work is mostly contained within the Applicant's existing lease area the proposed works should not affect them directly, although there may be some indirect impacts concerning construction traffic and utility impacts during construction.</li> <li>• Westshore requested that, consistent with past practice, any utility outages to be coordinated between the Applicant and Westshore to minimize disruptions to operations; as well as advance notice of any road or gate changes that may affect the flow of traffic along the Westshore access road, which may require precautionary measures to be taken.</li> </ul>	<ul style="list-style-type: none"> <li>• The Applicant responded that they appreciate Westshore's continued cooperation and will coordinate their fire hydrant testing for design of the proposed Rail Maintenance Building. Utility disruptions to Westshore during construction should be minimal. The Applicant will coordinate any planned utility disruptions directly with Westshore in advance.</li> <li>• VFPA will provide a copy of the final construction traffic management plan to Westshore for their information once it is received from the Applicant.</li> </ul>
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#### 4.1.4 Port Community Liaison Group

The proposed Project was assessed by to be of potential interest to the Port Community Liaison Group in Delta. The Applicant presented their project to the Port Community Liaison Group on May 29, 2015. VFPA did not receive any comments from the Port Community Liaison Group.

## 4.2 Public Consultation

The proposed Project was assessed by Community and Aboriginal Affairs Department to have potential impacts to adjacent residents and local community. Public consultation was determined to be required and a description of the Project and proposed works and all application materials were posted to VFPA's website on May 29, 2015 for public review and comment.

The Applicant was required to conduct public consultation activities as part of the Project and Environmental Review. The two-week public consultation period began on May 30, 2015 and closed on June 12, 2015, and included the following activities:

- Presentation to the Port Community Liaison Committee (Delta);
- Mail drop to Tsawwassen residents of the English Bluff advertising the Information Session;
- Advertisements in the Delta Optimist and the Surrey North Delta Leader newspapers two-weeks prior to the Information Session;
- Information Session in Delta on May 30, 2015;
- Web page created on the GCT Canada website ([www.globalterminalsCanada.com](http://www.globalterminalsCanada.com)); and
- Reporting following the close of the consultation period (*Engagement Summary Report* and *Consideration Memo*).

The Applicant received 11 completed feedback forms from the public and provided details on their consultation program and activities in an *Engagement Summary Report* (July 27, 2015). The Applicant has also provided an *Input Consideration Report* (July 27, 2015) describing how they responded to public comments received. Community and Aboriginal Affairs has reviewed and found both documents to be acceptable. See Appendix A for copies of these documents.

VFPA did not receive any comments from the general public on this project.

Below is a chart summarizing the general public comments received by the Applicant and how they were considered as part of the project and environmental review.

<i>Public Comments grouped by theme</i>	<i>VFPA Considerations</i>
Attendance and Interest	<ul style="list-style-type: none"> <li>• The applicant was required by PMV to host a 4-hour public information session which provided members of the public and interested stakeholders with an opportunity to learn more about the proposed intermodal yard reconfiguration project, ask questions about the project, and provide feedback.</li> <li>• The applicant's open house included display boards featuring information about:               <ul style="list-style-type: none"> <li>○ DTRIPP timeline and project map</li> <li>○ Project overview with a description of Deltaport IV reconfiguration project and benefits</li> <li>○ A visual comparison of the project design changes</li> <li>○ Description of the new Rail Maintenance Building</li> <li>○ Construction details and potential impacts and mitigation</li> </ul> </li> <li>• Additionally, the applicant provided a project fact sheet which was made available to members of the public to take home and attendees were encouraged to submit a feedback form either on site or mail/email during the two week public comment period.</li> <li>• The applicant has posted project information and updates to their website at:  <a href="http://www.globalterminalsCanada.com/ProjectUpdates">http://www.globalterminalsCanada.com/ProjectUpdates</a>. The applicant has stated that they will post their final Engagement Summary Report and Consideration Memo online to this website.</li> </ul>
Construction Stage of the Intermodal Yard Reconfiguration Project (potential effects of proposed construction)	<ul style="list-style-type: none"> <li>• The Applicant has stated that construction related dust will be controlled using best practices for sediment control including watering exposed and unpaved surfaces frequently, and sweeping paved surfaces to remove dust buildup.</li> <li>• The Applicant has stated that noise and light related to construction within the operating terminal will not affect adjacent areas outside of the current terminal footprint. No loud works, such as driving piles, are planned for the project.</li> <li>• The Applicant has stated that emissions from construction equipment would be the same as the original intermodal yard concept that was included in the approved Environmental Assessment for the DTRRIP program.</li> <li>• The Intermodal Yard project has been designed by the applicant to result in decreased emissions at Deltaport:               <ul style="list-style-type: none"> <li>○ Improved operational performance as a result of uninterrupted rail car switching will reduce waiting times for rail crane operators and tractor drivers,</li> </ul> </li> </ul>

