



PORT of  
**vancouver**

Vancouver Fraser  
Port Authority

# Roberts Bank Terminal 2 Project

2023 Annual Report

Submitted to the Impact Assessment Agency of Canada

March 31, 2024

## Executive summary

In April 2023, the Government of Canada approved Roberts Bank Terminal 2 (RBT2, the project), concluding the federal environmental assessment process. The federal Decision Statement (Decision Statement) sets out the conditions under which the project may move forward, and with which the Vancouver Fraser Port Authority (port authority) must comply. This document, the RBT2 2023 Annual Report (the report), was prepared in fulfillment of the requirements of conditions 2.10, 2.11, and 2.12 as set out in the Decision Statement.

This annual report provides the information on actions taken to comply with each condition within the period from issuance of the Decision Statement (April 20, 2023), to December 31, 2023 – the “reporting year”. In some cases, activities such as development and consultation on plans and mitigation measures were initiated before the Decision Statement was issued, in anticipation of final conditions. These activities are referred to for context pertaining to the current state of development or consultation pursuant to conditions, where applicable. The port authority has initiated development and consultation pursuant to some of the conditions in the Decision Statement, particularly where development and consultation are required prior to the start of construction. For many conditions, activities were not undertaken in the reporting year and will be initiated in subsequent reporting periods based on the anticipated start of project construction. Activities in the reporting year have focused on the following:

- Communication with consulted parties about the final federal conditions and associated consultation requirements and plans
- Development of, and consultation on, a causeway breach feasibility report, which was submitted to the Impact Assessment Agency of Canada
- Development of follow-up programs (FUP), with a focus on monitoring study design
- Preliminary field work to support the development of FUP study designs
- Development of an outline of the construction environmental management plan and associated sub-plans
- Development of, and consultation on, several specific plans and mitigation measures related to southern resident killer whales, underwater noise, Dungeness crab, and marine fish
- Advancement of a biofilm manual and biofilm creation project
- Pilot studies and technology trials to support development of specific mitigation measures and monitoring programs
- Ongoing consultation with First Nations and stakeholders, as well as federal, provincial, and municipal government on a variety of topics related to the subjects above

In addition to the consultation initiated prior to the issuance of the Decision Statement, in the reporting year, the port authority undertook consultation with First Nations, government bodies, and stakeholders. Consultation activities included one-on-one meetings, regular virtual multi-nation workshops, a two-day in person Indigenous Advisory Forum, and sharing of documents for review and comment by consulted parties. The port authority considered all views and information received through consultation, has discussed comments with several parties where requested, and has responded in writing where the consideration process has been completed. Consultation is either ongoing, or to be initiated in future reporting years, for all relevant conditions except condition 7.1 (consultation is complete and the requirements of the condition have been fulfilled).

The information provided in this report, including appendices, has been prepared in fulfillment of conditions 2.10, 2.11, and 2.12 of the Decision Statement. The port authority has indicated for each condition whether activities to comply with the requirements have been initiated or have been fulfilled. In this reporting year, condition 2.11 and condition 7.1 were fulfilled.

This annual report will be submitted to Impact Assessment Agency of Canada no later than March 31, 2024, and will be posted on the project website.

## Sommaire

En avril 2023, le gouvernement du Canada a approuvé le projet du Terminal 2 à Roberts Bank (RBT2, le projet), concluant ainsi le processus fédéral d'évaluation environnementale. La déclaration de décision fédérale (déclaration de décision) définit les conditions dans lesquelles le projet peut aller de l'avant et auxquelles l'Administration portuaire Vancouver-Fraser (administration portuaire) doit se conformer. Ce document, le rapport annuel 2023 RBT2 (le rapport), a été préparé pour satisfaire aux exigences des conditions 2.10, 2.11 et 2.12, comme indiqué dans la déclaration de décision.

Ce rapport annuel fournit des informations sur les mesures prises pour se conformer à chaque condition au cours de la période allant de la publication de la déclaration de décision (20 avril 2023) au 31 décembre 2023 - l'année de référence. Dans certains cas, des activités telles que l'élaboration et la consultation de plans et de mesures d'atténuation ont été entamées avant la publication de la déclaration de décision, en prévision des conditions définitives. Ces activités sont mentionnées pour le contexte relatif à l'état actuel d'élaboration ou de consultation conformément aux conditions, le cas échéant. L'administration portuaire a entamé l'élaboration et la consultation conformément à certaines des conditions de la déclaration de décision, en particulier lorsque l'élaboration et la consultation sont requis avant le début de la construction. Pour de nombreuses conditions, les activités n'ont pas été entreprises au cours de l'année de référence et seront lancées au cours des périodes de référence ultérieures en fonction du début prévu de la construction du projet. Les activités de l'année de référence se sont concentrées sur ce qui suit:

- Communication avec les parties consultées au sujet des conditions fédérales définitives et des exigences et plans de consultation connexes
- Élaboration de (et consultation sur) un rapport de faisabilité de la brèche dans la jetée, qui a été soumis à l'Agence d'évaluation d'impact du Canada
- Élaboration de programmes de suivi, en mettant l'accent sur la surveillance de la conception de l'étude
- Travaux préliminaires sur le terrain pour soutenir l'élaboration de plans d'étude du programme de suivi
- Élaboration d'une ébauche de plan de gestion environnementale de la construction et des sous-plans connexes
- Élaboration de (et consultation sur) plusieurs plans spécifiques et mesures d'atténuation concernant l'épaulard résident du Sud, le bruit sous-marin, le crabe dormeur et les poissons de mer
- Avancement d'un manuel sur les biofilms et d'un projet de création du biofilm
- Études pilotes et essais technologiques pour soutenir l'élaboration de mesures d'atténuation spécifiques et de programmes de surveillance
- Consultation continue avec les Premières Nations et les intervenants, ainsi qu'avec les autorités fédérales, provinciales et municipales sur une variété de sujets liés aux thèmes ci-dessus

Outre les consultations engagées avant la publication de la déclaration de décision, l'administration portuaire a consulté, au cours de l'année de référence, les Premières Nations, les organismes gouvernementaux et les intervenants. Les activités de consultation comprenaient des réunions individuelles, des ateliers virtuels multinationaux réguliers, un forum consultatif autochtone de deux jours en personne, et le partage de documents pour examen et commentaires par les parties consultées. L'administration portuaire a pris en considération toutes les points de vue et informations reçues dans le cadre de la consultation, a discuté des commentaires avec plusieurs parties lorsque cela a été demandé, et a répondu par écrit lorsque le processus d'examen a été achevé. La consultation est en cours ou sera entamée au cours des prochaines années de référence pour toutes les conditions pertinentes, à

l'exception de la condition 7.1 (la consultation est terminée et les exigences de la condition ont été remplies).

Les informations fournies dans ce rapport, y compris les annexes, ont été préparées conformément aux conditions 2.10, 2.11 et 2.12 de la déclaration de décision. L'administration portuaire a indiqué pour chaque condition si des activités visant à se conformer aux exigences ont été entamées ou ont été menées à bien. Au cours de cette année de référence, la condition 2.11 et la condition 7.1 ont été remplies.

Ce rapport annuel sera soumis à l'Agence d'évaluation d'impact du Canada au plus tard le 31 mars 2024 et sera publié sur le site Web du projet.

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## Acronyms and abbreviations

CEMP	Construction Environmental Management Plan
DFO	Fisheries and Oceans Canada
ECCE	Environment and Climate Change Canada
ECHO	Enhancing Cetacean Habitat and Observation Program
EMC	Environmental Monitoring Committee
FAA	<i>Fisheries Act</i> Authorization
FUP	Follow-up Program
GHG	Greenhouse gas
IAAC	Impact Assessment Agency of Canada
IAC	Indigenous Advisory Committee
IAF	Indigenous Advisory Forum
MOTI	BC Ministry of Transportation and Infrastructure
RBT2	Roberts Bank Terminal 2
SRKW	Southern Resident Killer Whale

## 1. Introduction

In April 2023, the Government of Canada approved Roberts Bank Terminal 2 (RBT2, the project), concluding the federal environmental assessment process. The federal Decision Statement (Decision Statement) sets out the conditions under which the project may move forward, and with which the Vancouver Fraser Port Authority (port authority) must comply. This document, the RBT2 2023 Annual Report (the report), was prepared in fulfillment of the requirements of conditions 2.10, 2.11, and 2.12 as set out in the Decision Statement and shown in **Table 1** below.

### 1.1. Time period covered by this report

This report includes information for the 2023 reporting year, between April 20, 2023, when the Decision Statement was issued, to December 31, 2023. In some cases, activities such as development and consultation on plans and mitigation measures were initiated before the Decision Statement was issued, in anticipation of final conditions. These activities are referred to for context pertaining to the current state of development or consultation pursuant to conditions, where applicable. However, the “reporting year” referred to throughout this report is defined as April 20, 2023 to December 31, 2023. The port authority has initiated development and consultation pursuant to some of the conditions in the Decision Statement, particularly where development and consultation are required prior to the start of construction. For many conditions, activities were not undertaken in the reporting year and will be initiated in subsequent reporting periods based on the anticipated start of project construction.

### 1.2. Organization of the report

The report is organized to align with the reporting requirements of the Decision Statement, specified in condition 2.10, as follows:

- **Section 1** – Introduction and concordance table showing where in the annual report information pursuant to each reporting requirement is provided
- **Section 2** - Summary of the activities undertaken within the reporting year to comply with the requirements of condition 2.10
- **Section 3** – Report conclusion
- **Appendix A** – Detailed list of activities undertaken to comply with each condition
- **Appendix B** – Summary and full record<sup>1</sup> of views and information received from First Nations<sup>2</sup>, and port authority responses
- **Appendix C** – Summary and full record of views and information received from government and stakeholders, and port authority responses

### 1.3. Concordance table

The table below lists the annual reporting requirements included in conditions and shows where the content related to each requirement is addressed in this report.

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<sup>1</sup> The full record of the views and information received from First Nations, and the port authority's responses, include confidential information that has been shared with IAAC and redacted from public documents.

<sup>2</sup> Refer to Section 3.2 for a full list of First Nations.

**Table 1 Reporting requirements concordance table**

<b>Condition #</b>	<b>Annual reporting requirements</b>	<b>Corresponding section in the annual report</b>
<b>Annual reporting requirements</b>		
2.10	The Proponent shall prepare an annual report that sets out, for each reporting year:	This annual report
2.10.1	the activities undertaken by the Proponent to comply with each of the conditions set out in this Decision Statement	Section 2.1 and Appendix A
2.10.2	how the Proponent complied with condition 2.1;	Section 2.2
2.10.3	for conditions set out in this Decision Statement for which consultation is a requirement, a summary and full record of any views and information received during or as a result of consultation and how the Proponent considered and addressed the views and information received as well as any outstanding issues and whether the outstanding issues impede compliance with any conditions;	Section 2.3, Appendix B, and Appendix C
2.10.4	the Indigenous knowledge the Proponent has received and how it was considered in the development and implementation of conditions set out in this Decision Statement. The Proponent shall respect Indigenous knowledge protocols and shall keep received Indigenous knowledge confidential, if requested, and/or if required by legal and requirements	Section 2.4 and Appendix B
2.10.5	the information referred to in conditions 2.5 for each follow-up program and any update to that information made pursuant to condition 2.6;	Section 2.5 and Appendix A
2.10.6	a summary of the results of the follow-up program requirements;	Not applicable in this reporting year – information to be provided in Section 2.5 and Appendix A in future reports
2.10.7	Any modified or additional mitigation measure implemented or proposed to be implemented by the Proponent, as determined pursuant to condition 2.8	Not applicable in this reporting year – information to be provided in Section 2.5 and Appendix A in future reports
2.10.8	For any conditions where implementation is specifically stated to be dependent in whole or in part upon economic or technical feasibility, and the Proponent determines it is not economically or technically feasible, the Proponent shall provide a reasonable justification for that determination	Not applicable in this reporting year – information to be provided in Section 2.6 and Appendix A in future reports
2.10.9	the activities undertaken by the Proponent related to its participation in regional initiatives; and	Section 2.7 and Appendix A



Condition #	Annual reporting requirements	Corresponding section in the annual report
2.10.10	for any plan that is a requirement of a condition set out in this Decision Statement, any update(s) to the plan that have been made during the reporting year.	Not applicable in this reporting year – information to be provided in Section 2.8 and Appendix A in future reports
2.11	The first reporting year for which the Proponent shall prepare an annual report pursuant to condition 2.10 shall start on the day the Minister of the Environment issues the Decision Statement to the Proponent pursuant to subsection 54 (1) of the <i>Canadian Environmental Assessment Act, 2012</i> .	This annual report
2.12	The Proponent shall submit to the Agency the annual report referred to in condition 2.10, including a plain language executive summary in both official languages, no later than March 31 following the reporting year to which the annual report applies.	Executive Summary
<b>Other annual reporting requirements</b>		
2.13	The Proponent shall publish on the Internet the annual reports and the executive summaries referred to in conditions 2.10 and 2.12	This annual report
3.3.2	Quantify and report annually, as part of the annual report referred to in condition 2.10, annual greenhouse gas emissions arising from construction activities, transportation activities not directly supporting the operation of the marine terminal, and other types of indirect emissions attributable to the Designated Project, including the methodology, assumptions and all supporting data. The Proponent shall specify if indirect emissions data is unavailable or if estimates have been made based on available information.	Reporting requirements not applicable in this reporting year - Information to be provided in Appendix A in future reports
8.3.3	Upon completion of the initial evaluation referred to in condition 8.3.2, conduct a review every three years in order to identify and evaluate any new and emerging underwater noise reduction technologies for berthing activities. The Proponent shall conduct a review until such time that the Proponent has determined, in consultation with Transport Canada and Fisheries and Oceans Canada, that a review is no longer warranted. The results of the review shall be included as part of the annual report referred to condition 2.10.	Reporting requirements not applicable in this reporting year - Information to be provided in Appendix A in future reports
8.7	The Proponent shall contractually obligate the terminal operator to require container vessels calling on the Designated Project to participate in the Enhancing Cetacean Habitat and Observation Program vessel slowdown initiative, or any future equivalent program, to reduce the potential effects of container vessels calling on the Designated Project on cetacean species. As part	Reporting requirements not applicable in this reporting year - Information to be provided in Appendix A in future reports

Condition #	Annual reporting requirements	Corresponding section in the annual report
	<p>of the annual report referred to in condition 2.10, the Proponent shall:</p> <p>8.7.1 Request and make available to the Agency, reported underwater noise levels related to container vessels calling at the Designated Project and the Port of Vancouver measured and available as part of the Enhancing Cetacean Habitat and Observation Program, or any future equivalent program, throughout operation.</p>	
12.4	<p>The Proponent shall develop prior to construction and in consultation with Transport Canada and Indigenous groups (Roberts Bank) and Indigenous groups (marine shipping), a follow-up program to verify the predictions of the environmental assessment as it pertains to changes in container vessel traffic as a result of the Designated Project and related effects on current use of lands and resources for traditional purposes by Indigenous groups (Roberts Bank) and Indigenous groups (marine shipping). The Proponent shall implement the follow-up program during construction and operation in accordance with conditions 2.5 to 2.9. As part of the follow-up program, the Proponent shall:</p> <p>...</p> <p>12.4.2 report annually, as part of the annual report referred to in condition 2.10 and to Indigenous groups (Roberts Bank) and Indigenous groups (marine shipping), the parameters referred to in condition 12.4.1 starting at the beginning of construction;</p>	<p>No applicable actions have been taken, therefore reporting requirements not applicable in this reporting year – Information to be provided in Appendix A in future reports</p>
13.4	<p>The Proponent shall develop, prior to construction and in consultation with Tsawwassen First Nation and the Maa-nulth First Nations, a process for Tsawwassen First Nation and the Maa-nulth First Nations to report concerns to the Proponent about any adverse environmental effect caused by the construction and operation of the marine terminal, the widened causeway, and the expanded tug basin and incidental marine shipping activities on their commercial ventures. The Proponent shall implement the process during construction and the first five years of operation or until the marine terminal has reached full capacity. As part of the implementation of the process, the Proponent shall:</p> <p>...</p> <p>13.4.4 provide to the Agency, as part of the annual report referred to in condition 2.10, all concerns received during the reporting year and how the Proponent has addressed all concerns related to issues within the Proponent's care and control, including any modified or additional mitigation measure that the Proponent has implemented or plans to implement, or a rationale as to why no</p>	<p>No applicable actions have been taken, therefore reporting requirements not applicable in this reporting year – Information to be provided in Appendix A in future reports</p>

Condition #	Annual reporting requirements	Corresponding section in the annual report
	modified or additional mitigation measure(s) is/are required to address the concerns received.	
14.8	The Proponent shall develop, prior to construction and in consultation with Tsawwassen First Nation, Musqueam, and Tsleil-Waututh Nation, nation-specific measures to address the effects described in the Federal Review Panel Report caused by the construction and operation of the marine terminal, the widened causeway, and the expanded tug basin on cultural heritage, including tangible and intangible cultural losses. The Proponent shall invite each of Tsawwassen First Nation, Musqueam, and Tsleil-Waututh Nation to co-lead the development of the measures specific to their nation. The Proponent shall implement the measures during all phases of the Designated Project and shall submit these measures to the Agency prior to implementing them, while ensuring that confidential information is protected. As part of the annual report referred to in condition 2.10, the Proponent shall report its discussions with Tsawwassen First Nation, Musqueam, and Tsleil-Waututh Nation, including the level of satisfaction of Indigenous groups on the implementation of the measures. ...	No applicable actions have been taken, therefore reporting requirements not applicable in this reporting year – Information to be provided in Appendix A in future reports
18.4	The Proponent shall report to the Agency as part of the annual report referred to in condition 2.10, or more frequently if required by the Agency, on the Proponent's actions with respect to the Environmental Monitoring Committee and the associated outcomes of the Proponent's actions.	No applicable actions have been taken, therefore reporting requirements not applicable in this reporting year – Information to be provided in Appendix A in future reports

## 2. Activities undertaken to comply with condition 2.10

### 2.1. Summary of activities undertaken (condition 2.10.1)

This section provides an overview of activities undertaken to comply with conditions in the reporting year. Additional information is provided in **Appendix A** for each condition.

The port authority has focused on the following key activities in the reporting year:

- Communication with consulted parties about the final federal conditions and associated consultation requirements and plans
- Development of, and consultation on, a causeway breach feasibility report, which was submitted to the Impact Assessment Agency of Canada (IAAC)
- Development of follow-up programs (FUP), with a focus on monitoring study design
- Preliminary field work to support the development of FUP study designs

- Development of an outline of the construction environmental management plan (CEMP) and associated sub-plans
- Development of, and consultation on, several specific plans and mitigation measures related to southern resident killer whales (SRKW), underwater noise, Dungeness crab, and marine fish
- Advancement of a biofilm manual and biofilm creation project
- Pilot studies and technology trials to support development of specific mitigation measures and monitoring programs
- Preliminary and ongoing consultation with First Nations and stakeholders, as well as federal, provincial, and municipal government on a variety of topics related to the subjects above

See **Appendix A** for details on specific activities undertaken by the port authority to comply with each condition. A summary of key general conditions is provided in the sub-sections that follow.

## 2.2. Compliance with condition 2.1 (condition 2.10.2)

Condition 2.1 states that the port authority *“shall ensure that its actions in meeting the conditions set out in this Decision Statement during all phases of the Designated Project are considered in a careful and precautionary manner, promote sustainable development, are informed by the best information and knowledge available at the time the Proponent takes action, including policies, guidelines and directives and community and Indigenous knowledge, available at the time the Proponent takes action, are based on methods and models that are recognized by standard-setting bodies, are undertaken by qualified individuals, and have applied the best available technically and economically feasible technologies.”*

The port authority’s actions toward compliance with the conditions set out in the Decision Statement were considered in the manner described above. The port authority’s mandate is to enable Canada’s trade objectives on behalf of all Canadians, ensuring goods are moved safely through the Port of Vancouver, while protecting the environment and considering local communities. The port authority has an environmental policy and reports annually on sustainability. The principles of sustainable development are integrated into the design of the project through: avoidance and protection of sensitive habitats; measures to mitigate the potential adverse effects of the project; and comprehensive follow-up monitoring programs. The adaptive management approach that will be incorporated in each FUP will ensure potential project effects are managed in a precautionary manner.

The activities undertaken toward compliance with conditions have been informed by best information and knowledge available, including applicable guidelines, policies, and directives, and community and First Nations knowledge, as well as standards and methods recognized by standard-setting bodies. This includes development of plans, measures, and follow-up monitoring programs.

The port authority continues to consult with First Nations, government bodies, and relevant authorities, as well as community stakeholders. Adjustments were made, where applicable, to plans, measures and monitoring study designs based on consideration of the views and information provided. The port authority will continue to consider the views and information through ongoing development of plans, measures, and monitoring study designs.

Through consultation with First Nations, the port authority was provided with Indigenous knowledge. Where Indigenous knowledge was provided, it was considered in the development of the applicable documents (see Section 2.4 and **Appendix B**).

The port authority has retained a team of qualified individuals to develop mitigation measures and management plans, to design and implement the various follow-up and monitoring programs, and to undertake the detailed design of the project. Field programs, studies, and engineering designs have

followed and will continue to follow accepted and applicable standards and practices using recognized methods and models. This will lead to the construction and operation of a marine terminal, widened causeway, and expanded tug basin that meet engineering requirements and provide safe operations while mitigating potential adverse environmental effects.

### 2.3. Consultation (condition 2.10.3)

The port authority consulted with First Nations and government bodies for a decade prior to the issuance of the Decision Statement, in anticipation of final conditions of approval. The port authority understands the time period for this report is April 20, 2023, to December 31, 2023, and as such has reported on the consultation undertaken within this reporting year.

**Appendix A** indicates where consultation activities were undertaken in the reporting year pursuant to each condition. This report also includes a summary and full record of the views and information received by consulted parties, where the port authority has completed its process of considering this input and provided a written response. This information is provided in **Appendix B** for First Nations, and in **Appendix C** for government and stakeholders. **Appendix B** and **C** include the comments as received, and the port authority's response demonstrating how the views and information were considered and integrated into the applicable document, or a rationale for the information not being integrated. The port authority acknowledges the sensitivity of the information provided by consulted parties. Therefore, the full record of views and information received from First Nations has been shared with IAAC and redacted from the version of **Appendix B** posted publicly.

For conditions where consultation and the port authority's process of considering input is still underway, the views and information provided through consultation will be reported in future reporting years. An overview of the port authority's consultation activities and the parties consulted in the reporting year is provided below.

#### 2.3.1. Consultation activities

Consultation activities undertaken in the reporting year included the following:

- **One-on-one meetings** – Focused discussions on a particular topic with the objectives of scoping and seeking input on the key aspects of a topic, or of discussing comments or questions that the consulted party has on the topic. One-on-one meetings with First Nations were also used to confirm the timing, approach, methods of notification and durations of review, as well as topics of interest for consultation, in accordance with condition 2.4.
- **Multi-Nation workshops** – Regular virtual workshops were held on a designated topic (or several topics) to discuss and seek input on the development of plans and measures, or pilot studies planned or underway. Multi-nation workshops involved groups of First Nations as defined in condition 1.22 through 1.24 (refer to Section 2.3.2 below), as well as federal and/or provincial government representatives, depending on the topic.
- **Indigenous Advisory Forum** – A two-day Indigenous Advisory Forum (IAF) was held during the reporting year (September 2023). The purpose of the IAF was to convene and seek input from multiple First Nations (Roberts Bank), with the participation of Fisheries and Oceans Canada (DFO), in person on particular priority topics. The IAF included technical presentations and facilitated breakout sessions to discuss selected topics in smaller groups.
- **Document reviews** - The port authority provided the opportunity for review and comment of the applicable material to consulted parties in accordance with specific conditions. Materials included: draft preliminary field study reports; the draft breach feasibility report; draft sections of plans and FUP designs; pilot study designs; terms of reference for a steering committee; and an outline package for

the CEMP. In accordance with condition 2.3, the port authority provided the consulted parties advance notice of each upcoming opportunity to provide views and information, and requested comments within a period of not less than 30 days.

### 2.3.2. Consulted parties

During the reporting year, the port authority consulted with First Nations, federal, provincial, and municipal government bodies, and stakeholders and landowners in accordance with the final conditions included in the Decision Statement. For clarity, per preferences expressed by First Nations to the port authority, where the conditions require the port authority to consult with Indigenous groups (Roberts Bank), Indigenous groups (Fraser River), and Indigenous groups (marine shipping), respectively, this report refers instead to First Nations (Roberts Bank), First Nations (Fraser River), and First Nations (marine shipping).

The port authority consulted with the following First Nations, as identified in conditions 1.22 through 1.24, within the reporting year:

- **First Nations (Roberts Bank)** - Tsawwassen First Nation, Musqueam Indian Band (Musqueam), Cowichan Tribes<sup>3</sup>, Halalt First Nation, Ts'uubaa-asatx<sup>4</sup>, Lyackson First Nation, Malahat First Nation, Maa-nulth Nations (Huu-ay-aht First Nation, Ka:'yu:'k'th'/Che:k'tles7et'h First Nations, Toquaht Nation, Uchucklesaht Tribe and Yuułu?if?ath (Ucluelet) Nation), Pauquachin First Nation, Penelakut Tribe, Semiahmoo First Nation, Snuneymuxw First Nation<sup>5</sup>, Stz'uminus First Nation, Tsartlip First Nation, Tsawout First Nation, Tseycum First Nation, and Tseil-Waututh Nation..
- **First Nations (Fraser River)** - S'ólh Téméxw Stewardship Alliance (Chawathil First Nation, Cheam First Nation, Kwaw-Kwaw-Apilt First Nation, Scowlitz First Nation, Skawahlook First Nation, Skwah First Nation, Sumas First Nation, Yale First Nation each on their own behalf, and Aitchelitz First Nation, Shxwhá:y Village, Skowkale First Nation, Soowahlie First Nation, Squiala First Nation, Tzeachten First Nation and Yakweakwoose First Nation), Kwantlen First Nation, Leq'á:mél First Nation, Matsqui First Nation, Shxw'ow'hamel First Nation, Popkum First Nation, and Seabird Island First Nation.
- **First Nations (marine shipping)** - Scia'new (Beecher Bay) First Nation, Ditidaht First Nation, Esquimalt Nation, Pacheedaht First Nation, Songhees Nation, and T'sou-ke First Nation.

