



PORT of
vancouver

PROJECT AND ENVIRONMENTAL REVIEW REPORT

PER NO. 20-184

**FRASER SURREY DOCKS CONTAINERIZED DRY BULK
HANDLING**

Prepared for: Peter Xotta, Vice President Planning and Operations

Table of Contents

Table of Contents	i
1 INTRODUCTION	1
2 PROJECT DESCRIPTION.....	2
2.1 Proposed Works.....	2
3 VANCOUVER FRASER PORT AUTHORITY INTERNAL REVIEWS.....	3
3.1 Planning	3
3.1.1 Land Use Designation.....	3
3.2 Transportation.....	3
3.3 Marine Operations.....	3
4 STAKEHOLDER CONSULTATION.....	3
4.1 Port Community Liaison Committee – Delta Notification Activities	3
5 PUBLIC ENGAGEMENT.....	4
5.1 Summary of Public Engagement.....	4
6 INDIGENOUS CONSULTATION.....	7
7 ENVIRONMENTAL EFFECTS REVIEW	7
7.1 Scope of Environmental Review	7
7.2 Environmental Effects and Mitigation Summary.....	7
7.3 Environmental Effects Review Decision	9
8 CONCLUSION	9
APPENDIX A Location Plan	11
APPENDIX B List of Information Sources.....	12

 PORT of vancouver Vancouver Fraser Port Authority		VANCOUVER FRASER PORT AUTHORITY PROJECT AND ENVIRONMENTAL REVIEW REPORT
PER No.:	20-184	
Tenant:	DP World Fraser Surrey Limited Partnership	
Project:	Fraser Surrey Docks Containerized Dry Bulk Handling	
Project Location	11060 Elevator Road	
Vancouver Fraser Port Authority SID No.:	SUR364	
Land Use Designation:	Port Terminal	
Applicant(s):	DP World Fraser Surrey Limited Partnership	
Applicant Address:	777 Centennial Road	
Category of Review:	C	
Recommendation:	That PER No. 20-184 for Fraser Surrey Docks Containerized Dry Bulk Handling be approved.	

1 INTRODUCTION

The Vancouver Fraser Port Authority (the “Port Authority”), a federal Port Authority, manages lands under the purview of the *Canada Marine Act*, which imparts responsibilities for environmental protection. The Port Authority accordingly conducts project and environmental reviews of works and activities undertaken on these lands to ensure that the works and activities will not likely cause significant adverse environmental effects. This project and environmental review report documents the Port Authority’s project and environmental review of PER No. 20-184: Fraser Surrey Docks Containerized Dry Bulk Handling (the “Project”) proposed by DP World Fraser Surrey Limited Partnership (the “Applicant”).

This project and environmental review was carried out to address the Port Authority’s responsibilities under the *Canada Marine Act*, and to meet the requirements of the *Impact Assessment Act* as applicable. The proposed Project is not a “designated project” under the *Impact Assessment Act* and an impact assessment as described in the *Impact Assessment Act* is not required. However, Port Authority authorization is required for the proposed Project to proceed and in such circumstances, where applicable, Section 82 of the *Impact Assessment Act* requires federal authorities to assure themselves that projects will not likely cause significant adverse environmental effects. The project and environmental review process is designed to provide that assurance. In addition, the Port Authority 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 the Port Authority and other consultations carried out by the Port Authority. 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. This project and environmental review report summarizes the review outcome, and provides the basis for approval or denial. Should the project be approved, the report is accompanied by a project permit (the “Permit”) and the conclusions described in this report require compliance with the conditions in the Permit.

2 PROJECT DESCRIPTION

DP World Fraser Surrey Limited Partnership is proposing to utilize specialized revolving heads on up to three existing gantry cranes in order to facilitate the handling of containerized dry bulk cargoes at their DP World – Fraser Surrey Site (11060 Elevator Road, Surrey, BC). The Applicant anticipates handling a range of containerized dry bulk cargoes, including, copper concentrate, potash, zinc and lead concentrates at their breakbulk or container truck gates, container yard, berths 7,8, and 9, and container gantry cranes 3, 5 and 5. The utilization of the specialized revolving heads would allow cargoes to be handled more efficiently by emptying the contents of the container directly into the hold of the bulk vessel, rather than the conventional method of loading a full container onto a container vessel. The proposed Project also includes the installation of a mobile dust suppression unit fitted around the rim of the vessel hatch that would emit water mist intended to eliminate dust from escaping the hold of the vessel during loading of all commodities.