	<p>resulting in reduced emissions.</p> <ul style="list-style-type: none"> <li>o Decreased emissions due to reduced equipment travel time.</li> <li>o Decreased noise and greenhouse gas emissions with the introduction of electric, state-of-the-art rail cranes.</li> <li>o Increased efficiency of tractors serving the rail yard</li> </ul>
<p>GCT Deltaport operations after Intermodal Yard Reconfiguration completion</p>	<ul style="list-style-type: none"> <li>• The Applicant has stated that the proposed project is not expected to generate additional truck traffic however should additional traffic be generated in the future at the Applicant's terminal facility, PMV stated that staff in PMV's Infrastructure Delivery Department are currently in discussions with BC MOTI concerning funding of offsite highway improvements as they relate to the Applicant's proposal. The Applicant has also stated that vessel traffic volume is not expected to change since more rail import/export containers are projected to arrive on the same number of ships, just larger ships.</li> <li>• The applicant has confirmed noise volumes are not expected to increase as a result of this project. The new, modernized rail mounted gantry container cranes are expected to operate more quietly than the older manually operated RMG container cranes.</li> <li>• The applicant's proposed light pollution mitigation strategy consists of replacing older style high pressure sodium light fixtures with more modern, energy efficient LED light fixtures having less glare and reduced alias light.</li> </ul>
<p>Requests for Updates</p>	<ul style="list-style-type: none"> <li>• The Applicant has stated their website will be updated with current information on the project status to help ensure members of the community and public can remain informed of developments of the project.</li> </ul>

In order to mitigate light pollution, the applicant will be replacing older style high pressure sodium light fixtures with more modern, energy efficient LED light fixtures having less glare and reduced light trespass.

The Project is located within a terminal which operates 24 hours a day, 7 days a week. During operation, backup alarms will sound on yard trucks when using angled parking. A noise study on the change in backup alarm usage resulting from the Project indicated that the increase in usage of the backup alarms is not anticipated to impact noise levels in nearby communities. The new modernized rail mounted gantry container cranes are also expected to operate more quietly than the older manually operated RMG container cranes.

Project related noise during construction is not expected to exceed background noise levels. In order to inform residents prior to the start of construction, the Applicant will be required to prepare a distribute a community construction notice ten (10) working days prior to commencement of work and delivered to property owners in the Tsawwassen residents of the English Bluff area. This is condition No. 14 in the Project Permit.

## **5. ABORIGINAL CONSULTATION**

The Pre-Consultation Report was completed by staff and approved by the Manager of Aboriginal Affairs, and it was determined that the duty to consult was not triggered.

## **6. ENVIRONMENTAL REVIEW**

Input from other PMV departments, as discussed in section 4, was considered as part of the environmental review. PMV has relied upon the information sources listed in Appendix B in its review of the Project.

### **6.1 Scope of Environmental Review**

The reconfiguration of the intermodal yard and additional container handling equipment were considered in the studies and environmental assessment conducted for the Deltaport terminal road and rail improvement project (DTRRIP). Key differences between the proposed Project and the intermodal yard activities considered in the DTRRIP environmental assessment include:

- Construction of a 4,000 m<sup>2</sup> rail maintenance building and associated infrastructure
- Demolition of two small buildings (approximately 38 m<sup>2</sup> and 2 m<sup>2</sup>)
- Angled parking of yard trucks

The scope of the environmental review of the Project was limited to the changes described above and associated potential effects.

While the above activities were not contemplated in the original DTRRIP environmental assessment, the Project continues to be designed to handle an increase in container capacity throughput of 600,000 TEUs, which is the capacity increase assessed in the DTRRIP environmental assessment. The findings of the studies and relevant mitigation measures in the DTRRIP environmental assessment are considered to be applicable to the Project.