The port authority consulted with the following government bodies and stakeholders within the reporting year:

- **Federal government bodies** – Environment and Climate Change Canada, Fisheries and Oceans Canada, Health Canada
- **Provincial government bodies** – BC Ministry of Environment and Climate Change Strategy, BC Ministry of Health, BC Ministry of Transportation and Infrastructure
- **Municipal government bodies** – Metro Vancouver, City of Delta, City of Richmond
- **Stakeholders** - British Columbia Railway Company, Global Container Terminals, Westshore Terminals, Blue Water Rail Services, Burlington Northern Santa Fe, Canadian National Railway, Canadian Pacific Kansas City Railway, Ocean Delta Towing, Toronto Terminals Railway

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<sup>3</sup> As per the project's provincial Environmental Assessment Certificate (EAC #T23-01) and direction from Cowichan Tribes, "Cowichan Nation Alliance members" has been changed to "Cowichan Tribes".

<sup>4</sup> Per direction from Ts'uubaa-asatx, "Nation" has been removed from their name.

<sup>5</sup> As per the project's provincial Environmental Assessment Certificate (EAC #T23-01), which includes Snuneymuxw First Nation as Indigenous Nations – Roberts Bank, and direction from IAAC, Snuneymuxw First Nation has been moved from the definition of condition 1.24 Indigenous groups (marine shipping) to condition 1.22 Indigenous groups (Roberts Bank).

## 2.4. Indigenous knowledge (condition 2.10.4)

As noted above (Section 2.2), the port authority has been provided with Indigenous knowledge through consultation, along with views and information about the topic of consultation. This information has been considered and addressed in the development of the applicable materials where provided. Indigenous knowledge is provided within the comment and response tables in the confidential version of **Appendix B** provided to IAAC.

## 2.5. Follow-up program (conditions 2.10.5, 2.10.6, and 10.2.7)

The port authority has initiated development of the following FUPs:

- Air quality-related effects on human health FUP (condition 3.6)
- Juvenile Dungeness crab nursery habitat FUP (condition 7.7)
- Offsetting habitat effectiveness FUP (condition 7.13)
- Juvenile salmon FUP (condition 7.14)
- Operations underwater noise-related effects on southern resident killer whale (SRKW) FUP (condition 8.6)
- Salinity, biofilm, and western sandpiper FUP (condition 10.4)
- Great blue heron FUP (condition 10.15)
- Barn owl mitigation effectiveness FUP (condition 10.17)
- Diving birds FUP (condition 10.18)

The port authority will initiate development of the following FUPs in future reporting years:

- Greenhouse gas emissions mitigation effectiveness FUP (condition 3.3)
- Atmospheric noise and vibration-related effects on human health FUP (condition 4.3)
- Light FUP (condition 5.2)
- Sediment erosion and deposition and eutrophication FUP (condition 6.11)
- Orange sea pen transplant effectiveness FUP (condition 7.9)
- Marine vegetation FUP (condition 7.15)
- Infauna and marine invertebrate FUP (condition 7.16)
- Rockfish and lingcod FUP (condition 7.17)
- Wetlands and wetland compensation effectiveness FUP (condition 9.4)
- Salinity, biofilm, and western sandpiper FUP: remainder of construction (condition 10.5)
- Barn owl nest box effectiveness FUP (condition 10.16)
- Artificial light and coastal bird population FUP (condition 10.19)
- Barn swallow habitat FUP (condition 10.20)
- Marine shipping current use FUP (condition 12.4)
- Current use FUP (condition 12.5)
- Indigenous health (marine traditional food quality) FUP (condition 13.1)
- Indigenous health (food security) FUP (condition 13.2)
- Cultural heritage FUP (condition 14.9)

As indicated above, development has been initiated for some of the FUPs, and none are in the implementation stage. As such, reporting requirements related to the implementation of the FUPs do not apply for this annual report. The information related to the completed or updated FUPs (condition 10.2.5), results of implementation of FUPs (condition 10.2.6), and any additional or modified mitigation implemented as part of a FUP (condition 10.2.7) will be reported on in future reporting years.

## 2.6. Technical and economic feasibility (condition 2.10.8)

Conditions where an aspect of implementation is stated to depend on technical or economic feasibility include the following:

- Air quality and greenhouse gas emissions (conditions 3.2, 3.4.1, 3.4.2, 3.4.4, 3.4.5)
- Atmospheric noise and vibration (conditions 4.1, 4.4)
- Water quality (condition 6.4)
- Causeway breach (conditions 7.1, 7.2)
- Fish and fish habitat (condition 7.10)
- Underwater noise (conditions 8.1, 8.2, 8.3, 8.5)
- Wetland compensation (conditions 9.2, 9.3)
- Avifauna (conditions 10.6, 10.11)
- Current use of lands and resources for traditional purposes (condition 12.4)
- Commercial ventures (condition 13.4)
- Agriculture (condition 13.8)

Activities undertaken to comply with each condition are described in **Appendix A**.

During this reporting year, condition 7.1 was fulfilled. In accordance with condition 7.1, the port authority investigated the technical and economic feasibility of a causeway breach to allow fish passage, and documented the analysis and results in a causeway breach feasibility report. The report describes whether and under what conditions a causeway breach would be technically and economically feasible. The investigation determined that it is not feasible for a causeway breach to be implemented by the port authority. This is because the port authority does not have the legal rights to compel third parties to accept the financial impacts associated with causeway breach construction-related disruptions to their businesses. To make a causeway breach feasible, a collaborative initiative focused on regional effects would be required, led by the federal and/or provincial governments with First Nations, and involving regulators, stakeholders, and the port authority. See the final breach feasibility report, submitted to IAAC on October 20, 2023, for more details.

There are no other conditions for which the port authority has determined within the reporting year that implementation will be technically and/or economically infeasible.

## 2.7. Regional initiatives (condition 2.10.9)

During the reporting year the port authority has not been requested by a relevant authority to participate in any regional initiatives, pursuant to the conditions. However, the port authority continues to be actively involved in various regional initiatives including but not limited to the Oceans Protection Plan, Whales Initiative, and the Greater Vancouver Integrated Response plan for marine pollution incidents.

Conditions relating to regional initiatives include:

- 8.10 *Species at Risk Act* conservation agreement for the recovery of SRKW
- 8.11 Management and recovery of SRKW
- 8.12 Underwater noise management
- 8.13 Identification of SRKW habitat use overlaps with marine shipping in the Salish Sea
- 12.6 Effects on current use from marine shipping
- 13.3 Improving understanding of shellfish quality at Roberts Bank
- 13.9 Prevention, monitoring, and compensation of project effects on adjacent Agricultural Land Reserve land
- 20.5 Development of integrated response plans for accidents related to marine shipping

Activities undertaken to comply with each condition are described in **Appendix A**.



The port authority leads the Enhancing Cetacean Habitat and Observation (ECHO) Program, which is relevant to the requirements of conditions 8.11 and 8.12, related to managing the impacts of underwater noise on SRKW. The port authority works with a diverse range of partners and advisors to develop and implement initiatives that result in management of underwater noise (quantifiable reduction) from commercial vessel traffic. Initiatives of the ECHO program in the reporting year included:

- Implementation of the 2023 Haro Strait and Boundary Pass voluntary ship slowdown
- Implementation of the 2023 Strait of Juan De Fuca voluntary inshore lateral displacement
- Implementation of the 2023 Swiftsure Bank voluntary ship slowdown

The seasonal slowdown and lateral displacement activities are part of a suite of regional actions coordinated and implemented under the Oceans Protection Plan and the Whales Initiative in support of SRKW recovery.

In addition to the actions listed above, in the reporting year the port authority, through the ECHO Program, continued to work collaboratively with parties to update the *Species at Risk Act Section 11 Conservation Agreement* to Support the Recovery of the Southern Resident Killer Whale, as well as to extend the agreement for an additional five-year term. This is relevant for condition 8.10.

The port authority is included in the Greater Vancouver Integrated Response plan for marine pollution incidents. In the reporting year, the port authority participated in this regional initiative, including activities toward an update to the current plan. This activity is related to condition 20.5.

## **2.8. Updates to plans (condition 2.10.10)**

The plans pursuant to the conditions are currently in development. As such, no updates to published plans have been undertaken in the reporting period.

## **3. Conclusion**

The information provided in this report, including the appendices, has been prepared in fulfillment of conditions 2.10, 2.11, and 2.12 of the Decision Statement. The port authority has indicated for each condition whether activities to comply with the requirements have been initiated or fulfilled, or if no applicable actions have been undertaken. In this reporting year, condition 2.11 and condition 7.1 were fulfilled.

This annual report will be submitted to IAAC no later than March 31, 2024, and will be posted on the project website.

**Appendix A**  
**Activities undertaken to comply with each condition in the reporting year**

## 1. Introduction

On April 20, 2023, the federal Minister of Environment and Climate Change issued a Decision Statement with respect to the Roberts Bank Terminal 2 Project (the project). The Decision Statement includes conditions with which the port authority must comply.

**Appendix A** describes the activities undertaken between April 20, 2023, and December 31, 2023 (the reporting year), to comply with each condition set out in the Decision Statement. The appendix is organized according to the conditions as set out in the Decision Statement, with one table corresponding to each section of the conditions.

## 2. General conditions

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
2.1	<p>The Proponent shall ensure that its actions in meeting the conditions set out in this Decision Statement during all phases of the Designated Project are considered in a careful and precautionary manner, promote sustainable development, are informed by the best information and knowledge available at the time the Proponent takes action, including policies, guidelines and directives and community and Indigenous knowledge, available at the time the Proponent takes action, are based on methods and models that are recognized by standard-setting bodies, are undertaken by qualified individuals, and have applied the best available technically and economically feasible technologies.</p>	<ul style="list-style-type: none"> <li>• The port authority has retained a team of qualified individuals to develop mitigation measures and management plans, to design and implement the various follow-up and monitoring programs, and to undertake the detailed design of the Project. Field program and study design, as well as engineering design, follows accepted and applicable standards and practices using recognized methods and models. This approach will lead to the construction and operation of a marine terminal, widened causeway, and expanded tug basin that meets engineering requirements for safe operation while mitigating potential environmental effects.</li> <li>• The port authority initiated consultation prior to the issuance of the Decision Statement, and continues to consult with relevant authorities, First Nations, and stakeholders to solicit their input as required by applicable conditions, and will incorporate information and knowledge obtained through consultation as appropriate into the various documents required by the conditions.</li> <li>• Through consultation with First Nations, the port authority was provided with Indigenous knowledge on some of the topics of consultation. Where Indigenous knowledge was provided, it was and/or is being considered in the development of the applicable document, and attributed to the nation that provided it.</li> <li>• The port authority's adaptive management approach will contribute to continuous improvement. Further details are included throughout this report specific to each condition, and in Section 2.2. The port authority's actions in fulfilling the conditions demonstrate a careful and precautionary approach that supports sustainable development.</li> </ul>
2.2	<p>The Proponent shall ensure that its actions in meeting the conditions set out in this Decision Statement are taken in a way that is consistent with any applicable management plan, recovery strategy and action plan for listed species at risk that is prepared or established pursuant to the <i>Species at Risk Act</i>.</p>	<ul style="list-style-type: none"> <li>• Mitigation measures will be developed in consideration of applicable recovery strategy and action plans for listed species at risk. As noted throughout this appendix, the plans and measures required by the conditions are currently in development.</li> <li>• In particular, the applicable recovery strategies have been considered in the initial development of mitigation measures related to southern resident killer whale (SRKW), as noted in this appendix in relation to conditions 8.1, 8.2, 8.5, and 8.10.</li> </ul>
2.3 2.3.1 to 2.3.4	<p>The Proponent shall, where consultation is a requirement of a condition set out in this Decision Statement:</p> <ul style="list-style-type: none"> <li>• 2.3.1 - provide a written notice of the opportunity for the party or parties being consulted to present their views and information on the subject matter of the consultation at least 90 days prior to the commencement of the activity or activities to which the consultation pertains;</li> <li>• 2.3.2 –provide the information that is available and is relevant to the scope and the subject matter of the consultation and a reasonable period of time not less than 30 days, or as otherwise agreed upon with the party or parties being consulted, to prepare their views and information;</li> <li>• 2.3.3 - undertake an impartial consideration of all views and information presented by the party or parties being consulted on the subject matter of the consultation; and</li> <li>• 2.3.4 - advise as soon as feasible in writing, the party or parties being consulted on how the views and information received have, or have not, been integrated into the subject matter of the consultation by the Proponent, including a rationale for why the views have, or have not, been integrated.</li> </ul>	<ul style="list-style-type: none"> <li>• In accordance with condition 2.3.1, the port authority provided written notice at least 90 days in advance of upcoming opportunities for consultation to the parties that were consulted in the reporting year.</li> <li>• In accordance with condition 2.3.2, documents containing the information available and relevant to the scope and the subject matter of the consultation were provided via email or file sharing software (project website consultation portal), which made the information available continuously for each party specific to each consultation request. Documents were provided for review periods of at least 30 days. In some cases, expedited reviews of shorter materials were agreed upon with the consulted parties.</li> <li>• In accordance with condition 2.3.3, all views and information received from consulted parties during the reporting year were and/or are being considered impartially by the port authority, including review and discussion with relevant technical subject matter experts.</li> <li>• In accordance with condition 2.3.4, where the consideration of views and information, and integration as applicable into relevant documents, were completed within the reporting year, the port authority advised the parties in writing of how the views and information had been integrated into the subject matter of consultation. Where the views and information were not integrated, a rationale was provided. <b>Appendix B</b> and <b>C</b> of this annual report includes the comment response tables that demonstrate this consideration and written notification where applicable.</li> <li>• For conditions where consultation and the port authority's process of considering input is still underway, the views and information provided through consultation will be reported in future reporting years.</li> </ul>

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
2.4 2.4.1 to 2.4.2.5	<p>The Proponent shall, where consultation with Indigenous groups (Roberts Bank), Indigenous groups (marine shipping), and/or Indigenous groups (Fraser River) is a requirement of a condition set out in this Decision Statement:</p> <ul style="list-style-type: none"> <li>• 2.4.1 - discuss with each Indigenous group within the Indigenous groups (Roberts Bank), Indigenous groups (marine shipping), and/or Indigenous groups (Fraser River) separately whether it is interested in being consulted on the condition(s) where indicated. The Proponent shall revisit this every year, or at a frequency agreed upon with each group, with each Indigenous group within Indigenous groups (Roberts Bank), Indigenous groups (marine shipping), and/or Indigenous groups (Fraser River) and only conduct consultation requirements referred to in condition 2.3 for the condition(s) of interest to each group;</li> <li>• 2.4.2 - communicate with each Indigenous group within the Indigenous groups (Roberts Bank), Indigenous groups (marine shipping), and/or Indigenous groups (Fraser River) with respect to the manner to satisfy the consultation requirements referred to in condition 2.3, including:                             <ul style="list-style-type: none"> <li>- 2.4.2.1 - Methods of notification;</li> <li>- 2.4.2.2 - The type of information, resources and the period of time to be provided when seeking input;</li> <li>- 2.4.2.3 - Whether consultation is to be done separately from other parties being consulted;</li> <li>- 2.4.2.4 - the process to be used by the Proponent to undertake impartial consideration of all views and information presented on the subject of the consultation; and</li> <li>- 2.4.2.5 - the period of time and the means to advise the Indigenous groups identified in condition 2.4.1 of how their views and information were considered by the Proponent.</li> </ul> </li> </ul>	<p>The port authority continued an ongoing and longstanding consultation program during the reporting year. The port authority provided written notification to all First Nations of the conditions where consultation with them is required, and requested feedback to identify the conditions that were of interest to each nation. The requirements of condition 2.4 have been met, in relation to the topics that were consulted on in the reporting year, through discussions and written correspondence with each group.</p>
2.5 2.5.1 to 2.5.6	<p>The Proponent shall, where a follow-up program is a requirement of a condition set out in this Decision Statement, determine, as part of the development of each follow-up program and in consultation with the party or parties being consulted during the development, the following information, unless already specified in the condition:</p> <ul style="list-style-type: none"> <li>• 2.5.1 - the methodology, location, frequency, timing and duration of monitoring associated with the follow-up program;</li> <li>• 2.5.2 - the scope, content and frequency of reporting of the results of the follow-up program;</li> <li>• 2.5.3 - the frequency at which the follow-up program must be updated;</li> <li>• 2.5.4 - the levels of environmental change relative to baseline that are caused by the Designated Project and that would require the Proponent to implement modified or additional mitigation measure(s), including instances where the Proponent may require Designated Project activities causing the environmental change to be stopped;</li> <li>• 2.5.5 - the potential technically and economically feasible mitigation measures that may be implemented by the Proponent if monitoring conducted as part of the follow-up program shows that the levels of environmental change referred to in condition 2.5.4 have been reached or exceeded as well as measures suggested by the party or parties being consulted that cannot be implemented and the reasons why they cannot be implemented; and</li> <li>• 2.5.6 - the specific and measurable end points that must be achieved before the follow up program can end. Those end points should indicate that the accuracy of the environmental assessment has been verified and/or that the mitigation measures are effective.</li> </ul>	<p>The development of monitoring aspects (condition 2.5.1) and reporting details (condition 2.5.2) for follow-up programs is in progress to varying degrees, as indicated throughout <b>Appendix A</b> for each follow-up program requirement.</p> <p>No actions were undertaken in the reporting year with respect to conditions 2.5.3, 2.5.4, 2.5.5, and 2.5.6. Activities to comply with these conditions will be initiated in future reporting years.</p>
2.6	<p>The Proponent shall update the follow-up programs, including the information determined for each follow-up program pursuant to condition 2.5, during the implementation of each follow-up program, at the minimum frequency determined pursuant to condition 2.5.3 and in consultation with the party or parties being consulted during the development of each follow-up program</p>	<p>No applicable activities were undertaken in the reporting year.</p>

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
2.7	<p>The Proponent shall provide the follow-up programs, including the information determined for each follow-up program pursuant to condition 2.5, to the Agency and to the party or parties being consulted during the development of each follow-up program prior to the implementation of each follow-up program. The Proponent shall also provide any update made pursuant to condition 2.6 to the Agency and to the party or parties being consulted during the development of each follow-up program within 30 days of the follow-up program being updated.</p>	No applicable activities were undertaken in the reporting year.
2.8 2.8.1 to 2.8.5	<p>The Proponent shall, where a follow-up program is a requirement of a condition set out in this Decision Statement:</p> <ul style="list-style-type: none"> <li>• 2.8.1 - implement the follow-up program according to the information determined pursuant to condition 2.5 and any requirements specified in conditions specific to each follow-up program;</li> <li>• 2.8.2 - conduct monitoring and analysis to verify the accuracy of the environmental assessment as it pertains to the particular condition and/or to determine the effectiveness of mitigation measure(s);</li> <li>• 2.8.3 - determine whether modified or additional mitigation measure(s) are required based on the monitoring and analysis undertaken pursuant to condition 2.8.2;</li> <li>• 2.8.4 - if modified or additional mitigation measures are required pursuant to condition 2.8.3, develop and implement these technically and economically feasible mitigation measure(s) as soon as feasible and monitor them pursuant to condition 2.8.2. The Proponent shall notify the Agency within 24 hours of any modified or additional mitigation measure being implemented and provide a detailed description of the measure, if not previously submitted to the Agency, within 7 days; and</li> <li>• 2.8.5 - report all results of the follow-up program including all data collected, analyses, and monitoring reports to the Agency no later than March 31 following any reporting year during which the follow-up program is implemented and, subject to information determined pursuant to 2.5.2, to the party or parties being consulted during the development of the follow-up program.</li> </ul>	No applicable activities were undertaken in the reporting year.
2.9	<p>Where consultation with Indigenous groups (Roberts Bank), Indigenous groups (marine shipping), and/or Indigenous groups (Fraser River) is a requirement of a follow-up program, the Proponent shall discuss the follow-up program with each group and shall determine, in consultation with each group, opportunities for their participation in the implementation of the follow-up program, including the conduct of monitoring, the analysis and reporting of follow-up results and whether modified or additional mitigation measure(s) are required, as set out in condition 2.8.</p>	No applicable activities were undertaken in the reporting year.
2.10 2.10.1 to 2.10.10	<p>The Proponent shall prepare an annual report that sets out, for each reporting year:</p> <ul style="list-style-type: none"> <li>• 2.10.1 - the activities undertaken by the Proponent to comply with each of the conditions set out in this Decision Statement;</li> <li>• 2.10.2 - how the Proponent complied with condition 2.1;</li> <li>• 2.10.3 - for conditions set out in this Decision Statement for which consultation is a requirement, a summary and full record of any views and information received during or as a result of consultation and how the Proponent considered and addressed the views and information received as well as any outstanding issues and whether the outstanding issues impede compliance with any conditions;</li> <li>• 2.10.4 - the Indigenous knowledge the Proponent has received and how it was considered in the development and implementation of conditions set out in this Decision Statement. The Proponent shall respect Indigenous knowledge protocols and shall keep received Indigenous knowledge confidential, if requested, and/or if required by legal and regulatory requirements;</li> <li>• 2.10.5 - the information referred to in conditions 2.5 for each follow-up program and any update to that information made pursuant to condition 2.6;</li> <li>• 2.10.6 - a summary of the results of the follow-up program requirements;</li> <li>• 2.10.7 - any modified or additional mitigation measure implemented or proposed to be implemented by the Proponent, as determined pursuant to condition 2.8;</li> </ul>	The port authority prepared an annual report for 2023 that provides all the specified information and submitted it to IAAC on March 31, 2024. This report was provided in accordance with condition 2.10 to describe the activities undertaken to comply with each of the conditions set out in the Decision Statement.

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
	<ul style="list-style-type: none"> <li>2.10.8 - for any conditions where implementation is specifically stated to be dependent in whole or in part upon economic or technical feasibility, and the Proponent determines it is not economically or technically feasible, the Proponent shall provide a reasonable justification for that determination;</li> <li>2.10.9 - the activities undertaken by the Proponent related to its participation in regional initiatives; and</li> <li>2.10.10 - for any plan that is a requirement of a condition set out in this Decision Statement, any update(s) to the plan that have been made during the reporting year.</li> </ul>	
2.11	The first reporting year for which the Proponent shall prepare an annual report pursuant to condition 2.10 shall start on the day the Minister of the Environment issues the Decision Statement to the Proponent pursuant to subsection 54 (1) of the Canadian Environmental Assessment Act, 2012.	This report includes information for the reporting year, April 20, 2023, to December 31, 2023. The requirements of this condition have been met.
2.12	The Proponent shall submit to the Agency the annual report referred to in condition 2.10, including a plain language executive summary in both official languages, no later than March 31 following the reporting year to which the annual report applies.	This report, including a plain language executive summary in both official languages, was submitted to IAAC on March 31, 2024.
2.13	The Proponent shall publish on the Internet the annual reports and the executive summaries referred to in conditions 2.10 and 2.12, greenhouse gas reduction plan and monitoring results referred to in conditions 3.2 and 3.3, biofilm follow-up program results referred to in conditions 10.4, the reports related to accidents and malfunctions referred to in conditions 20.6.3 and 20.6.4, the accident and malfunction communication plan referred to in condition 20.7, the schedules referred to in conditions 21.1 and 21.2, and any update or revision to the above documents, upon submission of these documents to the parties referenced in the respective conditions. The Proponent shall keep these documents publicly available for 15 years following their publication. The Proponent shall notify the Agency and Indigenous groups (Roberts Bank), Indigenous groups (marine shipping), and Indigenous groups (Fraser River) of the availability of these documents within two business days of their publication.	<p>In accordance with condition 2.13:</p> <ul style="list-style-type: none"> <li>The 2023 annual report and executive summary (in both official languages) will be published on the internet following submission of this annual report to IAAC.</li> <li>The greenhouse gas reduction plan (3.2) and follow-up program (3.3), biofilm follow-up program (10.4), accident and malfunctions plan (20.6.3 and 10.6.4) and accident and malfunction communications plan (20.7) are in development and as such will not be published on the internet until they are complete.</li> <li>The schedules referred to in conditions 21.1 and 21.1 will be developed prior to construction and operation, and as such will not be published on the internet until that time.</li> </ul>
2.14	When the development of any plan is a requirement of a condition set out in this Decision Statement, the Proponent shall submit the plan to the Agency prior to the commencement of the activity or activities to which the plan pertains, unless otherwise required through the condition.	No applicable actions were undertaken in the reporting year.
2.15	The Proponent shall notify the Agency and Indigenous groups (Roberts Bank), Indigenous groups (marine shipping), and Indigenous groups (Fraser River) in writing no later than 30 days after the day on which there is any transfer of ownership or control of the Designated Project in whole or in part.	No applicable actions were undertaken in the reporting year.
2.16 2.16.1 to 2.16.3	<p>If the Proponent is proposing to carry out the Designated Project in a manner other than described in condition 1.7, the Proponent shall notify the Agency in writing in advance of carrying out the proposed activities. As part of the notification, the Proponent shall provide:</p> <ul style="list-style-type: none"> <li>2.16.1 - a description of the proposed change(s) to the Designated Project and the environmental effects that may result from the proposed change(s);</li> <li>2.16.2 - Any modified or additional measure to mitigate any environmental effect that may result from the proposed change(s) and any modified or additional follow-up requirement; and</li> <li>2.16.3 - an explanation of how, taking into account any modified or additional mitigation measure referred to in condition 2.16.2, the environmental effects that may result from the proposed change(s) may differ from the environmental effects of the Designated Project identified during the environmental assessment.</li> </ul>	No applicable actions were undertaken in the reporting year.