Description of Dry Bulk Handling Operations

Dry bulk cargoes are proposed to arrive to the terminal by truck in specialized 20' containers referred to as "rotainers" or "rotoboxes". Rather than having to open at one end as conventional containers do, rotainers are capable of opening and emptying its contents from the top. Once ready for loading, the rotainer would be lifted over the vessel hatch using existing gantry cranes, and its contents would be lowered and emptied directly within the hold of the vessel to mitigate any potential fugitive dust from escaping the vessel using interchangeable specialized revolving heads. The specialized heads are capable of rotating, positioning and emptying the rotainer, and can be installed on the crane when needed.

In order to prevent dust from escaping the hold of the vessel, a mobile dust suppression system that emits water mist will be fitted around the rim of the vessel hatch. Although the final design of the sprayer has yet to be determined, the dust suppression misting piping would be installed around the loading hatch and connected to a portable wharf based pump. The wharf-based system would then be connected into the terminal's water supply network. As a result of the installation of the dust suppression system, the Applicant does not anticipate any loss of product while loading.

Initial volumes within the first three years of operation are estimated to be up to 120,000 metric tonnes of copper concentrate, however DP World Fraser Surrey Limited Partnership estimates that the terminal could handle up to 1 million metric tonnes per year of dry bulk cargoes using this method of handling should there be market demand. Anticipated initial volumes translate into approximately 4,800 TEU's per year. These volumes would represent an average of eight trucks per day and one vessel per month.

Note the port authority previously issued a project permit under PER No. 16-139 – FSD Dry Bulk Operations in January 2017, which was an identical project at the same terminal however the Applicant did not proceed with the work and the permit expired in March 2018.

2.1 Proposed Works

This project does not involve the construction of any new fixed site infrastructure but the following new elements are proposed to be added to the existing terminal materials handling operations:

- Container Revolver Heads installed on existing gantry cranes
- Portable fog water dust suppression system
- Rotainers – a specialized ISO 20' container fleet, designed with no doors and lockable open-top lids.

This permit is applicable to the initial works associated with the installation of relevant equipment that would be used to handle dry-bulk commodities. All future work to install or maintain the specialized heads is not likely to require a Project and Environmental Review.

Estimated project cost is \$2,000,000.

3 VANCOUVER FRASER PORT AUTHORITY INTERNAL REVIEWS

The following Port Authority departments have reviewed the application and have the following project considerations.

3.1 Planning

3.1.1 Land Use Designation

The proposed use of the site for movement of bulk commodities and associated container storage conforms to the designation of Port Terminal in the Port Authority's Land Use Plan.

3.2 Transportation

The proposed Project intends to use existing terminal facilities to store, transport and unload containerized dry bulk commodities at the DP World Fraser Surrey Limited Partnership terminal site. The Applicant estimates that the terminal could handle up to 1 million metric tonnes of dry bulk cargoes and that this would translate into approximately 4,800 TEU's per year resulting in an average of eight trucks per day and one vessel per month. The applicant has indicated that the product will not be arriving to the terminal by rail.

As the additional container truck traffic is limited to eight trucks a day and utilizing the existing container gate, no modifications to truck gate or off-site road infrastructure is required.

Transportation has reviewed the application and do not have any additional requirements, as the proposal does not involve the construction of any additional terminal infrastructure. The proposed traffic volume of eight truck trips per day is considered to be minimal, relative to other truck traffic in the area.

Transportation has reviewed the application and has no additional concerns.

3.3 Marine Operations

The proposed Project intends to be carried out from shoreside and therefore does not have any marine navigation implications. Marine Operations has reviewed the application and requires the Applicant to ensure the following:

The proposal meets Marine Operations' requirements, subject to adherence to the listed project and environmental conditions in the Permit.

4 STAKEHOLDER CONSULTATION

The proposed Project was assessed to have minimal or no potential impacts to stakeholders and consultation activities were determined not to be required during the review phase of the application.

4.1 Port Community Liaison Committee – Delta Notification Activities

The proposed Project was assessed to be of potential interest to the Port Community Liaison Committee (PCLC) – Delta. Information about the application was shared as part of the Port Updates document shared with the committee for the March 2, 2021 committee meeting. The Port Authority did not receive any comments from the PCLC – Delta.

The Port Authority 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 consultation.

5 PUBLIC ENGAGEMENT

To meet requirements of section 86 of the *Impact Assessment Act*, the Port Authority posted a description of the Project and notice of public participation to the Canadian Impact Assessment Registry to provide the public 30 calendar days to comment on the project and provide community knowledge. The public comment period ran from November 13 to December 12, 2020. At the close of the 30 calendar day public comment period, no comments were received from the public.