The temporal scope of the review includes site preparation, project construction, and operations up to the permitted capacity.

The environmental review considered potential adverse environmental and social effects of the project on 16 environmental components (e.g., species with special status, aquatic species and their habitat, recreational interests, etc.) and from Accidents and Malfunctions. These environmental components are aspects of the biophysical and socio-economic environment considered to have ecological, economic, social, cultural, archaeological, or historical importance.

Section 6.2 summarizes the results of the review.

### **6.2 Environmental Effects Summary**

The following table summarizes the potential environmental effects the project could have on the identified environmental components.

Environmental Component	Potential Adverse Effects?			Significant Residual Effects?		Mitigation Measures / Comments
	Yes	No	Unc	Yes	No	
Species/habitat with special status	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The Project is not expected to affect species with special status.
Vegetation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No vegetation clearing is associated with the Project.
Wildlife / wildlife habitat	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The Project is not expected to affect wildlife or wildlife habitat.
Aquatic species / fish habitat	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No activities within 15 m of the high water mark are associated with the Project.  Mitigation measures will be implemented to reduce potential adverse, construction-related environmental effects (i.e., from sedimentation).  With mitigation in place, residual adverse effects are not anticipated.
Other marine resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Soils	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	There is potential for spills or placement of contaminated fill to affect soil quality.  Mitigation measures will be implemented to reduce potential adverse environmental effects.  With mitigation in place, residual adverse effects are not anticipated.
Sediments	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No activities within 15 m of the high water mark are associated with the Project.
Ground water	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	There is potential for spills or placement of contaminated fill to affect ground water quality.  Mitigation measures will be implemented to reduce potential adverse environmental effects.  With mitigation in place, residual adverse effects are not anticipated.

Environmental Component	Potential Adverse Effects?			Significant Residual Effects?		Mitigation Measures / Comments
	Yes	No	Unc	Yes	No	
Surface water and water bodies	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>No activities within 15 m of the high water mark are associated with the Project.</p> <p>Mitigation measures will be implemented to reduce potential adverse, construction-related environmental effects (e.g., from sedimentation or accidental releases of cement or lime-containing construction materials).</p> <p>The new sanitary line and sewage lift station associated with the new rail maintenance building will be connected to the existing wastewater treatment facility on site. The effluent generated by the new building will increase the daily discharge rate to approximately 23.4 cubic meters per day, which should not adversely affect the performance of the wastewater treatment facility which is designed for a maximum daily discharge rate of 50 cubic meters per day.</p> <p>With mitigation in place, residual adverse effects are not anticipated.</p>
Wetlands	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>Wetlands will not be affected by the project.</p>

Environmental Component	Potential Adverse Effects?			Significant Residual Effects?		Mitigation Measures / Comments
	Yes	No	Unc	Yes	No	
Air quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>Construction activities are unlikely to result in measurable adverse effects on air quality. Mitigation measures will be implemented during construction to minimize dust generation and avoid unnecessary idling.</p> <p>With mitigation in place, residual adverse effects during construction are not anticipated.</p> <p>Air emissions associated with operation were considered as part of the DTTRIP environmental assessment. With mitigation in place, residual adverse effects for the overall DTTRIP project were considered to be not significant.</p>
Lighting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>Increased and additional lighting during construction and operation is anticipated to have minimal effects on local residents.</p> <p>With the implementation of mitigation measures, the residual adverse effect, if it occurs, is expected to be not significant.</p>

Environmental Component	Potential Adverse Effects?			Significant Residual Effects?		Mitigation Measures / Comments
	Yes	No	Unc	Yes	No	
Noise	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>The Project is located within a terminal which operates 24 hours a day, 7 days a week. Project related noise during construction is not expected to exceed background noise levels.</p> <p>During operation, backup alarms will sound on yard trucks when using angled parking. A noise study on the change in backup alarm usage resulting from the Project indicated that the increase in usage of the backup alarms is not anticipated to impact noise levels in nearby communities.</p> <p>The Applicant will be responsive to noise-related issues identified by the public, regulators and PMV. Should noise-related issues be identified, a noise management plan will be developed and implemented.</p> <p>The residual adverse effect, if it occurs, is expected to be not significant.</p>
Archaeological/heritage resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Archaeological and heritage resources will not be affected by the project.
First Nations interests	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The potential for direct effects on the current use of the lands and resources for traditional purposes by Aboriginal people was evaluated as part of the DTTRIP environmental assessment. No residual adverse effects to traditionally used resources were identified within the DTTRIP study area.
Recreational interests	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Recreational interests will not be affected by the Project.