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
2.17	The Proponent shall provide to the Agency any additional information required by the Agency about the proposed change(s) referred to in condition 2.16, which may include the results of consultation with one or more of the Indigenous groups identified in conditions 1.22, 1.23, and 1.24 and relevant authorities on the proposed change(s) and environmental effects referred to in condition 2.16.1 and the modified or additional mitigation measures and follow-up requirements referred to in condition 2.16.2.	No applicable actions were undertaken in the reporting year.

### 3. Air quality and greenhouse gas emissions

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
3.1	The Proponent shall provide and maintain, during operation, electrical power connection(s) so that all container vessels equipped to plug into land-based electrical power while berthed at the marine terminal can do so to reduce the use of diesel powered auxiliary engines	No applicable actions were undertaken in the reporting year.
3.2 3.2.1 to 3.2.6	<p>The Proponent shall develop, in consultation with Indigenous groups (Roberts Bank), Environment and Climate Change Canada, British Columbia's Ministry of Environment and Climate Change Strategy and Metro Vancouver, greenhouse gas management plans for construction and operation of the marine terminal, the widened causeway, and the expanded tug basin, to improve energy efficiency and reduce greenhouse gas emissions. The Proponent shall develop each plan prior to the relevant phase of the Designated Project and implement each plan throughout the relevant phase of the Designated Project. The Proponent shall take into account applicable federal, provincial and regional greenhouse gas reduction strategies when developing and implementing the plans. As part of each plan, the Proponent shall:</p> <ul style="list-style-type: none"> <li>3.2.1 - identify the sources of direct and indirect greenhouse gas emissions applicable to each phase of the Designated Project covered by the greenhouse gas management plan;</li> <li>3.2.2 - identify the commercially available technologies and practices which have the potential to reduce greenhouse gas emissions from each phase of the Designated Project covered by the greenhouse management plan, including emerging technologies and practices at a sufficiently advanced stage of technological development to become technically and economically feasible over the life of the Designated Project;</li> <li>3.2.3 - determine how each technically and economically feasible technology or practice identified pursuant to condition 3.2.2 will be implemented by the Proponent during each phase of the Designated Project, including consideration of when any equipment associated with the Designated Project that contributes to the emission of greenhouse gases will need to be replaced with equipment of lower greenhouse gas intensity;</li> <li>3.2.4 - review the Proponent's existing voluntary and incentive-based greenhouse gas reduction programs, as indicated in Table 7-3 of the Federal Review Panel Report, indicate within each plan whether the existing programs could be improved to include mandatory measures, and apply any applicable mandatory measures to the Designated Project;</li> <li>3.2.5 - establish greenhouse gas emission reduction targets for specific intervals that aim to reduce overall emissions and that take into account how the Proponent plans to implement the technologies and practices in the manner referred to in condition 3.2.2 and any greenhouse gas reduction programs referred to in condition 3.2.4;</li> <li>3.2.6 - Review the operational greenhouse gas management plan every five years from the start of operation of the marine terminal, the widened causeway, and the expanded tug basin. The Proponent shall take into account the results of the follow-up program referred to in condition 3.3 when reviewing and, if necessary updating the plan. If the Proponent updates the plan, the Proponent shall submit any updated</li> </ul>	<p><b>Development</b> – The port authority has initiated development of an outline for the construction phase greenhouse gas (GHG) management plan, a sub-plan of the construction environmental management plan (CEMP). The GHG management plan will address the information requirements specified in this condition.</p> <p><b>Consultation with First Nations</b> – The port authority has initiated consultation on the development of the GHG management plan outline.</p> <p><b>Consultation with government bodies</b> – No applicable actions were undertaken in the reporting year.</p>



Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
	<p>plan to the Agency and to Environment and Climate Change Canada within 30 days of the revision of the plan. As part of the review of the plan, the Proponent shall:</p> <ul style="list-style-type: none"> <li>• 3.2.6 – Review the operational greenhouse gas management plan every five years from the start of operation of the marine terminal, the widened causeway, and the expanded tug basin. The Proponent shall take into account the results of the follow-up program referred to in condition 3.3 when reviewing and, if necessary updating the plan. If the Proponent updates the plan, the Proponent shall submit any updated plan to the Agency and to Environment and Climate Change Canada within 30 days of the revision of the plan. As part of the review of the plan, the Proponent shall:               <ul style="list-style-type: none"> <li>– 3.2.6.1 – review the technologies and practices referred to in condition 3.2.2 and update the plan if it identifies other emerging technologies and practices that are at a sufficiently advanced stage of technological development to become technically and economically feasible over the life of the Designated Project;</li> <li>– 3.2.6.2 – review the greenhouse gas reduction programs referred to in condition 3.2.4 for any additional improvements; and</li> <li>– 3.2.6.3 – determine whether the reduction targets referred to in condition 3.2.5 need to be revised in light of the information referred to in condition 3.2.6.1 and, if so, revise the targets.</li> </ul> </li> </ul>	<p>No applicable actions were undertaken in the reporting year.</p>
<p>3.3 3.3.1 to 3.3.3</p>	<p>The Proponent shall develop, prior to construction, and implement, during all phases of the Designated Project, a follow-up program to determine the effectiveness of the mitigation measures as it pertains to greenhouse gas emissions. The Proponent shall develop and implement the follow-up program in consultation with Indigenous groups (Roberts Bank), Environment and Climate Change Canada, British Columbia's Ministry of Environment and Climate Change Strategy, and Metro Vancouver and in accordance with conditions 2.5 to 2.9. As part of the implementation of the follow-up program, the Proponent shall:</p> <ul style="list-style-type: none"> <li>• 3.3.1 – quantify and report annually, during operation and as part of the annual report referred to in condition 2.10, annual greenhouse gas emissions resulting from operation of the marine terminal, the widened causeway and the expanded tug basin, including the methodology, assumptions and all supporting data;</li> <li>• 3.3.2 – quantify and report annually, as part of the annual report referred to in condition 2.10, annual greenhouse gas emissions arising from construction activities, transportation activities not directly supporting the operation of the marine terminal, and other types of indirect emissions attributable to the Designated Project, including the methodology, assumptions and all supporting data. The Proponent shall specify if indirect emissions data is unavailable or if estimates have been made based on available information; and</li> <li>• 3.3.3 – use methods outlined in the Canada's Greenhouse Gas Quantification Requirements, as updated, or, where emission source methods are not specified for a certain activity, methods consistent with the 2006 Intergovernmental Panel on Climate Change Guidelines for National Greenhouse Gas Inventories, to quantify emissions pursuant to conditions 3.3.1 and 3.3.2. The Proponent shall justify the methodology used to quantify emissions from any activity not specified in Canada's Greenhouse Gas Quantification Requirements.</li> </ul>	<p>No applicable actions were undertaken in the reporting year.</p>
<p>3.4 3.4.1 to 3.4.1.4</p>	<p>The Proponent shall develop, prior to the commencement of activities to which they pertain and in consultation with Environment and Climate Change Canada, British Columbia's Ministry of Environment and Climate Change Strategy, the City of Delta, Metro Vancouver, and Indigenous groups (Roberts Bank), measures to mitigate adverse environmental effects caused by air emissions emitted from the construction and operation of the marine terminal, the widened causeway, and the expanded tug basin during each phase of the Designated Project. The Proponent shall implement the measures throughout the relevant phase of the Designated Project. As part of these measures, the Proponent shall:</p>	<p><b>Development</b> – Measures to mitigate adverse environmental effects caused by project-related air emissions will be included within the air emissions management plans for construction and operation. The port authority has initiated development of an outline for the air emissions management plan for construction, a sub-plan of the CEMP. The air emissions management plan will address the information requirements specified in this condition.</p> <p><b>Consultation with First Nations</b> – The port authority has initiated consultation on the development of the air emissions management plan outline. Consultation was initiated prior to the issuance of the Decision Statement and continued in the reporting year.</p>

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
	<ul style="list-style-type: none"> <li>• 3.4.1 – mitigate emissions of dust attributable to the construction of the marine terminal, the widened causeway, and the expanded tug basin, while minimizing freshwater use where technically and economically feasible, including by:               <ul style="list-style-type: none"> <li>• 3.4.1.1 – regularly sweeping any paved surface located within the Designated Project area;</li> <li>• 3.4.1.2 – installing and using a wheel washer;</li> <li>• 3.4.1.3 – regularly using water spray on any unpaved surface and exposed stockpiles within the open storage area located within the Designated Project area;</li> <li>• 3.4.1.4 -stabilizing any exposed earthwork as soon as possible;</li> </ul> </li> </ul>	<p><b>Consultation with government bodies</b> – No applicable actions were undertaken in the reporting year.</p>
3.4.2 – 3.4.4	<ul style="list-style-type: none"> <li>• 3.4.2 - Provide incentives to third-party contractors to use zero-emission mobile and stationary off-road equipment required for any physical activity undertaken in relation to the construction and operation of the marine terminal, the widened causeway, and the expanded tug basin or, if zero-emission equipment is not available or its use is not technically or economically feasible, provide a rationale for that determination and require third-party contractors to use equipment that:               <ul style="list-style-type: none"> <li>– 3.4.2.1 - uses diesel engines operating on diesel or low-carbon diesel fuel that meet Tier 4 emissions standards where technically and economically feasible or, at a minimum, Tier 3 emission standards and is equipped with verified diesel particulate filters and for which both the engines and the filters are maintained in accordance with maintenance instructions provided by the manufacturer; or</li> <li>– 3.4.2.2 - uses low-carbon fuel, which may include natural gas, propane or hydrogen, while meeting Tier 4 emissions standards where technically and economically feasible or, at a minimum, Tier 3 emission standards and being maintained in accordance with maintenance instructions provided by the manufacturer;</li> </ul> </li> <li>• 3.4.3 - ensure emission control technologies are not removed from any diesel-powered equipment, unless removal is necessary for repair and maintenance activities, after which the emission control technologies shall be replaced prior to resuming work; and</li> <li>• 3.4.4 - require, from the start of operation, on-site cargo handling equipment required for operation of the marine terminal to be zero-emitting through the use of electric, hydrogen fuel cell or other technology, except the horizontal transport equipment. The Proponent shall use low-emission horizontal transport equipment, until such a time as it becomes technically and economically feasible to transition the fleet of selected horizontal transport equipment.</li> </ul>	<p>No applicable actions were undertaken in the reporting year.</p>
3.5	<p>The Proponent shall develop, prior to construction, and implement, during all phases of the Designated Project, a no-idling policy for all mobile equipment and vehicles within the Designated Project area. The Proponent shall require that all persons abide by this policy, unless not technically feasible or not feasible for health or safety reasons. The Proponent shall submit the policy to the Agency prior to construction.</p>	<p>No applicable actions were undertaken in the reporting year.</p>
3.6 3.6.1 to 3.6.7	<p>The Proponent shall develop, prior to each phase of the Designated Project and in consultation with Environment and Climate Change Canada, Health Canada, British Columbia’s Ministry of Environment and Climate Change Strategy, British Columbia’s Ministry of Health, the City of Delta, Metro Vancouver, and Indigenous groups (Roberts Bank), and to the satisfaction of a qualified professional, a follow-up program as described in Table C21 of <b>Appendix G</b> in the Federal Review Panel Report to verify the accuracy of the environmental assessment and determine the effectiveness of mitigation measures as it pertains to adverse changes to air quality attributable to the construction and operation of the marine terminal, the widened causeway, and the expanded tug basin and related environmental effects on human health. The Proponent shall implement the follow-up program in accordance with conditions 2.5 to 2.9. As part of the follow-up program, the Proponent shall:</p> <ul style="list-style-type: none"> <li>• 3.6.1 - determine, for each phase of the Designated Project, the criteria air contaminants and trace organic contaminants to be monitored and reported on, including NO<sub>2</sub>, O<sub>3</sub>, SO<sub>2</sub>, TPM, PM<sub>10</sub> and PM<sub>2.5</sub>, the equipment to be used to obtain air quality concentrations and meteorological data, the frequency of data</li> </ul>	<p><b>Development</b> – The port authority has initiated development of the air quality-related effects on human health follow-up program (FUP), including initial scoping of an additional air quality monitoring station on Tsawwassen First Nation lands.</p> <p><b>Consultation with First Nations</b> – The port authority has initiated consultation on the development of the air quality-related effects on human health FUP. Consultation was initiated prior to issuance of the Decision Statement and continued in the reporting year. Specifically, in accordance with conditions 3.6.1, 3.6.3 and 3.6.4, through consultation the port authority has identified the contaminants proposed to be monitored and identified the proposed location of an additional permanent air quality monitoring station on Tsawwassen First Nation lands. Comment response tables related to First Nation consultation on this condition are provided in <b>Appendix B</b>.</p>

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
	<p>analysis and reporting requirements, and the human health thresholds to be used for the purpose of condition 3.6.5;</p> <ul style="list-style-type: none"> <li>• 3.6.2 - conduct, during construction, inventories of emissions of the contaminants determined for the construction phase pursuant to condition 3.6.1 within the Roberts Bank port complex, including emissions from the Deltaport Terminal and Westshore Terminals, as well as the BC Ferries Tsawwassen Terminal, to the extent such information is available to the Proponent;</li> <li>• 3.6.3 - monitor, during construction, the contaminants determined for the construction phase pursuant to condition 3.6.1 at existing air quality monitoring stations operated by Metro Vancouver and at additional air quality monitoring station(s) in locations potentially affected by the construction of the marine terminal, the widened causeway, and the expanded tug basin, as determined in consultation with the parties involved in the development of the follow-up program;</li> <li>• 3.6.4 - monitor, during operation, the contaminants determined for the operation phase pursuant to condition 3.6.1 at existing air quality monitoring stations operated by Metro Vancouver and at additional air quality monitoring station(s) in locations potentially affected by the operation of the marine terminal, the widened causeway, and the expanded tug basin, as determined in consultation with the parties involved in the development of the follow-up program;</li> <li>• 3.6.5 - if the results of the monitoring referred to in conditions 3.6.3 or 3.6.4 demonstrate any exceedance of the most stringent applicable air quality criteria set out in the Canadian Ambient Air Quality Standards or British Columbia Air Quality Objectives or human health thresholds, notify Metro Vancouver and determine, in consultation with the parties involved in the development of the follow-up program, the source of any such exceedance;</li> <li>• 3.6.6 - for any exceedance determined pursuant to condition 3.6.5 to be attributable to the construction and operation of the marine terminal, the widened causeway, and the expanded tug basin, develop and implement modified or additional measures to mitigate air quality emissions, which may include the reduction or cessation of one or more construction activities; and</li> <li>• 3.6.7 - share the results of the follow-up program on a regular basis with the parties being involved in the development of the follow-up program, including through meetings and the provision of monthly summaries of measured ambient air quality concentrations.</li> </ul>	<p><b>Consultation with government bodies</b> – The port authority has initiated consultation with government bodies on the development of the air quality-related effects on human health FUP. Consultation was initiated prior to issuance of the Decision Statement and is ongoing. Comment response tables related to government consultation on this condition are provided in <b>Appendix C</b>.</p>

#### 4. Atmospheric noise and vibration

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
<p>4.1 4.1.1 to 4.1.5</p>	<p>The Proponent shall develop, prior to the relevant phase of the Designated Project and in consultation with Indigenous groups (Roberts Bank), Environment and Climate Change Canada, Health Canada, and the City of Delta, technically and economically feasible measures to mitigate adverse environmental effects of atmospheric noise and vibration emitted from the construction and operation of the marine terminal, the widened causeway, and the expanded tug basin. The Proponent shall implement the measures during the relevant phase of the Designated Project. As part of these measures, the Proponent shall:</p> <ul style="list-style-type: none"> <li>• 4.1.1 - use soft start procedures to increase the sound levels emitted by construction equipment gradually before use at full operational power;</li> <li>• 4.1.2 - use alarms on moving or operating equipment with sound levels that adjust to the surrounding ambient sound levels subject to safety requirements;</li> <li>• 4.1.3 - require employees and contractors involved in or responsible for noise-generating activities in the Designated Project area to undertake training related to best practices for noise reduction related to those activities;</li> <li>• 4.1.4 - use and maintain atmospheric noise-dampening technologies on all vehicles and equipment used by the Proponent for construction and operation of the Designated Project in the Designated Project area and keep them in good working order, including through the implementation of a regular inspection program; and</li> </ul>	<p><b>Development</b> – Measures to mitigate adverse environmental effects of project-related atmospheric noise and vibration will be included within the noise and vibration management plans for construction and operation. The port authority has initiated development of an outline for the construction phase noise and vibration management plan, which will be a sub-plan of the CEMP. The noise and vibration management plan will address the information requirements specified in this condition.</p> <p><b>Consultation with First Nations</b> – The port authority has initiated consultation on the development of the noise and vibration management plan outline.</p> <p><b>Consultation with government bodies</b> – No applicable actions were undertaken in the reporting year.</p>

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
	<ul style="list-style-type: none"> <li>4.1.5 - install and maintain, to the satisfaction of a qualified professional, acoustic barriers around atmospheric noise-emitting components and activities to mitigate noise that may result in injury or behavioral changes to wildlife.</li> </ul>	
4.2	<p>The Proponent shall develop, prior to construction and in consultation with Tsawwassen First Nation and Health Canada, mitigation measures to reduce low-frequency noise caused by the construction and operation of the marine terminal, the widened causeway, and the expanded tug basin. The Proponent shall implement these measures during construction and operation and submit these measures to the Agency prior to implementing them.</p>	No applicable actions were undertaken in the reporting year.
4.3 4.3.1 to 4.3.6	<p>The Proponent shall develop, prior to each phase of the Designated Project and in consultation with the City of Delta, Health Canada, and Indigenous groups (Roberts Bank), a follow-up program as described in Table C22 of Appendix G in the Federal Review Panel Report to verify the accuracy of the environmental assessment and determine the effectiveness of mitigation measures as it pertains to adverse environmental effects on human health caused by noise and vibration attributable to the construction and operation of the marine terminal, the widened causeway, and the expanded tug basin. The Proponent shall implement the follow-up program in accordance with conditions 2.5 to 2.9. As part of the follow-up program, the Proponent shall:</p> <ul style="list-style-type: none"> <li>4.3.1 - determine, prior to construction, the data requirements for noise monitoring for all phases of the Designated Project;</li> <li>4.3.2 - consider Health Canada's noise guidance and associated thresholds that are available at the time the follow-up program is developed when determining human health threshold(s) that would require the Proponent to implement modified or additional mitigation measure(s) pursuant to condition 4.3.6;</li> <li>4.3.3 - consider the most sensitive human receptors, including potential receptors in the marine environment, when determining the location of noise monitoring;</li> <li>4.3.4 - monitor sound levels, including low-frequency noise, continuously during construction and the first two years of operation at a minimum of two locations on Tsawwassen First Nation lands, to be determined in consultation with Tsawwassen First Nation;</li> <li>4.3.5 - monitor sound levels, including low-frequency noise offshore from the marine terminal, the widened causeway, and the expanded tug basin at a frequency and location and for a duration determined in consultation with Indigenous groups (Roberts Bank); and</li> <li>4.3.6 - develop and implement modified or additional mitigation measures to mitigate the noise contribution of the construction and operation of the marine terminal, the widened causeway, and the expanded tug basin, at source or at any receptor location where sound levels are monitored, if the results of any monitoring conducted as part of the follow-up program demonstrate that noise levels attributable to the Designated Project at any receptor location are higher than noise levels predicted during the environmental assessment and/or are above the relevant human health threshold(s) defined in the follow-up program.</li> </ul>	No applicable actions were undertaken in the reporting year.
4.4 4.4.1 to 4.4.4	<p>The Proponent shall develop, prior to construction and in consultation with the City of Delta, a protocol for receiving complaints related to human health effects from exposure to noise attributable to the construction and operation of the marine terminal, the widened causeway, and the expanded tug basin. The Proponent shall implement the protocol during construction and operation. The Proponent shall provide the protocol to the Agency prior to construction. As part of the implementation of the protocol, the Proponent shall:</p> <ul style="list-style-type: none"> <li>4.4.1 - communicate, prior to construction, with residents and communities located within the upland noise and vibration study area indicated by the Proponent on Figure 9.3-1 of the environmental impact statement, to provide the details of the protocol, including how to record a complaint;</li> <li>4.4.2 - provide notification of noise-generating construction activities to the residents and communities referred to in condition 4.4.1 prior to carrying them out;</li> <li>4.4.3 - respond to any noise complaint attributed to any component of the Designated Project within 48 hours of the complaint being received and implement any technically and economically feasible corrective</li> </ul>	No applicable actions were undertaken in the reporting year.

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
	action, if required to reduce exposure to noise to below human health thresholds defined in the follow-up program referred to in condition 4.3, in a timely manner; and <ul style="list-style-type: none"> <li>4.4.4 -provide, on a quarterly basis, a report to the Agency and residents and communities referred to in condition 4.4.1. The report shall include any corrective actions taken during the reporting period.</li> </ul>	

## 5. Light

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
5.1 5.1.1 to 5.1.7	The Proponent shall develop, prior to the relevant phase of the Designated Project and in consultation with Indigenous groups (Roberts Bank), Environment and Climate Change Canada, Fisheries and Oceans Canada, Transport Canada, and the City of Delta, measures to mitigate adverse environmental effects caused by light emitted during construction and operation of the marine terminal, the widened causeway, and the expanded tug basin, while meeting safety, operational, or regulatory requirements. As part of these measures, the Proponent shall: <ul style="list-style-type: none"> <li>5.1.1 - avoid the use of decorative terminal lighting and solid burning or slow pulsing warning lights;</li> <li>5.1.2 - orient terminal lights downward and limit light use to areas where Designated Project activities are occurring, including through the use of down-shielded lighting fixtures;</li> <li>5.1.3 - control terminal light levels and reduce light intensity</li> <li>5.1.4 - install terminal light fixtures that emit light with wavelengths and/or correlated colour temperatures that are shown to reduce effects to fish, birds and/or other wildlife, to the satisfaction of a qualified professional;</li> <li>5.1.5 - design and install, on terminal structures, obstruction avoidance lighting of reduced intensity and flashing frequency;</li> <li>5.1.6 - design and install nighttime terminal lighting to avoid exceedances of 100 lux on the adjacent sea bed within 50 m of the terminal; and</li> <li>5.1.7 - implement measures to reduce effects caused by light emitted from the marine terminal on Brunswick Point.</li> </ul>	<p><b>Development</b> – Measures to mitigate adverse environmental effects caused by project-related light will be included within light management plans for construction and operation. The port authority has initiated development of an outline for the construction-phase light management plan, a sub-plan of the CEMP. The light management plan will address the information requirements specified in this condition.</p> <p><b>Consultation with First Nations</b> – The port authority has initiated consultation on the development of the light management plan outline.</p> <p><b>Consultation with government bodies</b> – No applicable actions were undertaken in the reporting year.</p>
5.2 5.2.1 to 5.2.4	The Proponent shall develop, prior to construction and in consultation with Environment and Climate Change Canada, Fisheries and Oceans Canada, the City of Delta, Transport Canada, Tsawwassen First Nation, and other Indigenous groups (Roberts Bank), a follow-up program as described in Table C20 of <b>Appendix G</b> in the Federal Review Panel Report to verify the accuracy of the environmental assessment and determine the effectiveness of mitigation measures as it pertains to adverse changes to ambient lighting attributable to the construction and operation of the marine terminal, the widened causeway, and the expanded tug basin, including in the marine environment. The Proponent shall implement the follow-up program in accordance with conditions 2.5 to 2.9. As part of the follow-up program, the Proponent shall: <ul style="list-style-type: none"> <li>5.2.1 - monitor light trespass and sky glow at the points of reception POR 1, POR 2, POR 7, POR 11 indicated on Figure 7-2 of the Federal Review Panel Report and at the nighttime points of reception N-POR 5 and N-POR 6 indicated on Figure 20-1 of the Federal Review Panel Report, and compare monitoring results to the relevant classification from the International Commission on Illumination referred to in Tables 7-8 and 7-9 of the Federal Review Panel Report;</li> <li>5.2.2 - establish pre-construction light levels in the marine environment from natural light and artificial light from existing infrastructure, including during the spring-summer period when salmon are present at Roberts Bank;</li> <li>5.2.3 - monitor light levels in the marine environment during operation and compare monitoring results to the pre-construction light levels established pursuant to condition 5.2.2; and</li> <li>5.2.4 - develop and implement modified or additional mitigation measures, while meeting safety, operational, and regulatory requirements if the results of the monitoring referred to in condition 5.2.1 or 5.2.3 demonstrate that modified or additional mitigation measures are required to mitigate light trespass,</li> </ul>	No applicable actions were undertaken in the reporting year.

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
	sky glow, or marine light levels attributable to the construction and operation of the marine terminal, the widened causeway, and the expanded tug basin.	