In addition to posting information about the Project on the Registry website, the Port Authority required the applicant to conduct public engagement activities with a 25 business day public engagement period. The objective of public engagement as part of the permit review, is to solicit feedback from the public on the proposed project, the completed technical studies, and proposed mitigations during construction and operation.

The Port Authority reviewed the record of public engagement, including all comments received and the Applicant's response to comments, in determining mitigation requirements and in making a decision on the proposed Project.

5.1 Summary of Public Engagement

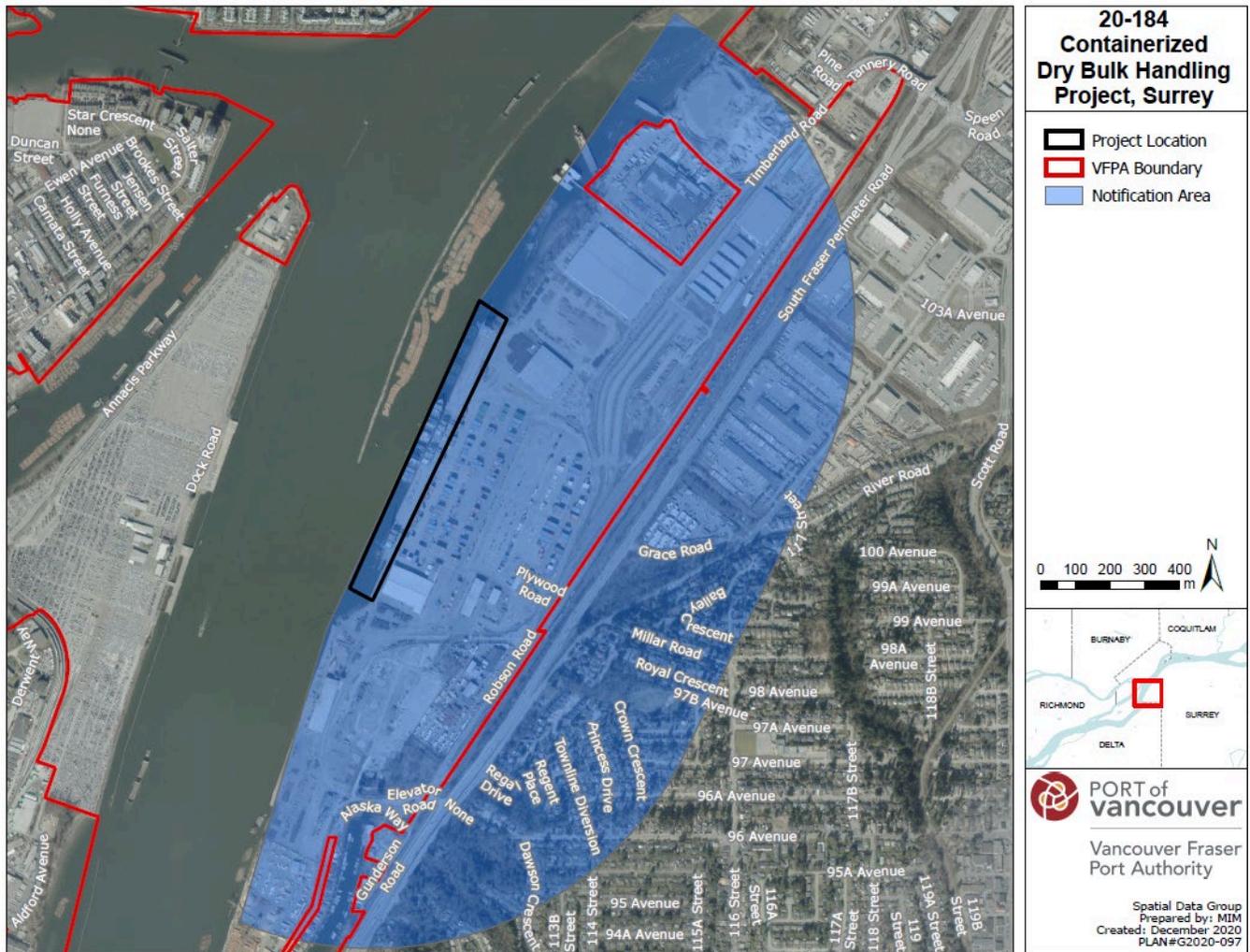
A description of the Project and proposed works, and all supporting materials were posted to the Port Authority's website on November 13, 2020 for public review and comment. Information about the Applicant's public engagement period was posted on the Port Authority's website on December 22, 2020 and links were provided to the Applicant's website for more information.