Environmental Component	Potential Adverse Effects?			Significant Residual Effects?		Mitigation Measures / Comments
	Yes	No	Unc	Yes	No	
Accidents and malfunctions	■	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■	<p>There is potential for adverse effects on soil, ground water and surface water from accidental equipment leaks or spills.</p> <p>Mitigation measures will be in place to reduce potential for adverse, project-related effects due to accidents, including an appropriate spill prevention, containment, and clean-up contingency plan for hydrocarbon products (e.g., fuel, oil, etc.) and other deleterious substances.</p> <p>With mitigation in place, the residual adverse effect, if it occurs, is expected to be not significant.</p>

### 6.3 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 Permit conditions, the Project is not likely to cause significant adverse environmental effects.

Carolina Eliasson

October 6, 2015

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**CAROLINA ELIASSON**  
**MANAGER, ENVIRONMENTAL PROGRAMS**

**DATE OF DECISION**

## 7. RECOMMENDATION

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

It is the recommendation of staff that this application be approved subject to conformance with the project and environmental conditions listed in project permit **PER No. 15-029**.

Review History		
Draft	October 6, 2015	PC
Final		

## APPENDIX A

### Figures and Drawings: Location Map



PER No. 15-029

## **Appendix B**

### **Information Sources**

**Vancouver Fraser Port Authority (VFPA) doing business as Port Metro Vancouver (PMV) has relied on the following sources of information in the project and environmental review of the Project:**

VFPA has relied upon the following sources of information in its assessment of the potential adverse environmental effects of the Project:

- Document titled "Deltaport Terminal, Road and Rail Improvement Project Environmental Assessment Decision Statement" prepared by VFPA, dated November 30, 2012, with attachments.
- Document titled "Environmental Assessment Report, Deltaport Terminal Road and Rail Improvement Project" prepared by Hemmera, dated November 2012, with appendices.
- Document titled "DTRRIP Pre-Application Response to PMV email questions," prepared by GCT Canada LP, dated 4 December 2014.
- Document titled "Geotechnical Investigation Report, Proposed TSI Rail Maintenance Facility Global Container Terminal Deltaport, Delta BC," prepared by Geopacific Consultants Ltd, dated March 30<sup>th</sup>, 2015.

Document titled "Port Metro Vancouver Project Permit Review Application" prepared by GCT Canada LP, dated April 24, 2015, with attachments.

- Document titled "Pre-Demolition Hazardous Building Materials Investigation Truck Drivers Facility and CP Rail Shed - 2 Roberts Bank Road, Delta, BC," prepared by Sure Hazmat and Testing," dated April 25<sup>th</sup>, 2015.
- Document titled "Port Metro Vancouver Project Permit Application Submission Response to 05 June 2015 PMV Comments" prepared by GCT Canada LP, dated July 20, 2015, with attachments.
- Document titled "Deltaport Backup Alarm Noise Assessment for GCT Canada in Delta, BC," prepared by Golder and Associates, dated August 7, 2015.
- Documents titled " Sewage Lift Station Design Memorandum," prepared by Omni Engineering Inc, dated August 10<sup>th</sup>, 2015.
- Document titled "Port Metro Vancouver Project Permit Application Submission Response to 21 July 2015, 24 July 2015 and 6 Aug 2015 PMV Comments" prepared by GCT Canada LP, dated August 10, 2015, with attachments.
- Document titled "Road Safety Audit DTRRIP Intermodal Yard Perimeter Service rd/gate3/Dyke rd Intersection Detailed Design Stage," prepared by Tetra Tech EBA Engineering, dated September 11, 2015.
- Document titled "Port Metro Vancouver Project Permit Application Submission Response to PMV Comments" prepared by GCT Canada LP, dated September 21, 2015, with attachments.

- Document titled “Consultation Input Consideration Report”, prepared by GCT Canada LP, dated July 27<sup>th</sup>, 2015.
- Document titled “Engagement Summary Report”, prepared by GCT Canada LP, dated September 22<sup>nd</sup>, 2015
- All plans and drawings labelled PER No. 15-029-A1 to M2.

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