## 6. Marine environment

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
6.1	The Proponent shall have a qualified professional design the dykes in a manner to minimize channel formation in the seabed, and shall construct the dykes according to this design.	The reference concept design was developed by a Qualified Professional and was done in the manner specified in condition 6.1. Further design work will be reported on in future reporting years, when detailed design is advanced.
6.2	The Proponent shall construct the northwest corner of the terminal in a manner that reduces the potential for seabed scour and sediment deposition identified on Figures IR2020-4-25 and IR2020-4-26 (Canadian Impact Assessment Registry Reference Number 80054, Document Number 2083).	The reference concept design reflected in Figure 1 of the Designated Project Description includes a rounding of the northwest corner to reduce potential for seabed scour and sediment deposition. The terminal will be constructed accordingly, and compliance will be reported on in future when construction of the northwest corner is complete.
6.3	The Proponent shall not use vibro-replacement techniques for construction of the Designated Project in the marine environment.	No applicable actions were undertaken in the reporting year.
6.4 6.4.1 to 6.4.2	<p>The Proponent shall take into account the Canadian Council of Ministers of the Environment's Water Quality Guidelines for the Protection of Aquatic Life and British Columbia's Approved Water Quality Guidelines: Aquatic Life, Wildlife and Agriculture when undertaking in-water work activities required for the Designated Project that use concrete, and do so in a manner consistent with the Fisheries Act and its regulations. In doing so, the Proponent shall:</p> <ul style="list-style-type: none"> <li>6.4.1 – use pre-cast concrete or, if the use of pre-cast concrete is not technically or economically feasible, isolate concrete from the receiving environment until properly cured, using concrete tight forms or other equivalent method, unless otherwise authorized under the Fisheries Act; and</li> <li>6.4.2 – if using cast-in-place concrete, monitor pH concentrations in the receiving environment, and implement modified or additional mitigations measures if pH concentrations exceed levels outlined in the Canadian Council of Ministers of the Environment's Water Quality Guidelines for the Protection of Aquatic Life or British Columbia's Approved Water Quality Guidelines: Aquatic Life, Wildlife and Agriculture or otherwise required under the Fisheries Act. If baseline levels exceed the guidelines, the Proponent shall follow the Canadian Council of Ministers of the Environment's Guidance on the Site-Specific Application of Water Quality Guidelines in Canada: Procedures for Deriving Numerical Water Quality Objectives.</li> </ul>	No applicable actions were undertaken in the reporting year.
6.5	The Proponent shall develop, prior to the relevant phase of the Designated Project, in consultation with Indigenous groups (Roberts Bank) and to the satisfaction of a qualified professional, measures to control erosion and sedimentation in the Designated Project area, taking into account future climate change scenarios. The Proponent shall implement the measures during all phases of the Designated Project and submit the measures to the Agency prior to implementing them.	<p><b>Development</b> – Measures to control erosion and sedimentation will be included within erosion and sediment control management plan. The port authority has initiated development of an outline for the construction-phase erosion and sediment control management plan, a sub-plan of the CEMP.</p> <p><b>Consultation with First Nations</b> – The port authority has initiated consultation on the development of the erosion and sediment management plan outline.</p> <p><b>Consultation with government bodies</b> – No applicable actions were undertaken in the reporting year.</p>
6.6	The Proponent shall regularly inspect, subject to safety requirements, all erosion and sediment control measures installed within the Designated Project area pursuant to condition 6.5, including during and following rainfall events, and shall document and repair any defective or damaged control measure in a timely manner.	No applicable actions were undertaken in the reporting year.

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
6.7	The Proponent shall collect and treat any storm water from new impervious areas associated with the marine terminal and widened causeway within the Designated Project area in a manner consistent with the Fisheries Act and its regulations and any authorization issued to the Proponent pursuant to the Fisheries Act before discharging that storm water into waters frequented by fish or in any place under any conditions where the storm water or any other deleterious substance that results from the discharge of the storm water may enter waters frequented by fish. The Proponent shall design the storm water treatment system(s) taking into account future climate change scenarios.	No applicable actions were undertaken in the reporting year.
6.8	The Proponent shall, prior to fill placement, characterize representative samples of all fill material from an off-site location, including quarry material, Fraser sand, dredged material and other material that may be used as fill and shall evaluate whether the use of the fill material during Designated Project construction activities, including supernatant discharge, would result in marine pollution as defined in the London Protocol and according to advice received from Environment and Climate Change Canada during the environmental assessment (Canadian Impact Assessment Registry Reference Number 80054, Document Number 1091) or in pollution as defined in subsection 1(1) of British Columbia's Environmental Management Act. The evaluation of the potential for marine pollution shall be conducted by a qualified professional and shall be based on consideration of the Government of Canada's Recommended Environmental Quality Guidelines for the Protection of Southern Resident Killer Whales and their Prey and on existing ambient concentrations in the receiving environment. The Proponent shall not use any materials as fill if the evaluation indicates that marine pollution is likely to occur, unless modified or additional mitigation measures are implemented to prevent marine pollution.	<p><b>Development</b> – Procedures to characterize representative samples of fill material from off-site locations will be documented within the dredging and sediment discharge management plan. The port authority has initiated development of an outline for the dredging and sediment discharge management plan, a sub-plan of the CEMP.</p> <p><b>Consultation with First Nations</b> – The port authority has initiated consultation on the development of the dredging and sediment discharge management plan outline.</p> <p><b>Consultation with government bodies</b> – No applicable actions were undertaken in the reporting year.</p>
6.9 6.9.1 to 6.9.2.2	The Proponent shall not use material dredged from the upper 0.5 metres of the existing tug basin and the tug basin expansion area as fill for land development for the Designated Project, nor for offsetting plans unless the Proponent: <ul style="list-style-type: none"> <li>• 6.9.1 – prevents the discharge of supernatant containing material dredged from the upper 0.5 metres of the existing tug basin and the tug basin expansion area; or</li> <li>• 6.9.1.2 – ensures that:                             <ul style="list-style-type: none"> <li>• 6.9.2.1 - sediment polychlorinated biphenyl levels in the supernatant do not exceed concentrations protective of Southern Resident Killer Whale (<i>Orcinus orca</i>), including those in the Government of Canada's Recommended Environmental Quality Guidelines for the Protection of Southern Resident Killer Whales and their Prey and in the British Columbia's Working Sediment Quality Guidelines, prior to discharge; or</li> <li>• 6.9.2.2 – discharge of supernatant will not increase ambient polychlorinated biphenyl concentrations in Southern Resident Killer Whale (<i>Orcinus orca</i>) critical habitat, including in the water column, sediment, and prey species.</li> </ul> </li> </ul>	No applicable actions were undertaken in the reporting year.
6.10 6.10.1 to 6.10.5	The Proponent shall develop, prior to construction and in consultation with Environment and Climate Change Canada, British Columbia's Ministry of Land, Water, and Resource Stewardship, British Columbia's Ministry of Environment and Climate Change Strategy, and Indigenous groups (Roberts Bank), measures to mitigate the release of sediments to the water column during dredging activities, taking into account the Fraser River Estuary Management Program Dredge Management Guidelines. As part of these measures, the Proponent shall: <ul style="list-style-type: none"> <li>• 6.10.1 - minimize the dispersal of sediments when dredging the upper 0.5 metres of sediments from the existing tug basin and tug basin expansion area;</li> <li>• 6.10.2 - establish site-specific water quality thresholds, including for turbidity and total suspended solids;</li> </ul>	<p><b>Development</b> – Measures to mitigate the release of sediments to the water column during dredging activities will be included within the dredging and sediment discharge management plan. The port authority has initiated development of an outline for the dredging and sediment discharge plan, a sub-plan of the CEMP.</p> <p><b>Consultation with First Nations</b> – The port authority has initiated consultation on the development of the dredging and sediment discharge plan outline.</p> <p><b>Consultation with government bodies</b> – No applicable actions were undertaken in the reporting year.</p>

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
	<ul style="list-style-type: none"> <li>6.10.3 - define the perimeter of the work areas around dredging activities within which water quality is monitored;</li> <li>6.10.4 – monitor water quality in real-time during dredging activities, including total suspended solids and turbidity at the perimeter of the work areas defined pursuant to 6.10.3; and</li> <li>6.10.5 - implement additional mitigation measures, including temporarily stopping or slowing dredging activities, if water quality monitoring results exceed the water quality thresholds established pursuant to condition 6.10.2.</li> </ul>	
<p>6.11 6.11.1 to 6.11.5</p>	<p>The Proponent shall develop, prior to the relevant phase of the Designated Project and in consultation with Fisheries and Oceans Canada, Natural Resources Canada, British Columbia’s Ministry of Land, Water, and Resource Stewardship, British Columbia’s Ministry of Environment and Climate Change Strategy, and Indigenous groups (Roberts Bank), a follow-up program as described in Table C2 of Appendix G in the Federal Review Panel Report to verify the accuracy of the environmental assessment as it pertains to sediment erosion and deposition and any associated eutrophication. The Proponent shall implement the follow-up program in accordance with conditions 2.5 to 2.9. As part of the follow-up program, the Proponent shall:</p> <ul style="list-style-type: none"> <li>6.11.1 - establish, prior to construction, baseline seabed geomorphic and sediment characteristics of the area predicted to be affected by the Designated Project using imagery and field measurements;</li> <li>6.11.2 - monitor scour along the northwest corner of the terminal at a frequency and for a duration determined in consultation with the parties involved in the development of the follow-up program;</li> <li>6.11.3 - implement additional mitigation measures if scour and/or environmental effects resulting from scour attributable to the Designated Project are greater than predicted in the environmental assessment unless not warranted in the circumstances as determined in consultation with Fisheries and Oceans Canada;</li> <li>6.11.4 – monitor relevant locations surrounding the Designated Project area prior to construction and for at least 10 years following the end of construction of the containment dykes to determine changes in sedimentation rates and patterns; and</li> <li>6.11.5 - verify the predictions of the environmental assessment regarding eutrophication by monitoring changes in organic enrichment indicators, including on tidal flats.</li> </ul>	<p>No applicable actions were undertaken in the reporting year.</p>



## 7. Fish and fish habitat

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
7.1	<p>The Proponent shall investigate the technical and economic feasibility of a causeway breach to allow fish passage. The Proponent shall develop the feasibility report in consultation with the British Columbia's Ministry of Transportation and Infrastructure, the British Columbia Railway Company and other landowners and tenants at Roberts Bank. The Proponent shall provide a draft of the feasibility report to Indigenous groups (Roberts Bank), Indigenous groups (marine shipping), Indigenous groups (Fraser River), Fisheries and Oceans Canada, Environment and Climate Change Canada, British Columbia's Ministry of Transportation and Infrastructure and the landowners and tenants at Roberts Bank and provide each with at least 60 days to comment. The Proponent shall provide the Agency with the final feasibility report within six months of the issuance of the Minister's Decision Statement describing whether and under what conditions a causeway breach would be technically and economically feasible, and shall include a description of how the views and information received during the consultation have been considered and addressed.</p>	<p>The port authority investigated the technical and economic feasibility of a causeway breach to enable fish passage and documented the analysis and results in a draft causeway breach feasibility report. The report describes whether and under what conditions a causeway breach would be technically and economically feasible. The investigation determined that it is not feasible for a causeway breach to be implemented by the port authority. This is because the port authority does not have the legal rights to compel third parties to accept the financial impacts associated with causeway breach construction-related disruptions to their businesses. To make a causeway breach feasible, a collaborative initiative focused on regional effects would be required, led by the federal and/or provincial governments with First Nations, and involving regulators, stakeholders, and the port authority. See the final breach feasibility report, submitted to IAAC on October 20, 2023, for more details.</p> <p><b>Consultation</b></p> <p>The port authority consulted with First Nations, as well as the Ministry of Transportation and Infrastructure (MOTI) and British Columbia Rail (landowners) during development of the breach feasibility report, building on consultation undertaken prior to the reporting year. The port authority provided a copy of the draft report on July 6, 2023, to First Nations (Roberts Bank), First Nations (marine shipping), First Nations (Fraser River), DFO, Environment and Climate Change Canada (ECCC), and MOTI, landowners and tenants, in accordance with condition 7.1.</p> <p><b>Appendix B</b> contains the views and information provided by First Nations on the breach feasibility report, and the port authority's response indicating consideration of the comment, as well as whether and how the input had been integrated.</p> <p><b>Appendix C</b> contains the written notification to stakeholders and government parties, advising them as to how their views and information had been integrated in the final report.</p> <p>The requirements of this condition have been met.</p>
7.2	<p>The Proponent shall install a breach to allow fish passage through either the existing and proposed widened areas of the causeway, if determined feasible pursuant to condition 7.1, or at the east end of the marine terminal identified on Figure IR2020-2.2-1 (Canadian Impact Assessment Registry Reference Number 80054, Document Number 2083). The Proponent shall implement the breach at the location that Fisheries and Oceans Canada determines will result in greater benefit to juvenile salmon productivity at Roberts Bank if both are technically and economically feasible. The Proponent shall develop and implement the breach in consultation with Indigenous groups (Roberts Bank), Indigenous groups (marine shipping), Indigenous groups (Fraser River), Fisheries and Oceans Canada, Environment and Climate Change Canada, and other relevant authorities, landowners and tenants.</p>	<p><b>Development</b> - A causeway breach is not feasible for the port authority to implement (per conclusion of the study pursuant to condition 7.1). As such, the port authority has continued development of a fish passage at the east end of the marine terminal (marine terminal breach).</p> <p><b>Consultation with First Nations</b> - The port authority has initiated preliminary consultation on the development of the marine terminal fish passage.</p> <p><b>Consultation with government bodies</b> – No applicable actions were undertaken in the reporting year.</p>
7.3 7.3.1 to 7.3.4	<p>The Proponent shall have a qualified professional develop, prior to construction and in consultation with Indigenous groups (Roberts Bank), Indigenous groups (marine shipping), Indigenous groups (Fraser River) and Fisheries and Oceans Canada, measures to avoid and mitigate adverse environmental effects of the Designated Project on marine species during in-water work activities during construction. The Proponent shall implement the mitigation measures during construction. As part of the measures, the Proponent shall:</p> <p>7.3.1 - conduct in-water work activities in the local assessment area indicated on figure 13-1 of the environmental impact statement during timing windows of least risk for marine species, including those identified in condition 8.1.7 and during the following timing windows:</p>	<p><b>Development</b> – Measures to avoid and mitigate adverse environmental project-related effects on marine species during in-water work activities during construction will be included in the marine species management plan for construction. The port authority has initiated development of an outline for the marine species management plan, a sub-plan of the CEMP.</p> <p><b>Consultation with First Nations</b> – The port authority has initiated consultation on the development of the marine species management plan outline.</p> <p><b>Consultation with government bodies</b> – No applicable actions were undertaken in the reporting year.</p>

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
	<ul style="list-style-type: none"> <li>7.3.1.1 - or in-water work activities below -5 metre chart datum, during the timing window of least risk for Dungeness crab (<i>Cancer magister</i>) (March 31 - October 15), unless otherwise authorized under the <i>Fisheries Act</i>;</li> <li>7.3.1.2 - or in-water work activities above -5 metre chart datum, during the timing window of least risk for juvenile salmon (August 16 - February 28), unless otherwise authorized under the <i>Fisheries Act</i>; and</li> <li>7.3.1.3 - any additional timing windows of least risk identified through any authorization under the <i>Fisheries Act</i> for the Designated Project;</li> <li>7.3.2 - monitor for presence of sensitive life phases of salmon and crab during least risk timing windows, and if sensitive life phases are encountered implement any additional mitigation measures to mitigate any adverse effects of construction on these sensitive life phases;</li> <li>7.3.3 - monitor for spawning herring presence during in-water work activities conducted outside the timing window of least risk for juvenile salmon and from February 15 to February 28, in areas that spatially overlap with herring spawning habitats, and use this information to inform the development and implementation of additional mitigation measures; and</li> <li>7.3.4 - determine the means, timing, frequency and location(s) of monitoring in condition 7.3.3.</li> </ul>	
7.4	The Proponent shall conduct dredging during operation, if required, only within the timing window of least risk for juvenile salmon (August 16 - February 28) and avoid the Southern Resident Killer Whale ( <i>Orcinus orca</i> ) peak use period in accordance with condition 8.1.7.	No applicable actions were undertaken in the reporting year.
7.5	The Proponent shall implement underwater noise monitoring during in-water work activities during construction to ensure sound levels remain below 206 decibels at a reference pressure of one micropascal within 10 metres of in-water pile driving for finfish.	No applicable actions were undertaken in the reporting year.
7.6	The Proponent shall develop and implement, in consultation with Indigenous groups (Roberts Bank) and relevant authorities, a Dungeness crab ( <i>Cancer magister</i> ) salvage program. The Proponent shall develop the program prior to construction and shall implement it prior to the commencement of any in-water work activity that has the potential to cause direct mortality of crab, including dredging. As part of the development of the program, the Proponent shall conduct a test to evaluate the use of baiting as a means to relocate crabs and minimize crab handling. If the Proponent concludes that the use of baiting is not an effective means to relocate crabs and minimize crab handling, the Proponent shall implement alternative salvage protocols.	<p><b>Development</b> – The port authority initiated the development of the Dungeness crab salvage program. Specifically, the port authority designed and implemented a preliminary crab salvage pilot study prior to the issuance of the Decision Statement. The results of the study will inform the development of a Dungeness crab salvage program, which will be incorporated into the marine species management plan, a sub-plan of the CEMP.</p> <p><b>Consultation with First Nations</b> - The port authority has initiated preliminary consultation on the study design for a crab baiting-away pilot study. Consultation was initiated prior to issuance of the Decision Statement and continued in the reporting year.</p> <p><b>Consultation with relevant authorities:</b> DFO has been identified as a relevant authority. Preliminary consultation with DFO was initiated prior to the issuance of the Decision Statement, and no applicable actions were undertaken in the reporting year.</p>
7.7	The Proponent shall develop, prior to construction and in consultation with Fisheries and Oceans Canada, Tsawwassen First Nation, Musqueam, and the other Indigenous groups within Indigenous groups (Roberts Bank), a follow-up program as described in Table C7 of Appendix G in the Federal Review Panel Report to verify the accuracy of the environmental assessment as it pertains to the potential effects on juvenile Dungeness crab ( <i>Cancer magister</i> ) nursery habitat. The Proponent shall implement the follow-up program in accordance with conditions 2.5 to 2.9.	<p><b>Development</b> –The port authority has initiated development of the juvenile Dungeness crab nursery habitat FUP, including preliminary data collection to inform the monitoring study design.</p> <p><b>Consultation with First Nations</b> – The port authority has initiated consultation with First Nations (Roberts Bank) on the development of the juvenile Dungeness crab nursery habitat FUP. Consultation was initiated prior to issuance of the Decision Statement and continued in the reporting year. The views and information provided by First Nations on the juvenile Dungeness crab nursery habitat FUP in the reporting year, and the port authority’s responses, are provided in <b>Appendix B</b>.</p> <p><b>Consultation with government bodies</b> – Preliminary consultation with DFO was initiated prior to the issuance of the Decision Statement, and no applicable actions were undertaken in the reporting year.</p>

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
7.8	<p>The Proponent shall transplant, prior to construction, a minimum of 10 percent of the orange sea pen (<i>Ptilosarcus gurneyi</i>) colony that occurs within the Designated Project area. The Proponent shall determine, prior to transplanting and in consultation with Indigenous groups (Roberts Bank) and relevant authorities, the means by which transplanting will be carried out.</p>	<p><b>Development</b> – Prior to the issuance of the Decision Statement, the port authority initiated development of the means by which orange sea pen transplanting will be carried out. Specifically, the port authority implemented a preliminary pilot study to assess feasibility and effectiveness of transplants as mitigation.</p> <p><b>Consultation with First Nations</b> – The port authority initiated consultation on the means by which orange sea pen transplanting will be carried out.</p> <p><b>Consultation with relevant authorities:</b> DFO has been identified as a relevant authority, and will be consulted in future reporting years.</p>
7.9	<p>The Proponent shall develop, prior to construction and in consultation with Indigenous groups (Roberts Bank) and relevant authorities, a follow-up program as described in Table C8 of Appendix G in the Federal Review Panel Report to verify the effectiveness of the orange sea pen (<i>Ptilosarcus gurneyi</i>) transplant referred to in condition 7.8. The Proponent shall implement the follow-up program in accordance with conditions 2.5 to 2.9.</p>	<p>No applicable actions were undertaken in the reporting year.</p>
7.10 7.10.1 to 7.10.2.1	<p>The Proponent shall develop, prior to construction and in consultation with Fisheries and Oceans Canada, British Columbia’s Ministry of Land, Water, and Resource Stewardship, and Indigenous groups (Roberts Bank), Indigenous groups (marine shipping), Indigenous groups (Fraser River), and relevant authorities, and implement measures during construction dredging activities to avoid or mitigate effects to marine fish and fish habitat, including:</p> <ul style="list-style-type: none"> <li>• 7.10.1 – measures to reduce direct mortality of Pacific sand lance (<i>Ammodytes hexapterus</i>) during dredging of the berth pocket; and</li> <li>• 7.10.2 – measures to limit disturbance to eulachon (<i>Thaleichthys pacificus</i>), including:</li> <li>• 7.10.2.1 – implementing, during dredging in April, and prior to and during dredging in the dredge basin, hydroacoustic monitoring to detect eulachon in real-time and, where technically and economically feasible, modify or stop dredging activities or guide dredging activities away from eulachon.</li> </ul>	<p><b>Development</b> – Measures to avoid or mitigate project-related effects to marine fish and fish habitat during construction dredging activities will be included in the dredging and sediment discharge management plan. The port authority has initiated development of an outline for the dredging and sediment discharge management plan, a sub-plan of the CEMP.</p> <p><b>Consultation with First Nations</b> – The port authority has initiated consultation on the development of the dredging and sediment discharge plan outline.</p> <p><b>Consultation with government bodies</b> – No applicable actions were undertaken in the reporting year.</p>
7.11 7.11.1 to 7.11.5	<p>The Proponent shall develop, prior to construction, as required by Fisheries and Oceans Canada for authorization under the Fisheries Act, and in consultation with Indigenous groups (Roberts Bank), Indigenous groups (marine shipping), Indigenous groups (Fraser River), Environment and Climate Change Canada and British Columbia’s Ministry of Land, Water, and Resource Stewardship, any offsetting plan(s) related to the alteration, destruction or disturbance of fish habitat, and death of fish associated with the carrying out of the Designated Project based on the draft offsetting plan in IR2020-1.2, (Canadian Impact Assessment Registry Reference Number 80054, Document Number 2083). The Proponent shall implement the plan(s) during construction and operation. The Proponent shall submit any approved offsetting plan(s) to the Agency prior to implementation. The plan shall include:</p> <ul style="list-style-type: none"> <li>• 7.11.1 - a description of anticipated losses of fish and fish habitat remaining after avoidance, reduction, and other mitigation measures have been implemented;</li> <li>• 7.11.2 - a description of the amount and type of offsets required and the selection of offsetting sites, including consideration of Indigenous priorities;</li> <li>• 7.11.3 - an assessment of the ability of offsetting measures to counterbalance residual effects, using both a productivity approach and a habitat area equivalency approach;</li> <li>• 7.11.4 - a description of how potential eutrophication, anoxia and changes in water drainage have been considered in the design of the offsetting measures; and</li> <li>• 7.11.5 - offsetting measures to compensate for effects to fish and fish habitat remaining after avoidance, reduction, and other mitigation measures have been implemented.</li> </ul>	<p><b>Development</b> – The port authority has initiated development of the offsetting plan.</p> <p><b>Consultation with First Nations</b> – The port authority has consulted with First Nations on the development of the offsetting plan. Consultation was initiated prior to issuance of the Decision Statement and continued in the reporting year. The views and information shared by First Nations on aspects of the offsetting plan, and the port authority’s responses, are provided in <b>Appendix B</b>.</p> <p><b>Consultation with regulatory bodies</b> - No applicable actions were undertaken in the reporting year.</p>

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
7.12	The Proponent shall, for any fish habitat offsetting measure proposed in any offsetting plan referred to in condition 7.11 that may cause adverse environmental effects not considered in the environmental assessment, develop and implement, prior to construction, following consultation with Indigenous groups (Roberts Bank), Indigenous groups (marine shipping), Indigenous groups (Fraser River) and relevant authorities, measures to mitigate those effects. The Proponent shall submit these measures to the Agency prior to implementing them.	<p><b>Development</b> – The port authority is developing mitigation measures for the potential environmental effects of proposed offsetting measures.</p> <p><b>Consultation</b> – No application actions were undertaken in the reporting year.</p>
7.13	The Proponent shall develop, prior to construction and in consultation with Indigenous groups (Roberts Bank), Indigenous groups (marine shipping) and Indigenous groups (Fraser River) and as required by Fisheries and Oceans Canada, a follow-up program in accordance with the requirements of any applicable <i>Fisheries Act</i> authorization to determine the effectiveness of the offsetting measures implemented as part of the offsetting plan(s) referred to in condition 7.11. The Proponent shall implement the follow-up program once offsetting habitats have been established and until requirements of the authorization under the <i>Fisheries Act</i> have been met. The Proponent shall implement the follow-up program in accordance with conditions 2.5 to 2.9.	<p><b>Development</b> - The port authority has initiated development of an offsetting effectiveness monitoring program as part of advancing the <i>Fisheries Act</i> authorization (FAA) application. The offsetting effectiveness monitoring program will meet the requirements of the <i>Fisheries Act</i> and follow-up program requirements in accordance with condition 7.13. The offsetting effectiveness monitoring program will be described in the FAA application and will be reviewed by DFO.</p> <p><b>Consultation with First Nations</b> - The port authority has initiated consultation with First Nations on the offsetting effectiveness monitoring program.</p> <p><b>Consultation with government bodies</b> – No applicable actions were undertaken in the reporting year.</p>
7.14 7.14.1 to 7.14.2	<p>The Proponent shall develop, prior to construction and in consultation with Fisheries and Oceans Canada, Indigenous groups (Roberts Bank), Indigenous groups (marine shipping), and Indigenous groups (Fraser River), a follow-up program as described in Table C9 of Appendix G in the Federal Review Panel Report to verify the accuracy of the environmental assessment as it pertains to changes to productivity of juvenile salmon as a result of the Designated Project. The Proponent shall implement the follow-up program in accordance with conditions 2.5 to 2.9. As part of the follow-up program, the Proponent shall:</p> <ul style="list-style-type: none"> <li>• 7.14.1 - monitor, prior to, during and after construction, the abundance and distribution of Pacific salmon (<i>Oncorhynchus</i>) in the local assessment area indicated on Figure 13-1 of the environmental impact statement using a statistically defensible sampling program; and</li> <li>• 7.14.2 - monitor the use of the breach for fish passage by juvenile salmon.</li> </ul>	<p><b>Development</b> – The port authority has initiated the development of the juvenile salmon FUP, including preliminary data collection in the reporting year, to inform development of the monitoring program.</p> <p><b>Consultation with First Nations</b> – The port authority has initiated consultation with First Nations on the development of the juvenile salmon FUP. Consultation was initiated prior to issuance of the Decision Statement and continued in the reporting year.</p> <p><b>Consultation with government bodies</b> – No applicable actions were undertaken in the reporting year.</p>
7.15	The Proponent shall develop, prior to construction and in consultation with Fisheries and Oceans Canada, Environment and Climate Change Canada and Indigenous groups (Roberts Bank), a follow-up program as described in Table C3 of Appendix G in the Federal Review Panel Report to verify the accuracy of the environmental assessment as it pertains to changes in marine vegetation as a result of the Designated Project, including to evaluate the accuracy of the Roberts Bank ecosystem model forecasts. The Proponent shall implement the follow-up program in accordance with conditions 2.5 to 2.9.	No applicable actions were undertaken in the reporting year.
7.16	The Proponent shall develop, prior to construction and in consultation with Fisheries and Oceans Canada and Indigenous groups (Roberts Bank), a follow-up program to verify the accuracy of the environmental assessment as it pertains to changes in infauna and marine invertebrate productivity as a result of the Designated Project, including to evaluate the accuracy of the Roberts Bank ecosystem model forecasts. The Proponent shall implement the follow-up program in accordance with conditions 2.5 to 2.9.	No applicable actions were undertaken in the reporting year.
7.17	The Proponent shall develop, prior to construction and in consultation with Fisheries and Oceans Canada and Indigenous groups (Roberts Bank), a follow-up program to verify the accuracy of the environmental assessment as it pertains to changes in rockfish species and lingcod ( <i>Ophiodon elongates</i> ) productivity as a result of the Designated Project, including to evaluate the accuracy of the Roberts Bank ecosystem model forecasts. The Proponent shall implement the follow-up program in accordance with conditions 2.5 to 2.9.	No applicable actions were undertaken in the reporting year.