Public engagement activities were conducted by the Applicant from December 23, 2020 to January 29, 2021, and included the following:

- Mailing notification letters to residents and businesses in Surrey on December 23, 2020
 - Including information about the proposed project and an invitation for comments or questions
- Providing an email address for inquiries, submissions and signing up for future notifications on the project
- Posting all Project-related information on-line on the Applicant's website (www.dpworldcanada.com/projects)

The Applicant mailed notification letters to all residents and businesses in the area shown in the following map, covering approximately 500 metres from the project location.

Figure 1 - Mail drop area for public notification



During the public engagement period, public participation was as follows:

- 7 comments from two residents of the same household, sent via email to the port authority and the Applicant

Comments and questions from the public were mainly related to possible increase in trains, lighting and noise, dust suppression, and the public engagement notification. Community knowledge was provided about the timing of trains, and lighting and dust impacts.

The Applicant provided a detailed summary of the public engagement process and all comments received in an Engagement Summary and Consideration Report dated February 23, 2021, with the Applicant’s formal responses to public comments received, by theme. The Port Authority has reviewed the document and found it to be acceptable. This report was posted on the Port Authority and the Applicant’s websites on March 5, 2021.

Below is a table summarizing issues raised by the public, and how they were considered by the Port Authority as part of the project and environmental review.

Issue	Mitigations and Permit Conditions	Rationale
Noise from additional trains	None required.	The Applicant confirmed no trains are anticipated to be utilized.
Additional lighting directed towards the neighbourhood	None required.	The Applicant confirmed no new lighting will be added.
Noise from the revolving heads	None required.	The Applicant confirmed the revolving heads will not create incremental noise.
Dust pollution from the revolving heads	None required.	The Applicant confirmed the contents would be lowered and emptied directly within the hold of the vessel to mitigate any potential fugitive dust from escaping the vessel. In addition, a mobile dust suppression unit fitted around the rim of the vessel hatch would emit water mist to prevent dust from escaping the hold of the vessel.
Invalid webpage link on public notification	None required.	The Applicant confirmed one of the two webpage links on the notification was invalid and offered the correct link. The notice also contained contact details for the public to ask for project details.
Outdated map on public notification, e.g., current silos were not included in the map	None required.	The silos are not part of DP World Fraser Surrey.
Open house for residents	Conditions No. 14 and 15 of the Permit require the Applicant to draft construction notification and distribute an approved notification within 10 business days of receiving the permit, prior to the first use of the revolving heads.	The Applicant explained that in-person gatherings, such as open houses, were not possible due to government restrictions to reduce the spread of COVID-19. The port authority outlined the public engagement requirements for the Applicant as part of the PER process, and offered links to where the summary and consideration report would be posted.

The Port Authority has reviewed the record of public engagement, and provided that the mitigation measures and conditions outlined in the table above are included in the Permit, is of the view that the Project has adequately addressed the concerns raised during public engagement.

The proposed Project was assessed by the Port Authority to have potential impacts to community interests in the surrounding area during construction and upon completion, given the project would enable the handling of a new commodity.

As a result, the Applicant is required to send a construction notice to adjacent residents and businesses in Surrey as shown in the previous map (see **Figure 1**). The construction notice shall be distributed by the Applicant within 10 business days prior to the first use of the revolving head. The construction notice will be posted on the Port Authority's and the Applicant's websites. This is condition No. 15 in the project Permit.

6 INDIGENOUS CONSULTATION

The Port Authority reviewed the proposed works and determined that adverse impacts to Aboriginal or Treaty rights are not expected.

7 ENVIRONMENTAL EFFECTS REVIEW

To fulfill its responsibilities under the *Canada Marine Act* and the *Impact Assessment Act*, the Port Authority must make a determination on the potential environmental effects of a proposed project on Port Authority managed lands and waters prior to authorizing those works to proceed. To make that determination, the Port Authority considers the residual adverse effects of the Project, that is, the effects after mitigation measures have been taken into account.

This section of the project and environmental review report summarizes the environmental effects review conducted for the Project, and provides the environmental effects decision. The environmental review also considered the information provided in the previous sections of this report.

7.1 Scope of Environmental Review

The environmental review includes consideration of the potential environmental effects of the proposed Project, taking into account mitigation measures to avoid or reduce those effects. This review considered the Project components and physical activities described in Section 2.