## 8. Marine mammals

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
8.1 8.1.1 to 8.1.8	<p>The Proponent shall develop, prior to the relevant phase of the Designated Project and in consultation with Indigenous groups (Roberts Bank), Fisheries and Oceans Canada and Transport Canada measures to mitigate adverse environmental effects caused by underwater noise emitted from the construction of the marine terminal, the widened causeway, and the expanded tug basin.</p> <p>The Proponent shall implement the measures during the construction of the marine terminal, the widened causeway, and the expanded tug basin. As part of these measures, the Proponent shall:</p> <ul style="list-style-type: none"> <li>• 8.1.1 - use soft start procedures, where technically feasible, to increase the sound levels emitted by construction equipment gradually before use at full operational power;</li> <li>• 8.1.2 - minimize impulse noise emitted by construction activities, including by giving preference to the use of vibratory pile-driving over impact pile-driving unless not technically feasible;</li> <li>• 8.1.3 - sequence in-water work activities to limit underwater noise aggregation to the extent feasible, as determined by a qualified professional;</li> <li>• 8.1.4 - use sound attenuation method(s) and/or technology(ies) when conducting impact pile-driving underwater;</li> <li>• 8.1.5 - conduct vibratory hammer and impact pile driving only on weekdays and during daytime hours;</li> <li>• 8.1.6 - require all construction vessel operators to implement applicable management measures established by the Government of Canada to protect Southern Resident Killer Whale (<i>Orcinus orca</i>) that are in effect, unless not feasible for safety reasons;</li> <li>• 8.1.7 - avoid, from June 1 or the date Southern Resident Killer Whale (<i>Orcinus orca</i>) are confirmed by marine mammal observers to be present in the Salish Sea, whichever is later, to September 30:               <ul style="list-style-type: none"> <li>• 8.1.7.1 - all vibratory and impact pile driving;</li> <li>• 8.1.7.2 - vibro-densification of the caisson foundation mattress rock; and</li> <li>• 8.1.7.3 - removal of the piles for the temporary barge ramps;</li> </ul> </li> <li>• 8.1.8 - limit, to the extent feasible as determined by a qualified professional, the number of dredge equipment in use and tug and barge movements required for dredging activities when Southern Resident Killer Whale (<i>Orcinus orca</i>) are confirmed present in the Salish Sea by marine mammal observers.</li> </ul>	<p><b>Development</b> – Measures to mitigate project-related effects caused by underwater noise will be included in the construction-phase underwater noise management plan. The port authority has initiated development of an outline for the underwater noise management plan, a sub-plan of the CEMP.</p> <p><b>Consultation with First Nations</b> - The port authority has initiated consultation on measures to mitigate project-related underwater noise during construction. Consultation was initiated prior to issuance of the Decision Statement and continued in the reporting year.</p> <p><b>Consultation with government bodies</b> – The port authority has initiated consultation on measures to mitigate the effects of underwater noise from construction.</p>
8.2 8.2.1 to 8.2.9	<p>The Proponent shall have a qualified professional develop, prior to construction and in consultation with Indigenous groups (Roberts Bank) and Indigenous groups (marine shipping), a marine mammal detection and response plan to reduce adverse effects to marine mammals caused by construction, consistent with any Fisheries and Oceans authorization under the <i>Fisheries Act</i>. The Proponent shall implement the plan during all in-water work activities during construction that pose a risk to marine mammals, and have a qualified professional oversee the implementation of the plan. As part of the marine mammal detection and response plan, the Proponent shall:</p> <ul style="list-style-type: none"> <li>• 8.2.1 - establish behavioral disturbance threshold(s) for continuous (non-impulse) noise for Southern Resident Killer Whale (<i>Orcinus orca</i>) and group-specific injury threshold(s) for impulse and continuous (non-impulse) noise for other marine mammal species, and describe the expected effects to marine mammals above and below the thresholds;</li> <li>• 8.2.2 - identify the in-water work activities that are predicted to generate impulse and continuous (non-impulse) underwater noise (which shall include pile driving and dredging) during construction;</li> <li>• 8.2.3 - establish minimum exclusion zone(s) for each activity referred to in condition 8.2.2 corresponding to the distance from each activity at which the underwater noise levels are below the thresholds established pursuant to condition 8.2.1, and implement and maintain these exclusion zones(s) when carrying each of these activities;</li> <li>• 8.2.4 - monitor underwater noise within and directly outside the injury threshold exclusion zone(s) established pursuant to condition 8.2.3 during activities that generate impulse noise identified pursuant to condition 8.2.2 to validate the size of the exclusion zone(s) based on the injury threshold(s) established</li> </ul>	<p><b>Development</b> - The port authority has initiated development, by a qualified professional, of the marine mammal detection and response plan, a sub-plan of the CEMP. The marine mammal detection and response plan will address the information requirements specified in this condition.</p> <p><b>Consultation with First Nations</b> - The port authority has consulted on the initial material developed for the plan. Consultation was initiated prior to issuance of the Decision Statement and continued in the reporting year.</p> <p><b>Consultation with government bodies</b> - Consultation with DFO is ongoing to ensure the plan will be consistent with the FAA.</p>

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
	<p>pursuant to condition 8.2.1. If underwater noise directly outside the exclusion zone(s) exceeds injury thresholds established pursuant to condition 8.2.1, the Proponent shall implement modified or additional mitigation measures, which may include expanding the exclusion zone;</p> <ul style="list-style-type: none"> <li>• 8.2.5 - at the start of each new in-water work activity identified pursuant to condition 8.2.2 that generates impulse and continuous noise, validate the exclusion zone(s) established based on the behavioral disturbance threshold(s) for Southern Resident Killer Whale (<i>Orcinus orca</i>) referred to in condition 8.2.1 to confirm it is of appropriate size. If the exclusion zone is not of the appropriate size, the Proponent shall modify the exclusion zone to be applicable;</li> <li>• 8.2.6 - establish a monitoring buffer zone around the exclusion zone implemented for Southern Resident Killer Whale (<i>Orcinus orca</i>) to account for the time needed to initiate stop/modify work procedures before Southern Resident Killer Whale (<i>Orcinus orca</i>) enter the applicable exclusion zone;</li> <li>• 8.2.7 - monitor for the presence of the applicable marine mammal(s) within their applicable exclusion zone(s) established pursuant to condition 8.2.3 and, also for Southern Resident Killer Whale (<i>Orcinus orca</i>) within the buffer zone established pursuant to condition 8.2.6 during all activities identified pursuant to condition 8.2.2. The Proponent shall conduct year-round visual monitoring, using marine mammal observer(s) in combination with non-visual monitoring, in order to observe if a marine mammal enters the exclusion zone. In doing so, the Proponent shall:             <ul style="list-style-type: none"> <li>• 8.2.7.1 - determine minimum training and experience requirements of the marine mammal observer(s) to determine, verify, and monitor exclusion zones and record the location and behavior of observed marine mammals;</li> <li>• 8.2.7.2 - develop and implement procedures to adjust the location and number of marine mammal observer(s) if Southern Resident Killer Whale (<i>Orcinus orca</i>) are approaching the exclusion zone(s) established pursuant to condition 8.2.3 or the buffer zone established pursuant to condition 8.2.6;</li> <li>• 8.2.7.3 - determine the type and placement of monitoring technologies, including passive acoustic or other technically and economically feasible technologies, which may include infrared technologies, to be deployed for detecting cetaceans;</li> <li>• 8.2.7.4 - develop and implement protocols that specify the conditions under which any non-visual monitoring shall be used, including during periods of low visibility, including darkness and fog;</li> <li>• 8.2.7.5 - develop and implement procedures for marine mammal observer(s) to receive any available information on the presence of cetaceans in the area surrounding the local assessment area from whale sighting networks, and use this information to inform observation requirements in condition 8.2.7;</li> <li>• 8.2.7.6 - develop and implement protocols to document cetaceans observed as part of the marine mammal detection and response plan, and communicate these observations to British Columbia's Cetacean Sightings Network and Fisheries and Oceans Canada;</li> </ul> </li> <li>• 8.2.8 - develop and implement stop work procedures to shut down or modify in-water work activities identified pursuant to condition 8.2.2 when marine mammals are present within their applicable exclusion zone(s) established pursuant to condition 8.2.3, including communication protocols to facilitate stop work procedures. In doing so, the Proponent shall:             <ul style="list-style-type: none"> <li>• 8.2.8.1 - grant authority to initiate stop work procedures to the marine mammal detection team;</li> <li>• 8.2.8.2 - initiate stop work procedures prior to Southern Resident Killer Whales (<i>Orcinus orca</i>) entering the exclusion zone(s) established pursuant to condition 8.2.3;</li> <li>• 8.2.8.3 - start or restart in-water work activities identified pursuant to condition 8.2.2 only once it has been visually confirmed that marine mammal(s) are not present within their applicable exclusion zone(s), or if a minimum of 30 minutes has elapsed since the marine mammal was last sighted within the applicable exclusion zone(s); and</li> </ul> </li> <li>• 8.2.9 - if marine mammals are observed in distress notify Fisheries and Oceans Canada, implement mitigation measures, including stopping, if it is safe to do so, or modifying in-water work activities identified pursuant to condition 8.2.2 to address the situation of marine mammal distress as a result of the Designated Project under the advisement and to the satisfaction of a qualified professional.</li> </ul>	

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
8.3 8.3.1 to 8.3.4	<p>The Proponent shall implement, in consultation with Transport Canada and Fisheries and Oceans Canada, technically and economically feasible technologies for reducing underwater noise related to berthing activities. In doing so, the Proponent shall:</p> <ul style="list-style-type: none"> <li>8.3.1 - require tugs to reduce speeds when transiting between the tug basin and the arrival and berth areas when Southern Resident Killer Whales (<i>Orcinus orca</i>) are present to mitigate acoustic effects to Southern Resident Killer Whale (<i>Orcinus orca</i>), if feasible and safe to do so.</li> <li>8.3.2 - evaluate, prior to operation, the effectiveness of technologies to reduce underwater noise, associated with berthing activities, including the use of electric tugs. The Proponent shall determine, as part of its evaluation, whether the use of the technology would increase underwater noise at frequencies at which Southern Resident Killer Whales (<i>Orcinus orca</i>) are most sensitive or increase the extent to which environmental effects, other than underwater noise, are adverse. The Proponent shall submit the evaluation to the Agency one year prior to the start of operation and shall include the sources of information and methodology used;</li> <li>8.3.3 - upon completion of the initial evaluation referred to in condition 8.3.2, conduct a review every three years in order to identify and evaluate any new and emerging underwater noise reduction technologies for berthing activities. The Proponent shall conduct a review until such time that the Proponent has determined, in consultation with Transport Canada and Fisheries and Oceans Canada, that a review is no longer warranted. The results of the review shall be included as part of the annual report referred to condition 2.10; and</li> <li>8.3.4 - implement any technically and economically feasible new or emerging underwater noise reduction technologies for berthing activities determined by the Proponent, as part of a review conducted pursuant to condition 8.3.2, to be effective at reducing underwater noise associated with berthing activities, without increasing the extent to which other environmental effects are adverse, and to meet requirements for safe operations. The Proponent shall submit these measures to the Agency prior to implementing them.</li> </ul>	No applicable actions were undertaken in the reporting year.
8.4	<p>The Proponent shall develop and implement, in consultation with Indigenous groups (Roberts Bank), Fisheries and Oceans Canada, Canadian Coast Guard, Pacific Pilotage Authority, and other relevant authorities, procedures to delay, where necessary, the daytime departure of container vessels calling on the Designated Project to mitigate effects to Southern Resident Killer Whale (<i>Orcinus orca</i>). The procedures shall include communication protocols, monitoring and criteria for determining whale presence, and safety and regulatory requirements. As part of the development of the procedures, the Proponent shall take into account the potential impacts of procedures on the Proponent's tenants and users of the Proponent's facilities at Roberts Bank.</p>	No applicable actions were undertaken in the reporting year.
8.5	<p>The Proponent shall, in consultation with Indigenous groups (Roberts Bank), Fisheries and Oceans Canada, Canadian Coast Guard, Pacific Pilotage Authority, and other relevant authorities, evaluate the technical and economic feasibility of measures to mitigate exposure of Southern Resident Killer Whale (<i>Orcinus orca</i>) to underwater noise attributable to the Designated Project at night in the vicinity of the marine terminal, including the feasibility of a real-time passive acoustic monitoring system and delayed unberthing at night. If any such measures are feasible and effective at reducing potential acoustic effects to Southern Resident Killer Whale (<i>Orcinus orca</i>), the Proponent shall implement them in consultation with Fisheries and Oceans Canada.</p>	<p><b>Development</b> – The port authority has initiated evaluation of measures to mitigate exposure of SRKW to underwater noise at night during operation.</p> <p><b>Consultation with First Nations</b> – The port authority has consulted with First Nations on measures to mitigate exposure of SRKW to underwater noise during operation, and consultation is ongoing. Consultation was initiated prior to issuance of the Decision Statement and continued in the reporting year.</p> <p><b>Consultation with government bodies</b> - The port authority has initiated consultation on measures to mitigate the exposure of SRKW to underwater noise from operation.</p>
8.6 8.6.1 to 8.6.8	<p>The Proponent shall develop, prior to construction and in consultation with Fisheries and Oceans Canada, Transport Canada, and Indigenous groups (Roberts Bank), a follow-up program as described in Table C13 of Appendix G in the Federal Review Panel Report to verify the accuracy of the environmental assessment as it pertains to changes in levels of underwater noise and associated effects to Southern Resident Killer Whale (<i>Orcinus orca</i>) as a result of operation of the marine terminal. The Proponent shall implement the follow-up program in accordance with conditions 2.5 to 2.9. As part of the follow-up program, the Proponent shall:</p>	<p><b>Development</b> – The port authority has initiated development of the FUP for operations underwater noise-related effects on SRKW.</p> <p><b>Consultation with First Nations</b> – The port authority has initiated consultation with First Nations (Roberts Bank) on the operations underwater noise-related effects on SRKW FUP.</p> <p><b>Consultation with government bodies</b> – No applicable actions were undertaken in the reporting year.</p>

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
	<ul style="list-style-type: none"> <li>• 8.6.1 - establish the metrics to be used to determine sound exposure levels to Southern Resident Killer Whales (<i>Orcinus orca</i>) due to operation of the marine terminal, which shall include annual time-averaged equivalent continuous sound level or other equivalent metrics determined in consultation with Fisheries and Oceans Canada;</li> <li>• 8.6.2 - establish thresholds based on the predicted effects described in IR2020-3 that would, if exceeded, require the Proponent to implement modified or additional mitigation measure(s);</li> <li>• 8.6.3 - monitor underwater noise using hydrophones prior to construction and during operation. The Proponent shall conduct monitoring, at a minimum, for 60 days in winter and 60 days in summer for every year of monitoring;</li> <li>• 8.6.4 - determine, using the underwater noise data collected during monitoring pursuant to condition 8.6.3 and the acoustic models developed in IR2020-3 (Canadian Impact Assessment Registry Reference Number 80054, Document Number 2083), estimated sound exposure levels for Southern Resident Killer Whale (<i>Orcinus orca</i>) due to operation of the marine terminal;</li> <li>• 8.6.5 - evaluate and determine whether the estimated sound exposure levels generated by operation of the marine terminal are as predicted in IR2020-3 (Canadian Impact Assessment Registry Reference Number 80054, Document Number 2083);</li> <li>• 8.6.6 - if the results of the modelling referred to in condition 8.6.4 demonstrate that levels of sound exposure are exceeding the levels predicted in IR2020-3 (Canadian Impact Assessment Registry Reference Number 80054, Document Number 2083), consult with Indigenous groups (Roberts Bank), Indigenous groups (marine shipping), Transport Canada, Fisheries and Oceans Canada, and other relevant federal authorities to determine whether modified or additional measures are required to mitigate any potential adverse effects on Southern Resident Killer Whale (<i>Orcinus orca</i>), and identify those measures;</li> <li>• 8.6.7 - if the modified or additional measures that are determined pursuant to condition 8.6.6 to be the most effective to mitigate acoustic effects to Southern Resident Killer Whale (<i>Orcinus orca</i>) are within the Proponent's care and control, the Proponent shall implement them. The Proponent shall submit these measures to the Agency prior to implementing them; and</li> <li>• 8.6.8 - monitor the effectiveness of any technologies implemented pursuant to condition 8.3</li> </ul>	
<p>8.7 8.7.1</p>	<p>The Proponent shall contractually obligate the terminal operator to require container vessels calling on the Designated Project to participate in the Enhancing Cetacean Habitat and Observation Program vessel slowdown initiative, or any future equivalent program, to reduce the potential effects of container vessels calling on the Designated Project on cetacean species. As part of the annual report referred to in condition 2.10, the Proponent shall:</p> <ul style="list-style-type: none"> <li>• 8.7.1 – request and make available to the Agency, reported underwater noise levels related to container vessels calling at the Designated Project and the Port of Vancouver measured and available as part of the Enhancing Cetacean Habitat and Observation Program, or any future equivalent program, throughout operation.</li> </ul>	<p>No applicable actions were undertaken in the reporting year.</p>
<p>8.8 8.8.1 to 8.8.3</p>	<p>The Proponent shall manage underwater noise produced as a result of marine shipping incidental to the Designated Project in a manner to avoid adverse effects to Southern Resident Killer Whales (<i>Orcinus Orca</i>). In doing so, the Proponent shall:</p> <ul style="list-style-type: none"> <li>• 8.8.1 – establish, through underwater noise modelling, no earlier than two years prior to the start of operation, baseline levels of underwater noise produced by container vessel traffic calling to the Port of Vancouver in consultation with Transport Canada and to the satisfaction of Fisheries and Oceans Canada. In doing so, the Proponent shall:</li> <li>• 8.8.1.1 – establish underwater noise source levels for all size classes of container vessels calling to the Port of Vancouver;</li> </ul>	<p>No applicable actions were undertaken in the reporting year.</p>



Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
	<ul style="list-style-type: none"> <li>• 8.8.1.2 – establish, through underwater noise modelling, baseline underwater noise levels and spatial and temporal distribution of underwater noise within Southern Resident Killer Whale (<i>Orcinus Orca</i>) critical habitat produced by container traffic calling to the Port of Vancouver;</li> <li>• 8.8.2 – avoid, throughout operation, adverse effects to Southern Resident Killer Whale (<i>Orcinus Orca</i>) by maintaining underwater noise levels below or at the baseline established in condition 8.8.1. In doing so, and prior to the start of operation, the Proponent shall, in consultation with Transport Canada and to the satisfaction of Fisheries and Oceans Canada:               <ul style="list-style-type: none"> <li>• 8.8.2.1 – develop an underwater noise monitoring framework;</li> <li>• 8.8.2.2 – establish underwater noise thresholds that would indicate the need for modified or additional mitigation measures to be undertaken in order to maintain underwater noise levels below or at the baseline established in condition 8.8.1;</li> <li>• 8.8.2.3 – identify modified or additional mitigation measures consistent with, but not limited by, the Government of Canada’s initiatives to reduce underwater noise to be undertaken if underwater noise levels reach identified thresholds. Measures may include, but shall not be limited to:                   <ul style="list-style-type: none"> <li>• 8.8.2.3.1 – mandatory speed reductions for vessels in addition to those required pursuant to condition 8.3;</li> <li>• 8.8.2.3.2 – offsets for underwater noise in Southern Resident Killer Whale (<i>Orcinus orca</i>) critical habitat in the Salish Sea;</li> <li>• 8.8.2.3.3 – other necessary vessel management measures and/or actions;</li> </ul> </li> <li>• 8.8.2.4 – implement, during operation, modified or additional mitigation measures identified in condition 8.8.2.3 if underwater noise levels reach thresholds identified in condition 8.8.2.2; and</li> </ul> </li> <li>• 8.8.3 – review and update, in consultation with Transport Canada and to the satisfaction of Fisheries and Oceans Canada, measures taken in response to condition 8.8.2 five and ten years following the start of operation.</li> </ul>	
8.9	<p>The Proponent shall distribute, prior to and throughout operation, the marine mammal awareness pamphlet Marine Mammals of the Roberts Bank Area and Mariner’s Guide to Whales, Dolphins, Porpoises of Western Canada, or any future equivalent document, to marine pilots working within the Port of Vancouver.</p>	<p>No applicable actions were undertaken in the reporting year.</p>
8.10	<p>The Proponent shall sign on, as a party to the <i>Species at Risk Act</i> Section 11 Conservation Agreement to Support the recovery of the Southern Resident Killer Whale, to an additional five year term of the agreement, or equivalent, if the other parties of the agreement also agree.</p>	<p>The port authority is working collaboratively with parties to update the SRKW Conservation Agreement, and to extend the agreement for an additional five-year term.</p>
8.11	<p>The Proponent shall participate, at the request of a relevant federal authority, in regional initiatives aimed at effective management and recovery of the Southern Resident Killer Whale (<i>Orcinus orca</i>), including the Oceans Protection Plan, the Whales Initiative, or equivalent, and any other initiative supporting the recovery objectives for the Southern Resident Killer Whale (<i>Orcinus orca</i>) outlined in the Northern and Southern Resident Killer Whale Action Plan.</p>	<p>The port authority leads the Enhancing Cetacean Habitat and Observation (ECHO) Program and works with a diverse range of partners and advisors to develop and implement initiatives that result in a quantifiable reduction in threats to whales as a result of shipping activities. Initiatives of the ECHO program in the reporting year included:</p> <ul style="list-style-type: none"> <li>• Implementation of the 2023 Haro Strait and Boundary Pass voluntary ship slowdown</li> <li>• Implementation of the 2023 Strait of Juan De Fuca voluntary inshore lateral displacement</li> <li>• Implementation of the 2023 Swiftsure Bank voluntary ship slowdown</li> </ul> <p>The seasonal slowdown and lateral displacement activities are part of a suite of regional actions coordinated and implemented under the Oceans Protection Plan and the Whales Initiative in support of SRKW recovery.</p> <p>The port authority has not received a request in the reporting year from a relevant federal authority to participate in any other regional initiative related to SRKW management and recovery.</p>
8.12	<p>The Proponent shall participate, at the request of a relevant federal authority, in regional initiatives aimed at managing underwater noise due to commercial vessel traffic.</p>	<p>The port authority continues to lead the management of the ECHO Program and works with a diverse range of partners and advisors, to develop and implement initiatives that result in a quantifiable reduction of</p>

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
		<p>underwater noise due to commercial vessel traffic. Initiatives of the ECHO program in the reporting year included:</p> <ul style="list-style-type: none"> <li>• Implementation of the 2023 Haro Strait and Boundary Pass voluntary ship slowdown</li> <li>• Implementation of the 2023 Strait of Juan De Fuca voluntary inshore lateral displacement</li> <li>• Implementation of the 2023 Swiftsure Bank voluntary ship slowdown</li> </ul> <p>The seasonal slowdown and lateral displacement activities are part of a suite of regional actions coordinated and implemented under the Oceans Protection Plan and the Whales Initiative in support of SRKW recovery.</p> <p>The port authority has not received a request in the reporting year from a relevant federal authority to participate in any other regional initiative related to management of underwater noise due to commercial vessel traffic.</p>
8.13	The Proponent shall participate, at the request of a relevant federal authority, in regional initiatives aimed at identifying the portions of the Salish Sea where marine shipping overlaps spatially and temporally with Southern Resident Killer Whale ( <i>Orcinus orca</i> ) habitat use.	The port authority has not received a request from a relevant federal authority to participate in any regional initiative related to identifying areas of overlap between SRKW habitat use and marine shipping.