The temporal scope of the review includes Project construction and operation.

The environmental review considered potential adverse environmental and social effects of the Project on 14 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 7.2 summarizes the results of the environmental effects review and proposed mitigations.

7.2 Environmental Effects and Mitigation Summary

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

Environmental Component	Potential Adverse Effects?		Overview of Potential Adverse Effects, Mitigation Measures, and Residual Adverse Effects	Significant Residual Adverse Effects?	
	Yes	No		Yes	No
Air quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Fugitive dust may potentially affect air quality.</p> <p>Mitigation measures outlined in the Permit Application and Air Emission Management Plan will be implemented to reduce potential adverse, environmental effects.</p> <p>With mitigation in place, residual adverse effects on air quality are not anticipated.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Lighting	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No changes to lighting are associated with the Project.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Noise	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The Project is not expected to affect noise.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Soils	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The Project is not expected to affect soils.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sediments	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Spills may potentially affect sediment quality.</p> <p>Mitigation measures outlined in the Permit Application, Water and Land Pollution Prevention Plan, and Emergency Response Plan will be implemented to reduce potential adverse, environmental effects.</p> <p>With mitigation in place, residual adverse effects on sediments are not anticipated.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ground water	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The Project is not expected to affect groundwater.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Surface water and water bodies	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Spills may potentially affect surface water quality.</p> <p>Mitigation measures outlined in the Permit Application, Water and Land Pollution Prevention Plan, and Emergency Response Plan will be implemented to reduce potential adverse, environmental effects.</p> <p>With mitigation in place, residual adverse effects on surface water are not anticipated.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Species/habitat with special status</p> <p>Assessed under section 79 of the <i>Species at Risk Act</i>, as applicable</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The Project is not expected to affect species or habitat with special status.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Terrestrial resources (e.g., vegetation, wildlife, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The Project is not expected to affect terrestrial resources.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Component	Potential Adverse Effects?		Overview of Potential Adverse Effects, Mitigation Measures, and Residual Adverse Effects	Significant Residual Adverse Effects?	
	Yes	No		Yes	No
Wetlands	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The Project is not expected to affect wetlands.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Aquatic resources (e.g., aquatic plants, fish and fish habitat, waterbirds, marine mammals, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The Project is not expected to affect aquatic resources.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Health and socio-economic conditions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The Project is not expected to cause adverse effects on health or socio-economic conditions of people, including Indigenous people.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Archaeological, physical, and cultural heritage resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The Project is not expected to affect archaeological, physical, and cultural heritage resources.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Accidents and malfunctions Assessed as required by the <i>Canada Marine Act</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	There is potential for adverse effects on surface water and sediments from accidental equipment leaks or spills. Mitigation measures outlined in the Emergency Response Plan will be implemented to reduce potential adverse, environmental effects. With mitigation in place, the residual adverse effect, if it occurs, is expected to be not significant. Remediation of any residual adverse effect is anticipated to be achievable.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

7.3 Environmental Effects Review Decision

In completing the project and environmental effects review, the Port Authority has reviewed and taken into account relevant information available on the proposed project and has considered any adverse impact that the project may have on the rights of indigenous peoples, Indigenous knowledge, community knowledge, comments received from the public, and measures that would mitigate any significant adverse environmental effects of the project. We conclude that with the implementation of proposed mitigation measures and Permit conditions, the Project is not likely to cause significant adverse environmental effects.