## 9. Terrestrial vegetation and wetlands

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
9.1 9.1.1 to 9.1.3	<p>The Proponent shall implement site-specific measures to monitor and control invasive plant species prior to and during construction, and for a minimum period of five years following construction of offsetting habitats, including by:</p> <ul style="list-style-type: none"> <li>• 9.1.1 – limiting, in consultation with British Columbia’s Ministry of Forests, seed dispersal of English cordgrass (<i>Spartina anglica</i>) prior to and during construction;</li> <li>• 9.1.2 – managing and disposing, in consultation with British Columbia’s Ministry of Forests, of existing English cordgrass (<i>Spartina anglica</i>) within the Designated Project area; and</li> <li>• 9.1.3 – managing and disposing of invasive plant species found within offsetting habitats constructed as part of the Designated Project.</li> </ul>	<p><b>Development</b> – Measures to monitor and control invasive plant species prior to and during construction will be included in the marine and terrestrial invasive species management plan. The port authority has initiated development of an outline for the construction-phase marine and terrestrial invasive species management plan, a sub-plan of the CEMP.</p> <p><b>Consultation with government bodies</b> – No applicable actions were undertaken in the reporting year.</p>
9.2 9.2.1 to 9.2.7	<p>The Proponent shall develop, prior to construction, and in consultation with Environment and Climate Change Canada, British Columbia’s Ministry of Land, Water, and Resource Stewardship, and Indigenous groups (Roberts Bank), a wetland compensation plan, which shall consider the principles outlined in Environment and Climate Change Canada’s Operational Framework for Conservation Allowances and meet the objective of no net loss of the Federal Policy on Wetland Conservation on Federal Lands (Government of Canada, 1991), and include measures to compensate for residual adverse environmental effects on wetland functions caused by the Designated Project that cannot be avoided or reduced and that are not already accounted for as part of the offsetting plan(s) required pursuant to condition 7.11. The Proponent shall begin implementing the compensation plan during construction. As part of the implementation of the compensation plan, the Proponent shall:</p> <ul style="list-style-type: none"> <li>• 9.2.1 – determine the compensation area required for each wetland and its associated functions remaining after the implementation of the offsetting requirements set out in the offsetting plan(s) referred to in condition 7.11 and that must be included in the wetland compensation plan;</li> <li>• 9.2.2 – delineate, based on field data, all wetland habitat that will be lost as a result of the Designated Project;</li> </ul>	No applicable actions were undertaken in the reporting year.

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
	<ul style="list-style-type: none"> <li>• 9.2.3 – identify habitat suitable to be used as compensation for the lost wetland habitat referred to in condition 9.2.2, including by prioritizing wetlands within the local assessment area shown in Figure 11-1 of the environmental impact statement. For wetlands located outside the local assessment area, the Proponent shall favor sites located as close to the Designated Project as possible and that reflect equivalent wetland functions to those that are lost;</li> <li>• 9.2.4 – prioritize wetland restoration over enhancement and wetland enhancement over creation;</li> <li>• 9.2.5 – take into account time lags, technical limitations, and uncertainty when meeting the objective of no net loss as per the Federal Policy on Wetland Conservation on Federal Lands (Government of Canada, 1991);</li> <li>• 9.2.6 – use, if technically feasible, wetland plant species native to the Designated Project area, of importance to Indigenous groups (Roberts Bank), and of value to migratory birds, including plant species salvaged in condition 9.3; and</li> <li>• 9.2.7 – include intertidal marsh habitat offsets to promote the growth of native species that would compensate for the loss and degradation of ecological communities listed as red or blue by the British Columbia Conservation Data Centre identified in Figure 11-5 of the Federal Review Panel Report resulting from the expanded causeway.</li> </ul>	
9.3	<p>The Proponent shall, in consultation with Indigenous groups (Roberts Bank), salvage and transplant native plant species, including ecological communities listed as red or blue by the British Columbia Conservation Data Centre and those of interest to Indigenous groups (Roberts Bank), prior to clearing vegetation within wetland habitats. The Proponent shall relocate salvaged plants to reclaimed areas or compensation habitats referred to in condition 9.2, if technically feasible. The Proponent shall develop, in consultation with Indigenous groups (Roberts Bank), criteria in order to evaluate the success of the transplantation.</p>	<p><b>Development</b> – Criteria to evaluate the success of transplantation will be included in the wetland management plan. The port authority has initiated development of the wetland management plan, a sub-plan of the CEMP.</p> <p><b>Consultation with First Nations</b> – The port authority has initiated preliminary consultation on the development of the wetland management plan.</p>
9.4 9.4.1 to 9.4.4	<p>The Proponent shall develop, prior to construction and in consultation with Environment and Climate Change Canada, Natural Resources Canada, British Columbia’s Ministry of Land, Water, and Resource Stewardship, Tsawwassen First Nation, Musqueam, and other Indigenous groups (Roberts Bank), a follow-up program to determine the effectiveness of the wetland compensation plan referred to in condition 9.2, and verify the accuracy of the environmental assessment as it pertains to the effects of the Designated Project on wetlands. The Proponent shall consider the implementation of the offsetting conducted pursuant to condition 7.11 and associated follow-up program when implementing the follow-up program and shall implement it in accordance with conditions 2.5 to 2.9. As part of the follow-up program, the Proponent shall:</p> <ul style="list-style-type: none"> <li>• 9.4.1 – establish performance standards for wetland functions, including criteria by which functions will be measured;</li> <li>• 9.4.2 – monitor, using a qualified professional, wetland compensation habitats that are not included in the offsetting plan required pursuant to condition 7.11 at the same frequency as monitoring of offsetting habitats determined in the <i>Fisheries Act</i> authorization until performance standards have been met;</li> <li>• 9.4.3 – monitor the effects of the marine terminal, the widened causeway, and the expanded tug basin on wetlands predicted to be affected by the marine terminal, the widened causeway, and the expanded tug basin, including: <ul style="list-style-type: none"> <li>• 9.4.3.1 – ecological communities listed as red or blue by the British Columbia Conservation Data Centre in the local assessment area predicted to be affected by the marine terminal, the widened causeway, and the expanded tug basin identified on Figure IR-11-22-A in the response to Information Request 11-22 (Canadian Impact Assessment Registry Reference Number 80054, Document Number 1275);</li> <li>• 9.4.3.2 – the intertidal marsh communities, including at Brunswick Point, predicted to be affected by the construction and operation of the marine terminal, the widened causeway, and the expanded tug basin; and</li> </ul> </li> <li>• 9.4.4 – identify and implement additional or modified mitigation measures if, by year 10, monitoring conducted pursuant to condition 9.4.2 indicates performance standards established pursuant to condition 9.4.1 have not been met or are not expected to be met within the expected timeline or are no longer being</li> </ul>	No applicable actions were undertaken in the reporting year.

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
	met and/or the monitoring conducted pursuant to condition 9.4.3 indicates that the effects of the Designated Project exceed those predicted in the environmental assessment.	

## 10. Avifauna

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
10.1	The Proponent shall carry out the Designated Project in a manner that protects migratory birds and avoids harming, killing or disturbing migratory birds, or destroying, disturbing or taking their nests or eggs. In this regard, the Proponent shall take into account Environment and Climate Change Canada's Guidelines to avoid harm to migratory birds.	Measures to carry out the Project in a manner that protects migratory birds and avoids harming, killing, or disturbing migratory birds, or destroying, disturbing, or taking their nests or eggs will be included in the terrestrial vegetation and wildlife management plan. The port authority has initiated development of an outline for the construction-phase terrestrial vegetation and wildlife management plan, a sub-plan of the CEMP.
10.2	The Proponent shall document, prior to construction and in consultation with qualified internationally recognized experts that are in possession of specialist or expert information or knowledge with respect to biofilm ecology and other relevant disciplines, Indigenous groups (Roberts Bank), and Environment and Climate Change Canada, methods and best practices to create biofilm habitat, including details about the production of lipids, with specific reference to fatty acids in the Fraser River estuary. The Proponent shall publish a document compiling the results of this work on its website and shall provide it to the Agency prior to construction. The Proponent shall incorporate current knowledge and peer-reviewed science in the document and shall update the document at years 2, 5, and 10 following the end of construction based on emerging knowledge and science, including knowledge and science developed in accordance with conditions 10.3 and 10.4.	<p><b>Development</b> – The port authority has documented methods and best practices to create biofilm habitat, including details about the production of lipids, with specific reference to fatty acids in the Fraser River estuary, in the form of a draft biofilm habitat creation manual. In developing the manual, the port authority has incorporated input from qualified local and internationally recognized experts, as well as Indigenous knowledge, current knowledge, and peer-reviewed science. The manual will be finalized and published in future reporting years.</p> <p><b>Consultation with First Nations</b> – The port authority has consulted with First Nations (Roberts Bank) on biofilm habitat creation manual, including providing a draft of the manual for review and input. Consultation was initiated prior to issuance of the Decision Statement and continued in the reporting year.</p> <p><b>Consultation with government bodies</b> – Consultation with ECCC was initiated prior to issuance of the Decision Statement, including providing a draft of the manual for review, and continued in the reporting year.</p>
10.3 10.3.1	<p>The Proponent shall develop, in consultation with Indigenous groups (Roberts Bank) and Environment and Climate Change Canada, and implement prior to operation of the Designated Project, biofilm habitat creation or enhancement to support the western sandpiper (<i>Calidris mauri</i>) population within the Lower Mainland region. In doing so, the Proponent shall:</p> <ul style="list-style-type: none"> <li>10.3.1 design and implement biofilm habitat creation or enhancement, including any biofilm habitat creation or enhancement included in any wetland compensation plan developed pursuant to condition 9.2 and any biofilm habitat creation or enhancement implemented as a mitigation measure pursuant to condition 2.5.5, or 9.4.4, by applying the methods and best practices documented pursuant to condition 10.2. If the methods and best practices documented pursuant to condition 10.2 cannot be applied to biofilm habitat creation or enhancement undertaken by the Proponent, the Proponent shall document the reasons and the alternative methods or practices applied. The Proponent shall provide the reasons and the alternative methods or practices applied to the Agency, Indigenous groups (Roberts Bank), and Environment and Climate Change Canada.</li> </ul>	<p><b>Development</b> – The port authority initiated the development of biofilm habitat creation or enhancement to support western sandpiper, prior to issuance of the Decision Statement. Specifically, the port authority identified site selection criteria, and identified and evaluated several potential biofilm habitat creation or enhancement sites. These activities were conducted in consideration of the best practices documented pursuant to the draft biofilm habitat creation manual required in Condition 10.2.</p> <p><b>Consultation with First Nations</b> – The port authority has consulted with First Nations (Roberts Bank) on site selection criteria and possible locations for biofilm habitat creation or enhancement. Consultation was initiated prior to issuance of the Decision Statement and continued in the reporting year.</p> <p><b>Consultation with government bodies</b> – The port authority has initiated consultation with ECCC on site selection criteria and possible locations for biofilm habitat creation or enhancement.</p>
10.4 10.4.1 to 10.4.5	The Proponent shall develop, in consultation with Indigenous groups (Roberts Bank), Environment and Climate Change Canada, relevant authorities, and qualified individuals that are in possession of specialist or expert information or knowledge with respect to biofilm ecology and other relevant disciplines, and implement prior to and during construction, a follow-up program to verify predicted changes caused by the Designated Project on salinity, and predicted effects of those changes on biofilm, and western sandpiper ( <i>Calidris mauri</i> ). The Proponent shall implement the follow-up	<p><b>Development</b> – The port authority has initiated development of the salinity, biofilm, and western sandpiper FUP. Specifically, the port authority has begun development of monitoring parameters and methods pursuant to condition 10.4.1 and initiated preliminary data collection to inform the FUP development.</p> <p><b>Consultation with First Nations</b> – The port authority has initiated consultation with First Nations (Roberts Bank). Comment response tables related to consultation on this condition to date are provided in <b>Appendix B</b>.</p>

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
	<p>program in accordance with conditions 2.5 to 2.9. As part of the follow-up program, the Proponent shall:</p> <ul style="list-style-type: none"> <li>• 10.4.1 – identify monitoring parameters, methods, and thresholds and submit those monitoring parameter, methods, and thresholds to the Agency for review and advice by an independent scientific body established by the Agency. The thresholds must include thresholds beyond which a potential adverse environmental effect on biofilm or Western sandpiper (<i>Calidris mauri</i>) is likely to occur as a result of salinity changes caused by the Designated Project;</li> <li>• 10.4.2 – establish, prior to construction, baseline conditions, taking into account variability, for the parameters identified pursuant to condition 10.4.1;</li> <li>• 10.4.3 – monitor, for a minimum of 36 months immediately following construction of the east basin containment dyke of the marine terminal, the parameters identified pursuant to condition 10.4.1 and compare these against the thresholds established pursuant to condition 10.4.1;</li> <li>• 10.4.4 – submit the baseline conditions information established pursuant to condition 10.4.2 and the results of monitoring conducted pursuant to condition 10.4.3 to the Agency for review by the independent scientific body; and</li> <li>• 10.4.5 – if the monitoring pursuant to in 10.4.3 indicates that changes to the monitoring parameters attributable to the Designated Project are exceeding thresholds identified in condition 10.4.1, as confirmed by the independent scientific body, the Proponent shall develop and implement modified or additional mitigation measures to return the monitoring parameters below thresholds or to offset the effects. These modified or additional mitigation measures may include but are not limited to biofilm habitat creation or enhancement and infrastructure redesign or removal.</li> </ul>	<p><b>Consultation with government bodies</b> - The port authority has initiated consultation with government bodies, including ECCC and DFO. DFO was determined to be a relevant authority in the technical area of water column salinity.</p> <p><b>Consultation with qualified individuals</b> – The port authority has initiated consultation with qualified individuals with expert information or knowledge pursuant to condition 10.4.</p>
<p>10.5 10.5.1 to 10.5.2</p>	<p>The Proponent shall develop, prior to construction and in consultation with Indigenous groups (Roberts Bank), Environment and Climate Change Canada, relevant authorities, and qualified individuals that are in possession of specialist or expert information or knowledge with respect to biofilm ecology and other relevant disciplines, and implement during the remainder of construction not covered by condition 10.4 and operation, a follow-up program to verify the accuracy of the environmental assessment as it pertains to the effects of the Designated Project on salinity, biofilm, and western sandpiper (<i>Calidris mauri</i>). The Proponent shall implement the follow-up program in accordance with conditions 2.5 to 2.9. As part of the follow-up program, the Proponent shall:</p> <ul style="list-style-type: none"> <li>• 10.5.1 - conduct monitoring using the parameters and methods established pursuant to condition 10.4.1; and</li> <li>• 10.5.2 - implement additional or modified mitigation measures to mitigate any adverse environmental effect on western sandpiper (<i>Calidris mauri</i>) caused by any exceedance of thresholds established pursuant to condition 10.4.1 caused by the Designated Project.</li> </ul>	<p>No applicable actions were undertaken in the reporting year.</p>
<p>10.6</p>	<p>The Proponent shall identify, in consultation with Environment and Climate Change Canada, Birds Canada, British Columbia’s Ministry of Transportation and Infrastructure, and Indigenous groups (Roberts Bank), types of and suitable locations for, and install physical barrier(s) within either the local and/or regional assessment areas, shown in Figures 15-1 and 15-2 of the environmental impact statement, to mitigate road-associated mortality risk for barn owls (<i>Tyto alba</i>) as a result of the Designated Project. The Proponent shall install the barrier(s), prior to operation, in a manner that does not attract other avian species, including barn swallows (<i>Hirundo rustica</i>), and shall, where technically feasible, conserve barn owl (<i>Tyto alba</i>) roadside grass verge hunting habitat. The Proponent shall maintain the barriers throughout operation and shall consider the lifespan and long-term maintenance requirements when identifying the types and locations of the barrier(s).</p>	<p>No applicable activities were undertaken in the reporting year.</p>

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
10.7	The Proponent shall identify, in consultation with Environment and Climate Change Canada, Birds Canada and Indigenous groups (Roberts Bank) and to the satisfaction of a qualified professional, the number and locations of artificial nest structures that shall be installed within the regional assessment area shown in Figure 15-2 of the environmental impact statement to enhance barn owl ( <i>Tyto alba</i> ) productivity. The Proponent shall install at least five nest structures during the first year of construction and shall maintain the nest structures throughout construction and operation.	No applicable activities were undertaken in the reporting year.
10.8	The Proponent shall contribute to third-party program(s) to establish and maintain barn owl ( <i>Tyto alba</i> ) foraging habitat close to existing or newly installed artificial nest structures.	No applicable activities were undertaken in the reporting year.
10.9	The Proponent shall cap all hollow steel pipes following their installation in the Designated Project area, and shall maintain capping throughout construction and operation.	No applicable activities were undertaken in the reporting year.
10.10	The Proponent shall determine, in consultation with Environment and Climate Change Canada, the extent to which the offsetting required pursuant to conditions 7.11 and 9.2 includes great blue heron ( <i>Ardea herodias</i> ) foraging habitat, and shall compensate residual productivity loss to great blue heron ( <i>Ardea herodias</i> ) foraging habitat in the intertidal zone of the local assessment area indicated on Figure 15-1 of the environmental impact statement that has not otherwise been compensated.	No applicable activities were undertaken in the reporting year.
10.11	The Proponent shall determine, in consultation with British Columbia's Ministry of Transportation and Infrastructure and Environment and Climate Change Canada, if the implementation of measures to decrease the potential for bird-vehicle collisions within the local and regional assessment area indicated by the Proponent on Figures 15-1 and 15-2 of the environmental impact statement (including reduced speed limits) is technically and economically feasible. If technically and economically feasible, the Proponent shall provide these measures to the Agency prior to construction. The Proponent shall ensure vehicles associated with the Designated Project adhere to these measures during construction and operation within the Designated Project area.	No applicable activities were undertaken in the reporting year.
10.12	The Proponent shall develop and implement measures to increase awareness among employees, contractors and truck drivers associated with the Designated Project, who may encounter wildlife within the Designated Project area, to reduce collisions between birds and vehicles.	No applicable actions were undertaken in the reporting year.
10.13	The Proponent shall develop, prior to each phase of the Designated Project, in consultation with Environment and Climate Change Canada and Metro Vancouver and to the satisfaction of a qualified professional, waste management measures to minimize waste generation and to avoid harm to birds. The Proponent shall implement these measures during the relevant phase of the Designated Project and shall provide them to the Agency prior to implementing them.	<b>Development</b> – Waste management measures to minimize waste generation and to avoid harm to birds will be included in the waste management plan. The port authority has initiated development of an outline for the construction-phase waste management plan, a sub-plan of the CEMP.  <b>Consultation with government bodies</b> – No applicable actions were undertaken in the reporting year.
10.14	The Proponent shall develop and implement, in consultation with Indigenous groups (Roberts Bank), protocols to notify Indigenous groups (Roberts Bank) of any mortality of birds of interest within the Designated Project area and for the safe harvest of the birds by or for the use of Indigenous groups (Roberts Bank).	No applicable actions were undertaken in the reporting year.
10.15	The Proponent shall develop, prior to construction and in consultation with Environment and Climate Change Canada and Indigenous groups (Roberts Bank), a follow-up program as described	<b>Development</b> – The port authority has initiated development of the great blue heron FUP, including preliminary data collection to inform the monitoring study design development.

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
	<p>in Table C4 of Appendix G in the Federal Review Panel Report to verify the accuracy of the environmental assessment and determine the effectiveness of mitigation measures as it pertains to the abundance and use of foraging habitat, including any created as a result of condition 10.10, by great blue heron (<i>Ardea herodias</i>). The Proponent shall implement the follow-up program in accordance with conditions 2.5 to 2.9.</p>	<p><b>Consultation with First Nations</b> – The port authority has initiated consultation with First Nations (Roberts Bank) on the development of the great blue heron FUP prior to issuance of the Decision Statement. No applicable actions were undertaken in the reporting year.</p> <p><b>Consultation with government bodies</b> – No applicable actions were undertaken in the reporting year.</p>
10.16	<p>The Proponent shall develop, prior to construction and in consultation with Environment and Climate Change Canada, British Columbia’s Ministry of Environment and Climate Change Strategy, City of Delta, City of Richmond and Indigenous groups (Roberts Bank), a follow-up program as described in Table C16 of Appendix G in the Federal Review Panel Report to determine the effectiveness of mitigation measures as it pertains to the artificial nest structures for barn owl (<i>Tyto alba</i>) installed pursuant to condition 10.7 in the local and regional assessment areas. The Proponent shall implement the follow-up program in accordance with conditions 2.5 to 2.9.</p>	<p>No applicable actions were undertaken in the reporting year.</p>
10.17 10.17.1	<p>The Proponent shall develop, prior to construction and in consultation with Environment and Climate Change Canada, British Columbia’s Ministry of Environment and Climate Change Strategy, British Columbia’s Ministry of Transportation and Infrastructure, and Indigenous groups (Roberts Bank), a follow-up program as described in Table C17 of Appendix G in the Federal Review Panel Report to verify the accuracy of the environmental assessment in the local assessment area shown in Figures 15-1 of the environmental impact statement and determine the effectiveness of mitigation measures as it pertains to barn owl (<i>Tyto alba</i>). The Proponent shall implement the follow-up program in accordance with conditions 2.5 to 2.9. As part of the follow-up program, the Proponent shall:</p> <p>10.17.1 - monitor the effectiveness of physical barrier(s) installed to reduce vehicle collision with barn owl (<i>Tyto alba</i>) and other avian species, including barn swallow (<i>Hirundo rustica</i>), pursuant to condition 10.6.</p>	<p><b>Development</b> – The port authority has initiated the development of the barn owl mitigation effectiveness FUP.</p> <p><b>Consultation with First Nations</b> – The port authority initiated consultation with First Nations (Roberts Bank) on the barn owl mitigation effectiveness FUP prior to issuance of the Decision Statement. No applicable actions were undertaken in the reporting year.</p> <p><b>Consultation with government bodies</b> – No applicable actions were undertaken in the reporting year.</p>
10.18	<p>The Proponent shall develop, prior to construction and in consultation with Environment and Climate Change Canada and Indigenous groups (Roberts Bank), a follow-up program as described in Table C18 of Appendix G in the Federal Review Panel Report to verify the accuracy of the environmental assessment as it pertains to the abundance, density and diversity of diving birds. The Proponent shall implement the follow-up program in accordance with conditions 2.5 to 2.9.</p>	<p><b>Development</b> – The port authority has initiated development of the development of the diving bird FUP.</p> <p><b>Consultation with First Nations</b> – The port authority has initiated consulted with First Nations (Roberts Bank) on the diving bird FUP. Consultation was initiated prior to issuance of the Decision Statement. No applicable actions were undertaken in the reporting year.</p> <p><b>Consultation with government bodies</b> – No applicable actions were undertaken in the reporting year.</p>
10.19 10.19.1	<p>The Proponent shall develop, prior to construction and in consultation with Environment and Climate Change Canada and Indigenous groups (Roberts Bank), a follow-up program as described in Table C19 of Appendix G in the Federal Review Panel Report to verify the accuracy of the environmental assessment as it pertains to the effect of artificial light from the Designated Project on coastal bird population viability. The Proponent shall implement the follow-up program in accordance with conditions 2.5 to 2.9. As part of the follow-up program, the Proponent shall:</p> <p>10.19.1 - conduct surveys of light-induced stranding events of migratory birds aligned with the periods for which light-induced stranding events are expected to occur taking into consideration methodology information provided by Environment and Climate Change Canada.</p>	<p>No applicable actions were undertaken in the reporting year.</p>

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
10.20	The Proponent shall develop, prior to construction and in consultation with Environment and Climate Change Canada and Indigenous groups (Roberts Bank), a follow-up program to verify the accuracy of the environmental assessment and determine the effectiveness of mitigation measures as it pertains to barn swallow ( <i>Hirundo rustica</i> ) habitat. The Proponent shall implement the follow-up program in accordance with conditions 2.5 to 2.9.	No applicable actions were undertaken in the reporting year.

## 11. Communication plan

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
11.1 11.1.1 to 11.1.5	<p>The Proponent shall develop, prior to construction and in consultation Indigenous groups (Roberts Bank), Indigenous groups (marine shipping), relevant authorities, and commercial and recreational marine users (including the Area I Crab Fisherman Association and the Lower Fraser Sport Fishing Advisory Committee), a communication plan. The Proponent shall implement the plan during construction and operation. The plan shall include measures applicable to each phase of the Designated Project to provide up-to-date information to Indigenous groups (Roberts Bank), Indigenous groups (marine shipping), and commercial and recreational marine users about activities related to the construction and operation of the marine terminal, the widened causeway, and the expanded tug basin that may adversely affect access within the local assessment area for land and water use indicated on Figure 26-1 of the environmental impact statement. As part of the plan, the Proponent shall include the following:</p> <ul style="list-style-type: none"> <li>• 11.1.1 - the type of information that will be communicated to Indigenous groups (Roberts Bank), Indigenous groups (marine shipping), and commercial and recreational marine users about the nature, location, status and progress of planned and unplanned activities associated with the Designated Project, including:             <ul style="list-style-type: none"> <li>• 11.1.1.1 - information on navigational closure areas implemented during construction or operation of the Designated Project;</li> <li>• 11.1.1.2 - vessel traffic schedules for vessels associated with the Designated Project; and</li> <li>• 11.1.1.3 - procedures for navigational safety and any other measures implemented by the Proponent to mitigate adverse effects to navigation as a result of the Designated Project.</li> </ul> </li> <li>• 11.1.2 -procedures to communicate the information referred to in condition 11.1.1 to Indigenous groups (Roberts Bank), Indigenous groups (marine shipping), and commercial and recreational marine users, including timing and frequency of distribution of this information;</li> <li>• 11.1.3 - procedures for Indigenous groups (Roberts Bank) and Indigenous groups (marine shipping) to communicate information to the Proponent about timing, duration and location of fishing for food, social and ceremonial purposes and how Designated Project activities may interfere with this practice;</li> <li>• 11.1.4 - procedures for Indigenous groups (Roberts Bank), Indigenous groups (marine shipping), and commercial and recreational marine users to provide feedback to the Proponent on adverse effects related to marine use as result of construction and operation of the marine terminal, the widened causeway, and the expanded tug basin including unanticipated issues and interactions with other users; and</li> <li>• 11.1.5 - procedures for the Proponent to document and respond in a timely manner to the information communicated pursuant to 11.1.3 and feedback received pursuant to 11.1.4, and to demonstrate how it has been addressed.</li> </ul>	<p><b>Development</b> –The port authority has initiated development of an outline for the construction-phase marine users communication plan, a sub-plan of the CEMP. The marine users communication plan will address the information requirements specified in this condition.</p> <p><b>Consultation with First Nations</b> – The port authority has initiated consultation on the development of the marine users communication plan for construction.</p> <p><b>Consultation with government bodies</b> – No applicable actions were undertaken in the reporting year.</p>



## 12. Current use of lands and resources for traditional purposes

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
12.1 12.1.1 to 12.1.3	<p>The Proponent shall allow access to closure area(s), including navigational closure area(s) that are within the care and control of the Proponent, for the purpose of Indigenous harvesting of crab for domestic or food, social and ceremonial purposes, to the extent that such access is safe. In doing so, the Proponent shall:</p> <ul style="list-style-type: none"> <li>12.1.1 - consult with Tsawwassen First Nation, Musqueam, and other Indigenous groups (Roberts Bank) on the development and implementation of the closure area(s), including the timing of implementation, location and spatial extent;</li> <li>12.1.2 - provide the final details related to the closure area(s) referred to in condition 12.1.1 to Tsawwassen First Nation, Musqueam, other Indigenous groups (Roberts Bank), and Fisheries and Oceans Canada prior to implementation, and any update to that information; and</li> <li>12.1.3 - develop and implement measures, in consultation with Tsawwassen First Nation, Musqueam, other Indigenous groups (Roberts Bank), and Fisheries and Oceans Canada, to address safety concerns and the practicality for members of Tsawwassen First Nation and Musqueam and other Indigenous groups (Roberts Bank) to harvest crab for food, social and ceremonial purposes within the navigational closure area(s).</li> </ul>	<p><b>Development</b> – The port authority initiated development of the location and spatial extent of the expanded navigational closure area, in accordance with condition 12.1.1, prior to issuance of the Decision Statement. No applicable actions were undertaken in the reporting year.</p> <p><b>Consultation with First Nations</b> – The port authority initiated consultation with Tsawwassen First Nation and Musqueam on the location and spatial extent of the closure area prior to issuance of the Decision Statement, and consultation continued in the reporting year.</p>
12.2	<p>The Proponent shall undertake a study to investigate the use of alternative technologies and methods for harvesting crab for food, social and ceremonial purposes in the navigational closure area. The Proponent shall develop the study prior to construction, in consultation with Tsawwassen First Nation and Musqueam and to the satisfaction of Fisheries and Oceans Canada, and undertake the study, starting prior to the initiation of the Designated Project construction. The Proponent shall adapt the study over time as additional information is gathered with the goal of identifying a viable long-term option, to the satisfaction of Fisheries and Oceans Canada, that would allow Tsawwassen First Nation and Musqueam to harvest crab for food, social and ceremonial purposes in the navigational closure area while meeting safety and regulatory requirements. The Proponent shall implement any aspect of the identified viable long-term option within its care and control, throughout operation of the Designated Project.</p>	<p><b>Development</b> – The port authority has initiated development of a study to investigate the use of alternative technologies and methods for harvesting crab for food, social, and ceremonial purposes in the navigational closure area. Specifically, the port authority developed Terms of Reference for a steering committee for the study.</p> <p><b>Consultation with First Nations</b> – The port authority has consulted with Tsawwassen First Nation and Musqueam on the development of the study. Consultation was initiated prior to issuance of the Decision Statement and continued in the reporting year.</p> <p><b>Consultation with government bodies</b> – The port authority has consulted with DFO on the development of the study prior to issuance of the Decision Statement and consultation continued in the reporting year.</p>
12.3	<p>The Proponent shall, prior to construction, work collaboratively with Musqueam and Tsawwassen First Nation on a stewardship initiative to retrieve and dispose of lost or discarded fishing gear in the Roberts Bank area.</p>	<p>No applicable actions were undertaken in the reporting year.</p>
12.4 12.4.1 to 12.4.4	<p>The Proponent shall develop prior to construction and in consultation with Transport Canada and Indigenous groups (Roberts Bank) and Indigenous groups (marine shipping), a follow-up program to verify the predictions of the environmental assessment as it pertains to changes in container vessel traffic as a result of the Designated Project and related effects on current use of lands and resources for traditional purposes by Indigenous groups (Roberts Bank) and Indigenous groups (marine shipping). The Proponent shall implement the follow-up program during construction and operation in accordance with conditions 2.5 to 2.9. As part of the follow-up program, the Proponent shall:</p> <ul style="list-style-type: none"> <li>12.4.1 – monitor the number, capacity based on twenty-foot equivalent units, and route of container vessels calling at the Port of Vancouver;</li> <li>12.4.2 - report annually, as part of the annual report referred to in condition 2.10 and to Indigenous groups (Roberts Bank) and Indigenous groups (marine shipping), the parameters referred to in condition 12.4.1 starting at the beginning of construction;</li> <li>12.4.3 - consult with Indigenous groups (Roberts Bank) and Indigenous groups (marine shipping) to develop and implement a process to determine whether any increase in container vessels attributable to the Designated Project is resulting in incremental interference with current use of lands and resources for</li> </ul>	<p>No applicable actions were undertaken in the reporting year.</p>

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
	<p>traditional purposes in the marine shipping area. The process shall include documenting the specific nature and characteristics of the interference, based on input received from the Indigenous groups consulted; and</p> <ul style="list-style-type: none"> <li>12.4.4 - if incremental interference with the current use of lands and resources for traditional purposes is identified pursuant to 12.4.3, identify, in consultation with Indigenous groups (Roberts Bank), Indigenous groups (marine shipping), Transport Canada, and Canadian Coast Guard, modified or additional measures that could be implemented to mitigate the incremental interference. The Proponent shall implement any technically and economically feasible measures that are identified that are within its care and control. The Proponent shall submit these measures to the Agency prior to implementing them.</li> </ul>	
12.5 12.5.1 to 12.5.5	<p>The Proponent shall develop, prior to construction, and implement, throughout the first eight years of operation, a follow-up program in consultation with Tsawwassen First Nation, Musqueam, and other Indigenous groups (Roberts Bank) as it relates to their current use of lands and resources for traditional purposes. The Proponent shall implement the follow-up program in accordance with conditions 2.5 to 2.9. As part of the development of the follow-up program, the Proponent shall identify:</p> <ul style="list-style-type: none"> <li>12.5.1 - parameters to monitor changes in environmental components identified as important for the current use of lands and resources for traditional purposes, including crab and juvenile salmon, and the contribution of the construction and operation of the marine terminal, the widened causeway, and the expanded tug basin to these changes;</li> <li>12.5.2 - how the Proponent will monitor the parameters identified pursuant to condition 12.5.1, including the means, timing and location of monitoring, and how monitoring conducted as part of the other follow-up programs set out in this Decision Statement for environmental components referred to in condition 12.5.1 will be utilized;</li> <li>12.5.3 - the levels of changes to environmental components referred to in condition 12.5.1 relative to baseline and attributable to the construction and operation of the marine terminal, the widened causeway, and the expanded tug basin that would require the Proponent to implement modified or additional mitigation measure(s);</li> <li>12.5.4 - a process for developing and implementing any modified or additional mitigations if the levels of environmental change identified pursuant to condition 12.5.3 are exceeded; and</li> <li>12.5.5. - opportunities for the participation of Tsawwassen First Nation, Musqueam, and other Indigenous groups (Roberts Bank) in monitoring and reporting on the follow-up program.</li> </ul>	No applicable actions were undertaken in the reporting year.
12.6	<p>The Proponent shall participate, at the request of Transport Canada and/or Fisheries and Oceans Canada, in the development and implementation of regional initiatives, including as part of the Oceans Protection Plan, or equivalent, related to effects on current use of lands and resources for traditional purposes as a result of marine shipping.</p>	<p>During the reporting year, the port authority has not received a request to participate in any regional initiative related to effects on current use of lands and resources for traditional purposes as a result of marine shipping, however, the port authority continues to participate in the Oceans Protection Plan.</p>

### 13. Health and socio-economic conditions

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
13.1 13.1.1 to 13.1.4	<p>The Proponent shall develop, prior to construction and in consultation with Indigenous groups (Roberts Bank), Health Canada, British Columbia's Ministry of Health, Fraser Health Authority and other relevant authorities, and to the satisfaction of a qualified individual or professional, a follow-up program to verify the accuracy of the environmental assessment as it pertains to the effects of the construction and operation of the marine terminal, the widened causeway, and the expanded tug basin on Indigenous health related to the quality of marine traditional food. The Proponent shall implement the follow-up program in accordance with conditions 2.5 to 2.9. As part of the follow-up program, the Proponent shall:</p>	No applicable actions were undertaken in the reporting year.

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
	<ul style="list-style-type: none"> <li>13.1.1. - collect, prior to, during and post in-water construction, samples of marine species consumed by Indigenous groups (Roberts Bank);</li> <li>13.1.2 - develop a list of potential contaminants of concern to be analyzed;</li> <li>13.1.3 - conduct laboratory analysis of tissue samples of the marine species identified pursuant to condition 13.1.1 for the contaminants of concern identified during the development of the follow-up program; and</li> <li>13.1.4 - conduct analysis of results of the follow-up program using a human health risk assessment prior to, during and post in-water construction.</li> </ul>	
<p>13.2 13.2.1 to 13.2.3</p>	<p>The Proponent shall develop, prior to construction and in consultation with Indigenous groups (Roberts Bank), Health Canada, British Columbia's Ministry of Health, Fraser Health Authority and other relevant authorities, a follow-up program to verify the accuracy of the environmental assessment as it pertains to the effects of the construction and operation of the marine terminal, the widened causeway, and the expanded tug basin on Indigenous health related to food security. The Proponent shall implement the follow-up program in accordance with conditions 2.5 to 2.9. As part of the follow-up program, the Proponent shall:</p> <ul style="list-style-type: none"> <li>13.2.1 - survey Indigenous communities regarding consumption patterns of marine traditional foods in the area potentially impacted by the Designated Project, prior to, during and post-in water construction;</li> <li>13.2.2 - survey Indigenous communities regarding their response to the results of analysis conducted pursuant to condition 13.1 to determine factors influencing any changes to consumption patterns; and</li> <li>13.2.3 - implement additional or modified mitigation measures should results indicate that changes in consumption patterns are occurring and are a result of real or perceived effects of the Designated Project.</li> </ul>	<p>No applicable actions were undertaken in the reporting year.</p>
<p>13.3</p>	<p>The Proponent shall participate, at the request of a relevant federal authority, in any regional initiative related to improving the understanding of shellfish quality at Roberts Bank.</p>	<p>The port authority has not received a request from a relevant federal authority to participate in any regional initiative related to improving the understanding of shellfish quality at Roberts Bank.</p>
<p>13.4 13.4.1 to 13.4.4</p>	<p>The Proponent shall develop, prior to construction and in consultation with Tsawwassen First Nation and the Maa-nulth First Nations, a process for Tsawwassen First Nation and the Maa-nulth First Nations to report concerns to the Proponent about any adverse environmental effect caused by the construction and operation of the marine terminal, the widened causeway, and the expanded tug basin and incidental marine shipping activities on their commercial ventures. The Proponent shall implement the process during construction and the first five years of operation or until the marine terminal has reached full capacity. As part of the implementation of the process, the Proponent shall:</p> <ul style="list-style-type: none"> <li>13.4.1 - document the concerns received from Tsawwassen First Nation and the Maa-nulth First Nations, including a description of how these concerns relate to effects of the Designated Project on their commercial ventures;</li> <li>13.4.2 - implement technically and economically feasible modified or additional mitigation measures, in consultation with Tsawwassen First Nation and the Maa-nulth First Nations, to address concerns documented in accordance with condition 13.4.1 that relate to issues within the Proponent's care and control;</li> <li>13.4.3 - report concerns documented in accordance with condition 13.4.1 that relate to issues outside the Proponent's care and control to Transport Canada and the Canadian Coast Guard; and</li> <li>13.4.4 - provide to the Agency, as part of the annual report referred to in condition 2.10, all concerns received during the reporting year and how the Proponent has addressed all concerns related to issues within the Proponent's care and control, including any modified or additional mitigation measure that the Proponent has implemented or plans to implement, or a rationale as to why no modified or additional mitigation measure(s) is/are required to address the concerns received.</li> </ul>	<p>No applicable actions were undertaken in the reporting year.</p>

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
13.5	<p>The Proponent shall develop, prior to construction and in consultation with the Area I Crab Fisherman Association, Indigenous groups that hold commercial licenses to harvest crab within the local assessment area indicated on Figure 21-3 of the environmental impact statement, the Lower Fraser Sport Fishing Advisory Committee, and Fisheries and Oceans Canada, measures to mitigate adverse environmental effects on the commercial and recreational crab fisheries attributable to the construction and operation of the marine terminal, the widened causeway, and the expanded tug basin. The measures to mitigate potential impacts to the commercial crab fishery must consist of measures to determine the extent of any reduction in commercial crab harvest resulting from any loss of access to commercial crab fishing grounds for Area I commercial license holders, and measures to mitigate any reduction in commercial crab harvests resulting from any loss of access. The Proponent shall implement these mitigation measures during construction and operation and shall submit these measures to the Agency prior to implementing them.</p>	No applicable actions were undertaken in the reporting year.
13.6	<p>The Proponent shall annually undertake monitoring and analysis, during construction and the first five years of operation, of commercial crab harvest landing data within the local assessment area to the extent that such data is available to the Proponent and evaluate the effectiveness of the mitigation measures developed pursuant to condition 13.5, to inform activities pursuant to condition 13.7. The Proponent shall, if the evaluation determines that the mitigation measures developed pursuant to condition 13.5 are not effective, develop, in consultation with the Area I Crab Fisherman Association, Indigenous groups that hold commercial licenses to harvest crab within the local assessment area indicated on Figure 21-3 of the environmental impact statement, the Lower Fraser Sport Fishing Advisory Committee, and Fisheries and Oceans Canada, and implement modified or additional measures.</p>	No applicable actions were undertaken in the reporting year.
13.7 13.7.1 to 13.7.2	<p>The Proponent shall invite commercial crab harvesters, including the Area I Crab Fisherman Association, Indigenous groups that hold commercial licenses to harvest crab within the local assessment area indicated by the Proponent on Figure 21-3 of the environmental impact statement, and the Lower Fraser Sport Fishing Advisory Committee, to meetings annually during construction and the first five years of operation to discuss:</p> <ul style="list-style-type: none"> <li>• 13.7.1 - the effectiveness of mitigation measures developed pursuant to condition 13.5 and any modified or additional measures developed pursuant to condition 13.6, including the nature, location and status of relevant Designated Project activities; and</li> <li>• 13.7.2 - the results of the annual commercial crab harvest landing data monitoring, analysis and evaluation referred to in condition 13.6.</li> </ul>	No applicable actions were undertaken in the reporting year.
13.8	<p>The Proponent shall evaluate the feasibility of implementing land use options related to or in support of agriculture, for portions of the land referred as Lot 3 in the Vancouver Fraser Port Authority's 2018 Approved Land Use Plan Amendments that are not required for Designated Project components or activities. The Proponent shall provide the Agency with the results of the evaluation, provide a reasonable justification for options determined not economically or technically feasible, and implement technically and economically feasible land use options related to or in support of agriculture.</p>	No applicable actions were undertaken in the reporting year.
13.9	<p>The Proponent shall participate, at the request of a relevant authority, in any regional initiative related to the prevention, monitoring and compensation of any adverse environmental effect attributable to the Designated Project on Agricultural Land Reserve properties located adjacent to the Designated Project area.</p>	The port authority has not received a request by a relevant authority to participate in any regional initiative related to the Agricultural Land Reserve.

#### 14. Physical and cultural heritage and structures, sites or things or historical, archaeological, paleontological or architectural significance

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
14.1	The Proponent shall develop, prior to construction and in consultation with Tsawwassen First Nation, Musqueam, and other Indigenous groups (Roberts Bank), and to the satisfaction of a qualified professional, and implement a plan to conduct an inventory of fish trap stakes across the eastern end of the causeway expansion area within the area of moderate archaeological potential indicated by the Proponent on Figure 8 of Appendix 28-A of the environmental impact statement. If the Proponent encounters any fish trap stakes during the inventory, it shall expand excavation towards the existing causeway. The Proponent shall implement the procedures developed pursuant to condition 14.3 when encountering any fish trap stake.	No applicable actions were undertaken in the reporting year.
14.2	The Proponent shall monitor annually, in consultation with Indigenous groups (Roberts Bank) and to the satisfaction of a qualified professional, during construction and for the first five years of operation, erosion of the area of moderate archeological potential indicated by the Proponent on Figure 28-3 of Volume 4 of the environmental impact statement and of the historic tidal channel that lies northwest of the terminal, formerly draining Canoe Passage, to identify potential exposure of buried fish trap stakes or other archeological resource(s). The Proponent shall implement procedures developed pursuant to condition 14.3 when encountering any fish trap stake(s) or archeological resource(s).	No applicable actions were undertaken in the reporting year.
14.3 14.3.1 to 14.3.7.4	<p>The Proponent shall develop, prior to construction, in consultation with Indigenous groups (Roberts Bank) and relevant authorities and to the satisfaction of a qualified professional, a Physical Heritage Resources Management Plan for any structure, site, or thing of historical, archaeological, paleontological, or architectural significance or physical heritage resources within the local assessment area indicated on Figure 28-1 of the environmental impact statement. The Proponent shall implement the Physical Heritage Resources Management Plan during all phases of the Designated Project. The plan shall include:</p> <ul style="list-style-type: none"> <li>• 14.3.1 - a description of how Indigenous knowledge and traditional use studies conducted as part of the environmental assessment have been integrated into the development of the plan, while respecting Indigenous knowledge protocols and keeping Indigenous knowledge confidential, if requested;</li> <li>• 14.3.2 - a description of the predicted impacts of activities associated with the construction and operation of the marine terminal, the widened causeway, and the expanded tug basin on physical heritage resources and structures, sites, or things of historical, archaeological, paleontological or architectural significance within the local assessment area;</li> <li>• 14.3.3 - protocols with respect to the discovery, handling, recognition, recording, transferring and safekeeping of fish trap stakes identified through the inventory conducted by the Proponent pursuant to condition 14.1 or through monitoring pursuant to condition 14.2;</li> <li>• 14.3.4 - procedures to record, analyze, and mitigate the adverse environmental effects of the construction and operation of the marine terminal, the widened causeway, and the expanded tug basin on physical heritage resources and structures, sites, or things of historical, archaeological, paleontological or architectural significance;</li> <li>• 14.3.5 - a process for reporting information about physical heritage resources and structures, sites or things of historical, archaeological, paleontological or architectural significance to Indigenous groups (Roberts Bank) and relevant authorities;</li> <li>• 14.3.6 - a chance find protocol to apply in the event that previously unidentified physical heritage features or structures, sites or things of historical, archaeological, paleontological or architectural significance are discovered by the Proponent. As part of the chance find protocol, the Proponent shall:             <ul style="list-style-type: none"> <li>• 14.3.6.1 - as soon as it is safe to do so, halt work at the location of the discovery, except for actions required to be undertaken to protect the integrity of the discovery;</li> <li>• 14.3.6.2 - delineate an area of at least 30 metres around the discovery as a no-work zone;</li> </ul> </li> </ul>	<p><b>Development</b> – The port authority has initiated development of an outline for the construction-phase physical heritage resources management plan, a sub-plan of the CEMP. The physical heritage resources management plan will address the information requirements specified in this condition.</p> <p><b>Consultation with First Nations</b> – The port authority has initiated consultation on the development of the physical heritage resources management plan outline.</p> <p><b>Consultation with government bodies</b> – No applicable actions were undertaken in the reporting year.</p>

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
	<ul style="list-style-type: none"> <li>• 14.3.6.3 - have a qualified professional, whose expertise pertains to the requirements of British Columbia's Archaeological Impact Assessment Guidelines and British Columbia's Heritage Conservation Act, conduct an assessment at the location of the discovery; and</li> <li>• 14.3.6.4 - inform the Agency and Indigenous groups (Roberts Bank) within 24 hours of the discovery, and allow Indigenous groups (Roberts Bank) to monitor archaeological works.</li> <li>• 14.3.7 - a process for qualified individuals to provide training to employees and contractors involved in or overseeing Designated Project construction activities that involve physical disturbance of previously undisturbed ground about:               <ul style="list-style-type: none"> <li>• 14.3.7.1 - how to identify physical heritage features or structures, sites or things of historical, archaeological, paleontological or architectural significance;</li> <li>• 14.3.7.2 - how to implement the protocols developed pursuant to conditions 14.3.3 and 14.3.6;</li> <li>• 14.3.7.3 - the locations of sensitive physical heritage resources and structures, sites or things of historical, archeological, paleontological or architectural significance within the Designated Project area; and</li> <li>• 14.3.7.4 - cultural sensitivity, confidentiality and heritage values in relation to these sensitive physical heritage resources and structures, sites or things of historical, archeological, paleontological or architectural significance within the Designated Project area.</li> </ul> </li> </ul>	
14.4	The Proponent shall develop, in consultation with Indigenous groups (Roberts Bank), criteria that the Proponent shall apply when retaining the services of the qualified individual(s) and professional(s) referred to in conditions 14.1 through 14.3.	No applicable actions were undertaken in the reporting year.
14.5	The Proponent shall develop and implement, in consultation with Indigenous groups (Roberts Bank), additional or modified mitigation measures if the Proponent must conduct any pre-construction survey that may impact any structure, site, or thing of historical, archaeological, paleontological, or architectural significance or physical heritage resources. The Proponent shall implement these measures prior to conducting these surveys, and shall provide these measures to the Agency prior to implementing them. The Proponent shall implement the procedures developed pursuant to condition 14.3 when encountering any structure, site, or thing of historical, archaeological, paleontological, or architectural significance or physical heritage resources during these activities.	No applicable actions were undertaken in the reporting year.
14.6	The Proponent shall ensure Indigenous monitors referred to in condition 15.1 are notified prior to being on site when archeological works are being undertaken pursuant to conditions 14.1 through 14.3 and shall ensure those Indigenous monitors have access to the area where the archeological works are being undertaken while they are underway, subject to meeting safety requirements.	No applicable actions were undertaken in the reporting year.
14.7 14.7.1	<p>The Proponent shall develop, prior to construction and in consultation with Indigenous groups (Roberts Bank), and implement measures to mitigate effects caused by the construction and operation of the marine terminal, the widened causeway, and the expanded tug basin on cultural heritage, including:</p> <ul style="list-style-type: none"> <li>• 14.7.1 – painting the cranes to be used during operation in colours that reduce contrast and enhance blending with the surrounding landscape, determined in consultation with Transport Canada, and shall maintain these colours throughout operation, subject to safety and regulatory requirements.</li> </ul>	No applicable actions were undertaken in the reporting year.
14.8 14.8.1 to 14.8.2	The Proponent shall develop, prior to construction and in consultation with Tsawwassen First Nation, Musqueam, and Tsleil-Waututh Nation, nation-specific measures to address the effects described in the Federal Review Panel Report caused by the construction and operation of the marine terminal, the widened causeway, and the expanded tug basin on cultural heritage, including tangible and intangible cultural losses. The Proponent shall invite each of Tsawwassen First Nation, Musqueam, and Tsleil-Waututh Nation to co-lead the development of the measures specific to their nation. The Proponent shall implement the measures during	No applicable actions were undertaken in the reporting year.

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
	<p>all phases of the Designated Project and shall submit these measures to the Agency prior to implementing them, while ensuring that confidential information is protected. As part of the annual report referred to in condition 2.10, the Proponent shall report its discussions with Tsawwassen First Nation, Musqueam, and Tsleil-Waututh Nation, including the level of satisfaction of Indigenous groups on the implementation of the measures. As part of the measures, the Proponent shall consider:</p> <ul style="list-style-type: none"> <li>• 14.8.1 – supporting continued access for cultural practices to the sea on a nation-specific basis; and</li> <li>• 14.8.2 – developing or contributing to Indigenous-led programs to preserve and enhance cultural heritage.</li> </ul>	
14.9	<p>The Proponent shall develop, prior to construction and in consultation with Tsawwassen First Nation, Musqueam, and Tsleil-Waututh Nation, a follow-up program to verify the accuracy of the environmental assessment and determine the effectiveness of the mitigation measures as it pertains to adverse environmental effects on cultural heritage caused by the construction and operation of the marine terminal, the widened causeway, and the expanded tug basin. The Proponent shall invite Tsawwassen First Nation, Musqueam, and Tsleil-Waututh Nation to co-lead the development of the follow-up program. As part of the follow-up program, the Proponent shall monitor, during construction and the first 10 years of operation, cultural heritage indicators identified in consultation with Tsawwassen First Nation, Musqueam, and the Tsleil-Waututh Nation, and shall establish thresholds for implementing additional mitigation measures, in accordance with conditions 2.5 to 2.9.</p>	No applicable actions were undertaken in the reporting year.

## 15. Indigenous monitors

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
15.1 15.1.1 to 15.1.6	<p>The Proponent shall retain, prior to construction, the services of Indigenous monitors to observe, record, and report on the implementation of the conditions set out in this Decision Statement during construction. Prior to retaining the services of Indigenous monitors, the Proponent shall undertake a collaborative and consensus-based process to determine, in consultation with Indigenous groups (Roberts Bank), the scope, purpose and objectives of the participation of Indigenous monitors and shall provide that information to the Agency prior to construction. As part of that process, the Proponent shall determine:</p> <ul style="list-style-type: none"> <li>• 15.1.1 – how each Indigenous monitor shall be involved in monitoring their areas of interest, including the location, frequency, timing and duration of their participation;</li> <li>• 15.1.2 – how the Proponent shall support the participation of Indigenous monitors, including through the provision of training (including safety or skills certifications), equipment (including personal protective equipment), and access to the Designated Project area;</li> <li>• 15.1.3 – how Indigenous monitors shall collect information and shall communicate that information to the Proponent, the independent environmental monitor referred to in condition 16.1, the Indigenous Advisory Committee referred to in condition 17.1, and the Agency;</li> <li>• 15.1.4 – how monitoring conducted by Indigenous monitors shall be informed by and shall inform the monitoring activities conducted by the independent environmental monitor referred to in condition 16.1 and any other monitor associated with the Designated Project;</li> <li>• 15.1.5 – how each Indigenous monitor shall be involved in Proponent initiated stop work and corrective action processes should non-compliance with the conditions set out in this Decision Statement be identified; and</li> <li>• 15.1.6 – how the Proponent shall consider the information obtained from Indigenous monitors and how the Proponent shall report to Indigenous groups, relevant authorities and the Agency about how information</li> </ul>	<p><b>Development</b> – The requirements of this condition will be met through the development and implementation of an Indigenous Monitors Plan. The port authority initiated the development of the plan prior to issuance of the Decision Statement; no applicable actions were undertaken in the reporting year.</p> <p><b>Consultation with First Nations</b> – The port authority has consulted with First Nations (Roberts Bank) on the development of an Indigenous Monitors Plan, pursuant to condition 15.1. Consultation was initiated prior to issuance of the Decision Statement; no applicable actions were undertaken in the reporting year.</p>

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
	obtained from Indigenous monitors has been considered by the Proponent, including a rationale for why any action recommended by Indigenous monitors has, or has not been taken.	