ORIGINAL COPY SIGNED

April 9, 2021

LISA MCCUAIG
MANAGER, ENVIRONMENTAL PROGRAMS

DATE OF DECISION

8 CONCLUSION

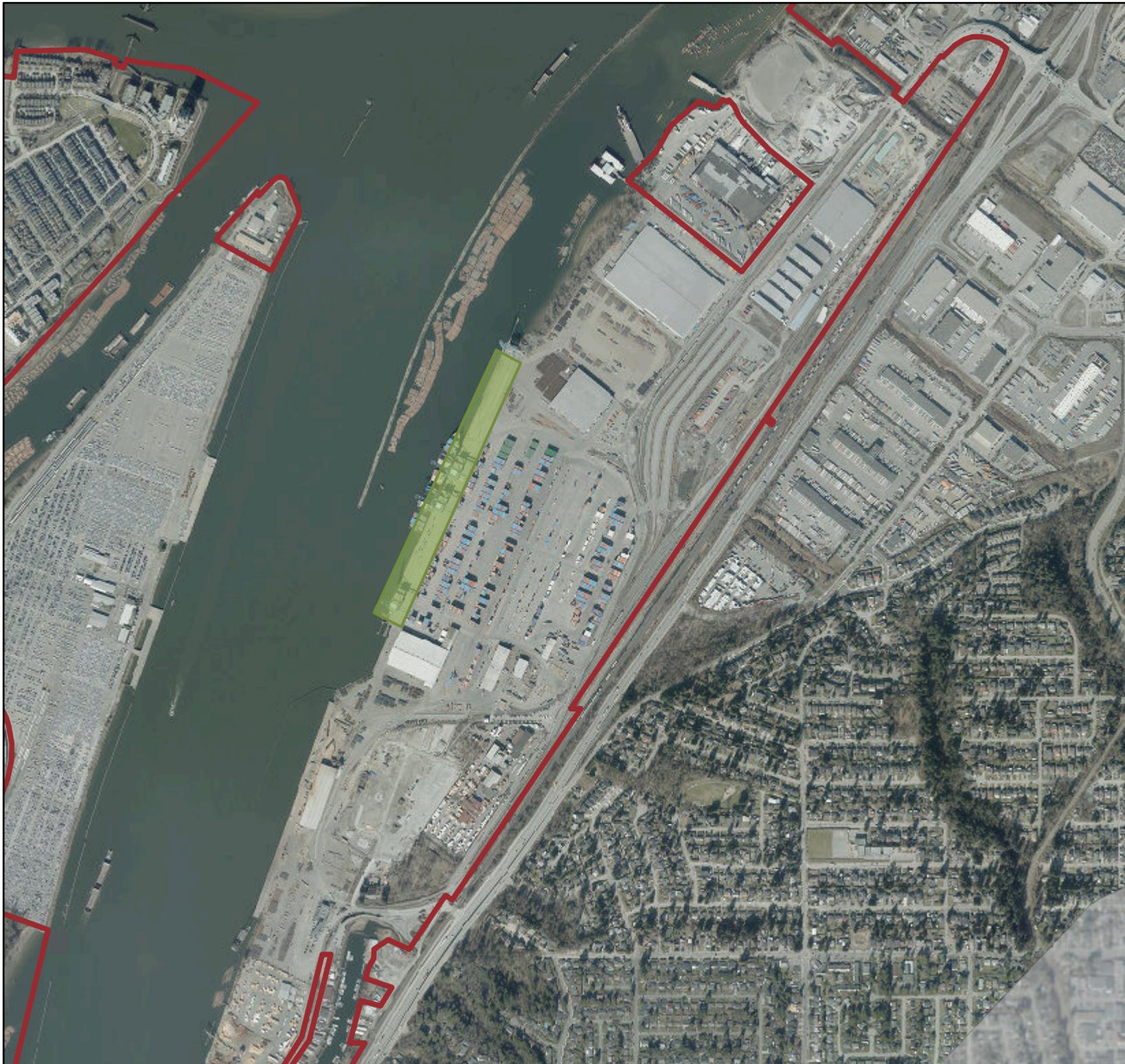
In completing the project and environmental review, the Port Authority concludes that with the implementation of proposed mitigation measures and conditions described in the Permit, the Project has appropriately addressed all identified concerns.

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. 20-184**.





**APPENDIX A
Location Plan**



PER #20-184

Fraser Surrey Docks Containerized Dry Bulk Handling

-  Project Location
-  VFPA Boundary

Vancouver Fraser Port Authority:
This drawing has been reviewed by
Vancouver Fraser Port Authority
solely for the purpose of VFPA's
issuance of a Project Permit. This
Permit in no way denotes design,
engineering, or structural approval
or endorsement.



**Vancouver Fraser
Port Authority**

Date: March 30, 2021



APPENDIX B
List of Information Sources

The Port Authority has relied on the following sources of information in the project and environmental review of the Project:

- Application form and materials submitted by DP World Fraser Surrey Limited Partnership on October 6, 2020.
- All Project correspondence with Tabare Dominguez and Kurtis Dool from November 9, 2020 to April 6, 2020.
- Air Emission Management Plan (AEMP), October 5, 2020, WSP
- Emergency Response Plan, June 4th 2020 (Revision Date), DP World Fraser Surrey Limited Partnership, Health and Safety Department
- Water and Land Pollution Prevention Plan, April 1, 2016, DP World Fraser Surrey Limited Partnership, Environmental Management System Representative
- All plans and drawings labelled PER No.20-184- A to E

COPY