## 16. Independent environmental monitor

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
16.1	The Proponent shall retain, prior to construction, the services of a third-party independent environmental monitor, who is a qualified professional with a minimum of five-years' experience as it pertains to environmental monitoring in British Columbia and who has experience working with Indigenous groups. The Proponent shall make all reasonable efforts to obtain the approval of Tsawwassen First Nation and Musqueam for the retention of the services of the independent environmental monitor and, following retention, notify Tsawwassen First Nation and Musqueam of any change to the qualified professional occupying the independent environmental monitor position.	No applicable actions were undertaken in the reporting year.
16.2	The Proponent shall require the independent environmental monitor to report to the Proponent, in writing, about the implementation of any condition set out in this Decision Statement during construction. The Proponent shall also require the independent environmental monitor to recommend to the Proponent, in writing, which action(s) in their view, should be taken by the Proponent in respect to the implementation of conditions set out in this Decision Statement during construction.	No applicable actions were undertaken in the reporting year.
16.3	The Proponent shall require the independent environmental monitor to provide directly to the Agency, at a frequency to be determined in consultation with the Agency, the information reported to the Proponent pursuant to condition 16.2.	No applicable actions were undertaken in the reporting year.
16.4	The Proponent shall consider the information obtained from the independent environmental monitor and shall report to the Agency and relevant authorities about how information obtained from the independent environmental monitor has been considered by the Proponent, including a rationale for why any action recommended by the independent environmental monitor has, or has not been taken.	No applicable actions were undertaken in the reporting year.
16.5	The Proponent shall require the independent environmental monitor to retain the information reported to the Proponent pursuant to condition 16.2 for five years following submission to the Agency pursuant to condition 16.3.	No applicable actions were undertaken in the reporting year.

## 17. Indigenous Advisory Committee

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
17.1 17.1.1. to 17.1.9	The Proponent shall establish, prior to construction and in consultation with Indigenous groups (Roberts Bank), and maintain, throughout construction and operation, an Indigenous Advisory Committee (IAC) to support dialogue and issue resolution between the Proponent and Indigenous groups (Roberts Bank). The Proponent shall invite Indigenous groups (Roberts Bank) to participate in all IAC activities, and shall consult participating Indigenous groups on the development of Terms of Reference for the IAC. The Proponent shall make reasonable efforts to come to agreement on the Terms of Reference with participating Indigenous groups. The	<p><b>Development</b> – The port authority initiated the development of an Indigenous Advisory Committee prior to issuance of the Decision Statement. No applicable actions were undertaken in the reporting year.</p> <p><b>Consultation with First Nations</b> – The port authority has initiated consultation with First Nations (Roberts Bank) on the development of an Indigenous Advisory Committee. Consultation was initiated prior to issuance of the Decision Statement; no applicable actions were undertaken in the reporting year.</p>



Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
	<p>Proponent shall submit the final Terms of Reference to the Agency prior to construction. As part of the Terms of Reference, the Proponent shall include:</p> <ul style="list-style-type: none"> <li>• 17.1.1 – the means by which the Proponent and Indigenous groups shall jointly identify issues to be discussed by the IAC and the means by which the Proponent shall document these issues;</li> <li>• 17.1.2 – the frequency, timing and location of IAC meetings during each phase of the Designated Project and the means by which the Proponent shall document meeting minutes and shall seek approval of the meeting minutes by Indigenous groups;</li> <li>• 17.1.3 – the means by which IAC meetings will be chaired, which may be jointly by the Proponent and a representative of the Indigenous groups and/or by a mutually-acceptable third-party facilitator retained by the Proponent;</li> <li>• 17.1.4 – the means by which the Proponent may consult the IAC when consultation with an Indigenous group is a requirement of a condition set out in this Decision Statement, should it be agreeable to the Indigenous group(s) specified;</li> <li>• 17.1.5 – the means by which the Proponent shall share with the IAC the following information, including when and how this information will be shared:               <ul style="list-style-type: none"> <li>• 17.1.5.1 – the results of the follow-up programs, including any modified or additional mitigation measure implemented or proposed to be implemented by the Proponent as a result of each follow-up requirement;</li> <li>• 17.1.5.2 – activities associated with the Proponent’s participation in regional initiatives; and</li> <li>• 17.1.5.3 – other information as determined by the IAC;</li> </ul> </li> <li>• 17.1.6 – the means by which the Proponent shall document the activities of the IAC, including:               <ul style="list-style-type: none"> <li>• 17.1.6.1 – all views and information received through the IAC from Indigenous groups; and</li> <li>• 17.1.6.2 – how the Proponent has considered all views and information received through the IAC from Indigenous groups;</li> </ul> </li> <li>• 17.1.7 – the means by which the Proponent shall document any issue for which IAC members are unable to find a resolution, including a rationale for the lack of resolution, and any solutions for finding a resolution proposed by the IAC;</li> <li>• 17.1.8 – the means by which the Proponent shall share the information documented by the Proponent pursuant to conditions 17.1.6 and 17.1.7 with IAC members and with the Agency, including when and how this information shall be shared; and</li> <li>• 17.1.9 – the means by which the Proponent shall evaluate, in consultation with Indigenous groups, the Terms of Reference throughout construction and operation to determine whether administrative or management improvements are required to increase the efficiency and effectiveness of the IAC.</li> <li>• 17.1.2 – The Proponent shall implement the Terms of Reference developed pursuant to condition 17.1 throughout construction and operation, including any revision to the Terms of Reference made pursuant to condition 17.1.9.</li> </ul>	
17.2	The Proponent shall implement the Terms of Reference developed pursuant to condition 17.1 throughout construction and operation, including any revision to the Terms of Reference made pursuant to condition 17.1.9.	No applicable actions were undertaken in the reporting year.

## 18. Environmental Monitoring Committee

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
18.1	The Proponent shall participate, during all phases of the Designated Project and at the request of relevant federal authorities, in any Environmental Monitoring Committee (EMC), should one be established in relation to the Designated Project	No applicable actions were undertaken in the reporting year.

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
18.2	The Proponent shall provide to the EMC, upon request, information relating to the mitigation measures and follow-up programs set out in this Decision Statement to the EMC. If requested by the EMC, the Proponent shall also provide non-proprietary data files of the results of the follow-up programs.	No applicable actions were undertaken in the reporting year.
18.3	When provided with a written recommendation by the EMC that pertains to the Designated Project, the Proponent shall provide a response in writing to the EMC, which set out whether the Proponent accepts the recommendation, and if it does not, the reasons for not accepting the recommendation.	No applicable actions were undertaken in the reporting year.
18.4	The Proponent shall report to the Agency as part of the annual report referred to in condition 2.10, or more frequently if required by the Agency, on the Proponent's actions with respect to the EMC and the associated outcomes of the Proponent's actions.	No applicable actions were undertaken in the reporting year.
18.5	The Proponent shall allow access to the Designated Project area, to the extent that such access is safe, to any monitor(s) established as part of the EMC. The Proponent shall communicate with monitor(s) regarding coordination of monitoring activities.	No applicable actions were undertaken in the reporting year.

## 19. Financial guarantee

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
19.1	<p>The Proponent shall, prior to the first day of construction, deliver to the Government of Canada an irrevocable standby letter of credit from an approved financial institution, or performance bond in a form and content directed by the Agency in the amount of CDN \$150 million dollars (\$150,000,000.00 CDN) to stand as security for the execution of any condition set out in this</p> <p>Decision Statement through the first three years of construction. The Government of Canada shall be entitled to draw on and use the standby letter of credit or performance bond, to fulfill any condition set out in this Decision Statement in the event the Proponent fails to fulfill any such condition.</p>	No applicable actions were undertaken in the reporting year.

## 20. Accidents and malfunctions

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
20.1 20.1.1 to 20.1.2	<p>The Proponent shall take all reasonable measures to prevent accidents and malfunctions associated with the Designated Project that may result in adverse environmental effects and all reasonable measures to mitigate any adverse environmental effect from accidents and malfunctions that do occur. As part of these measures, the Proponent shall:</p> <ul style="list-style-type: none"> <li>• 20.1 – consider sensitive time periods for vulnerable species found in the vicinity of the Designated Project (including juvenile salmon and migratory birds); and</li> <li>• 20.1.2 – implement measures for the safe storage, refueling and handling of all substances identified pursuant to condition 20.3.1 in the Designated Project area, including containment specifications and equipment staging, and provide training about these measures to all persons involved in and responsible for safe storage, refueling and handling of these substances. The Proponent shall describe how it will ensure that these persons abide by these measures.</li> </ul>	<p><b>Development</b> – Measures to prevent accidents and malfunctions, and mitigate any adverse environmental effect from accidents and malfunctions related to the project, will be included in the accident and malfunction response plan (see condition 20.3). The port authority has initiated development of an outline of the construction-phase accident and malfunction response plan, a sub-plan of the CEMP.</p>

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
20.2	The Proponent shall consult, prior to the phase to which the measures pertain, Indigenous groups (Roberts Bank), Indigenous groups (marine shipping) and relevant authorities on the measures referred to in condition 20.1 to be implemented to prevent accidents and malfunctions resulting from the construction and operation of the marine terminal, the widened causeway, and the expanded tug basin.	<b>Consultation with First Nations</b> – The port authority has initiated consultation on the development of the construction-phase accident and malfunction response plan outline. Consultation was initiated prior to issuance of the Decision Statement and continued in the reporting year.
20.3 20.3.1 to 20.3.8	The Proponent shall develop, in consultation with Indigenous groups (Roberts Bank), Indigenous groups (marine shipping), the City of Delta, British Columbia’s Ministry of Environment and Climate Change Strategy, British Columbia’s Ministry of Land, Water, and Resource Stewardship, Transport Canada, the Canadian Coast Guard, Parks Canada, Environment and Climate Change Canada, Western Canada Marine Response Corporation and other relevant authorities, an Accident and Malfunction Response Plan in relation to the each phase of the Designated Project. The Proponent shall develop each Accident and Malfunction Response Plan prior to the phase to which it pertains, and shall keep it up to date during that phase of the Designated Project. The Proponent shall incorporate and reference established response plans, procedures and organizations, as appropriate, into each Accident and Malfunction Response Plan, so as to avoid duplication with established plans, procedures and organizations. The Proponent shall implement each Accident and Malfunction Response Plan during the phase to which it pertains. As part of the Accident and Malfunction Response Plans, the Proponent shall describe: <ul style="list-style-type: none"> <li>• 20.3.1 - the types, location, and quantities of all substances expected to be stored within the Designated Project area, other than substances contained in containers or in vessels, trucks or trains passing through or temporarily stored in the marine terminal, that may cause adverse environmental effects in case of a spill;</li> <li>• 20.3.2 - information on marine and terrestrial wildlife oil spill vulnerability for species, populations, and their habitats that may be affected by a spill attributable to the construction and operation of the marine terminal, the widened causeway, and the expanded tug basin, including their spatial and temporal distributions;</li> <li>• 20.3.3 - the types of accidents and malfunctions that may cause adverse environmental effects during any phase of the Designated Project, including unplanned releases or spills of fuels, oils, concrete, lubricants and other hazardous and noxious substances attributable to the construction and operation of the marine terminal, the widened causeway, and the expanded tug basin;</li> <li>• 20.3.4 - for each type of accident and malfunction identified pursuant to condition 20.3.3, the roles and responsibilities of each relevant party, including Tsawwassen First Nation and Musqueam, involved in the response to the accident or malfunction, including potential limitations associated with responding to an accident or malfunction in an effective and coordinated manner, and proposed solutions to these limitations;</li> <li>• 20.3.5 - thresholds for reporting and notification to the relevant parties identified pursuant to condition 20.3.4;</li> <li>• 20.3.6 - for each type of accident and malfunction identified pursuant to condition 20.3.3, the measures, appropriate to the accident or malfunction and under the control of the Proponent, to mitigate any adverse environmental effect caused by the accident or malfunction;</li> <li>• 20.3.7 - for each type of accident and malfunction identified pursuant to condition 20.3.3, the measures under the control of the Proponent for the long-term monitoring of any adverse environmental effect caused by the accident or malfunction; and</li> <li>• 20.3.8 - the measures under the control of the Proponent for documenting, reporting, and correcting instances of non-compliance with the Accident and Malfunction Response Plans.</li> </ul>	<b>Development</b> – The port authority has initiated development of an outline for the construction-phase accident and malfunction response plan, a sub-plan of the CEMP. The accident and malfunction response plan will address the information requirements specified in this condition.  <b>Consultation with First Nations</b> – The port authority has initiated consultation on the development of the accident and malfunction response plan outline. Consultation was initiated prior to issuance of the Decision Statement and continued in the reporting year.  <b>Consultation with government bodies</b> – No applicable actions were undertaken in the reporting year.

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
20.4	<p>The Proponent shall participate in or conduct regular and coordinated training exercises for spill prevention and control of fuels, oils, lubricants and other hazardous and noxious substances that may be released during construction and operation of the marine terminal, the widened causeway, and the expanded tug basin. The Proponent shall document any deficiency observed during these training exercises, update the applicable Accident and Malfunction Response Plan to address these deficiencies, and provide the results of the training exercises and any update to the Accident and Malfunction Response Plan to the parties involved in the development of the plan. The Proponent shall provide opportunities for participation by Indigenous groups (Roberts Bank) in the training exercises.</p>	No applicable actions were undertaken in the reporting year.
20.5	<p>The Proponent shall participate, at the request of the Canadian Coast Guard, in the development of all applicable integrated response plans to ensure effective and coordinated response to marine shipping accidents that may occur within the Proponent's navigational jurisdiction.</p>	<p>The port authority is included in the Greater Vancouver Integrated Response (GVIR) plan for marine pollution incidents. In the reporting year, the port authority participated in this regional initiative, including activities toward an update to the current GVIR plan.</p>
20.6 20.6.1 to 20.6.4	<p>In the event of an accident or malfunction associated with the Designated Project with the potential to cause adverse environmental effects, the Proponent shall, in conjunction with other relevant authorities, immediately implement the measures appropriate to the accident or malfunction referred to in condition 20.3.6, under the control of the Proponent, and shall:</p> <ul style="list-style-type: none"> <li>• 20.6.1 - implement the communication plan referred to in condition 20.7;</li> <li>• 20.6.2 - notify, as soon as possible through the means established pursuant to 20.7, Indigenous groups (Roberts Bank) and Indigenous groups (marine shipping) and, through established notification procedures, relevant authorities, of the accident or malfunction, and notify the Agency in writing no later than 24 hours following the accident or malfunction, except where notification is required to be undertaken by another relevant authority. For the notification to Indigenous groups (Roberts Bank), Indigenous groups (marine shipping) and the Agency, the Proponent shall specify:             <ul style="list-style-type: none"> <li>• 20.6.2.1 - the date when and location where the accident or malfunction occurred;</li> <li>• 20.6.2.2 - a summary description of the accident or malfunction; and</li> <li>• 20.6.2.3 - a list of any substance potentially released into the environment as a result of the accident or malfunction.</li> </ul> </li> <li>• 20.6.3 - submit a written report to the Agency no later than 30 days after the day on which the accident or malfunction occurred. As part of the report, the Proponent shall not include information that, if disclosed, could cause specific harm to the environment or people. The written report shall include:             <ul style="list-style-type: none"> <li>• 20.6.3.1 - a detailed description of the accident or malfunction and of its adverse environmental effects;</li> <li>• 20.6.3.2 - a description of the measures that were taken by the Proponent and other relevant authorities to mitigate the adverse environmental effects caused by the accident or malfunction;</li> <li>• 20.6.3.3 – a description of any residual adverse environmental effect and any modified or additional measures under the control of the Proponent to mitigate residual adverse environmental effects;</li> <li>• 20.6.3.4 - any view from Indigenous groups (Roberts Bank) and Indigenous groups (marine shipping) and advice from relevant authorities received with respect to the accident or malfunction, its adverse environmental effects and the measures under the control of the Proponent to mitigate these adverse environmental effects; and</li> <li>• 20.6.3.5 - details concerning the implementation of the Accident and Malfunction Response Plan referred to in condition 20.3.</li> </ul> </li> <li>• 20.6.4 - submit a written report to the Agency no later than 90 days after the day on which the accident or malfunction occurred that includes a description of the changes made to avoid a subsequent occurrence of the accident or malfunction and of the modified or additional measure(s) under the control of the Proponent to mitigate and monitor residual adverse environmental effects and to carry out any required progressive reclamation, taking into account the information submitted in the written report pursuant to condition 20.6.3. The report shall include all additional views from Indigenous groups (Roberts Bank) and Indigenous groups (marine shipping) and advice from relevant authorities received by the Proponent since the views and</li> </ul>	No applicable actions were undertaken in the reporting year.

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
	advice referred to in condition 20.6.3.4 were received by the Proponent. As part of the report, the Proponent shall not include information that, if disclosed, could cause specific harm to the environment or people.	
20.7 20.7.1 to 20.7.3	<p>The Proponent shall develop, in consultation with Indigenous groups (Roberts Bank) and Indigenous groups (marine shipping), a communication plan for accidents and malfunctions identified pursuant to condition 20.3.3. The communication plan shall not duplicate or conflict with communication aspects of any integrated response plan relevant to the Designated Project. The Proponent shall develop the communication plan prior to construction and shall implement and keep it up to date during all phases of the Designated Project. The plan shall include:</p> <ul style="list-style-type: none"> <li>• 20.7.1 - the types of accidents and malfunctions requiring the Proponent to notify each of the Indigenous groups (Roberts Bank) and Indigenous groups (marine shipping);</li> <li>• 20.7.2 - the manner by which Indigenous groups (Roberts Bank) and Indigenous groups (marine shipping) wish to be notified by the Proponent of an accident or malfunction during each phase of emergency management, including clean-up, and of any opportunity for the Indigenous groups (Roberts Bank) and the Indigenous groups (marine shipping) to assist in the response to the accident or malfunction; and</li> <li>• 20.7.3 - the contact information of the representatives of the Proponent that the Indigenous groups (Roberts Bank) and the Indigenous groups (marine shipping) may contact and of the representatives of each of the Indigenous groups (Roberts Bank) and Indigenous groups (marine shipping) to which the Proponent provides notification.</li> </ul>	<p><b>Development</b> – The port authority has initiated development of an outline for the construction-phase accident and malfunction response plan inclusive of a communication plan for accidents and malfunctions, which will be a sub-plan of the CEMP. The accident and malfunction response plan will address the information requirements specified in this condition.</p> <p><b>Consultation with First Nations</b> – The port authority has initiated consultation on the development of the accident and malfunction response plan outline. Consultation was initiated prior to issuance of the Decision Statement and continued in the reporting year.</p>

## 21. Schedules

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
21.1	The Proponent shall submit to the Agency, Indigenous groups (Roberts Bank) and the Indigenous groups (marine shipping) a schedule for all conditions set out in this Decision Statement no later than 60 days prior to the start of the phase of the Designated Project to which they pertain. This schedule shall detail all activities planned to fulfill each condition set out in this Decision Statement and the commencement and estimated completion month(s) and year(s) for each of these activities.	No applicable actions were undertaken in the reporting year.
21.2	The Proponent shall submit to the Agency, Indigenous groups (Roberts Bank) and the Indigenous groups (marine shipping) a schedule outlining all activities required to carry out all phases of the Designated Project no later than 60 days prior to the start of each phase. The schedule shall indicate the commencement and estimated completion month(s) and year(s) and duration of each of these activities.	No applicable actions were undertaken in the reporting year.
21.3	The Proponent shall submit to the Agency, Indigenous groups (Roberts Bank) and the Indigenous groups (marine shipping) in writing an update to schedules referred to in conditions 21.1 and 21.2 every year no later than December 31, until completion of all activities referred to in each schedule.	No applicable actions were undertaken in the reporting year.

## 22. Record keeping

Condition number	Condition	Activities undertaken to comply with the condition in the reporting year
22.1	The Proponent shall maintain all records relevant to the implementation of the conditions set out in this Decision Statement. The Proponent shall retain the records and make them available to the Agency for 25 years following their publication. The Proponent shall provide the aforementioned records to the Agency upon demand within a timeframe specified by the Agency.	<p>The port authority will maintain all records relevant to implementation of conditions, in accordance with condition 22.1. For the current reporting year this applies to:</p> <ul style="list-style-type: none"> <li>• Condition 2.13, 2023 Annual Report</li> <li>• Condition 7.1, Causeway Breach Feasibility Report</li> </ul> <p>Upon request, records will be provided to IAAC.</p>
22.2	The Proponent shall retain all records referred to in condition 22.1 at a facility in Canada and shall provide the address of the facility to the Agency. The records may be retained in electronic form. The Proponent shall notify the Agency at least 30 days prior to any change to the physical location of the facility where the records are retained, and shall provide to the Agency the address of the new location.	<p>The port authority will retain all relevant records in Canada at 3301 E. Pender Street, Vancouver, BC and at 100 The Pointe, 999 Canada Place, Vancouver, BC in accordance with condition 22.2. For the current reporting year this applies to:</p> <ul style="list-style-type: none"> <li>• Condition 2.13, 2023 Annual Report</li> <li>• Condition 7.1, Causeway Breach Feasibility Report</li> </ul> <p>IAAC will be notified if there is a change to the physical location of the facility where the records are retained at least 30 days prior to any change, and the new address will be provided.</p>
22.3	The Proponent shall notify the Agency of any change to the contact information of the Proponent included in this Decision Statement.	No applicable actions were undertaken in the reporting year.

**Appendix B**  
**Summary and full record of views and information received from First Nations, and port authority responses**

## **Links<sup>1</sup>**

**Causeway breach feasibility report (condition 7.1)**

**Juvenile Dungeness crab nursery habitat follow-up program  
(condition 7.7)**

**Offsetting plan (condition 7.11)**

**Salinity, biofilm, and western sandpiper follow-up program (condition  
10.4)**

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<sup>1</sup> The full record of the views and information received from First Nations, and the port authority's responses, include confidential information which has been shared with the Impact Assessment Agency of Canada and redacted from this document.



## Causeway breach feasibility report (condition 7.1)

### Summary of views and information

The port authority consulted on the causeway beach feasibility report with First Nations as specified in condition 7.1: First Nations (Roberts Bank), First Nations (marine shipping), and First Nations (Fraser River), as defined in conditions 1.22 through 1.24. The condition provided for a 60-day review period. Prior to the expiration review period, the port authority received requests from First Nations for an extension to this review period and the port authority granted an additional 12 days for such review to conclude.

The port authority received views and information from the following First Nations on the draft breach feasibility report:

- Tsawwassen First Nation
- Musqueam Indian Band
- Ts'uubaa-asatx
- Quw'utsun Nation (representing Cowichan Tribes, Halalt First Nation, Lyackson First Nation, Penelakut Tribe, and St'zuminus First Nation)
- Seabird Island Band
- Songhees Nation

Feedback received from First Nations on the draft report consisted of clarification questions on information presented in the report, editorial suggestions to improve understanding and readability, and comments regarding the report's scope and content, including recommendations for further work, as well as perspectives on the two breach location options (marine terminal and causeway) identified in condition 7.2. The port authority considered the views and information, as well as Indigenous and community knowledge, provided by First Nations and provided a written response indicating how the views and information, and knowledge, provided had been integrated into the report, or a rationale for not integrating the input received, where applicable.

## **Juvenile Dungeness crab nursery habitat follow-up program (condition 7.7)**

### **Summary of views and information**

As specified in condition 7.7, the port authority consulted on the juvenile Dungeness crab nursery habitat follow-up program with First Nations (Roberts Bank), as defined in condition 1.22.

The port authority received views and information from the following First Nations:

- Tsawwassen First Nation
- Musqueam Indian Band

Feedback received consisted of questions and suggestions for clarification on scope and purpose of the follow-up program, suggestions related to data collection methods, size class criteria for juvenile crab, the timing and location of sampling efforts, and editorial suggestions to improve clarity in the report.

The port authority considered the views and information, as well as Indigenous and community knowledge, provided by First Nations on the juvenile Dungeness crab nursery habitat follow-up program and provided a written response indicating how the views, information, and knowledge provided had been integrated into the report, or a rationale for not integrating the input received, where applicable.

## Offsetting plan (condition 7.11)

### Summary of views and information

As specified in condition 7.11, the port authority consulted on the offsetting plan with First Nations (Roberts Bank), First Nations (marine shipping), First Nations (Fraser River), as defined in condition 1.22 through 1.24.

The port authority received views and information on the non-conventional offsetting program, which is an aspect of the offsetting plan, from the following First Nations:

- Musqueam Indian Band
- Tseil-Waututh Nation

Feedback received from First Nations consisted of providing important ecological factors and Indigenous priorities to consider in evaluating different types of offsetting projects; information about traditional Indigenous practices; suggestions for a holistic approach to pilot studies; questions about the relationship of the non-conventional offsetting program to the overall offsetting plan; and requests to consider information available in relation to completed offsetting projects.

The port authority considered the views and information, as well as Indigenous and community knowledge, provided by First Nations on the non-conventional offsetting plan and provided a written response indicating how the views, information, and knowledge provided had been integrated into the report, or a rationale for not integrating the input received, where applicable.

## **Salinity, biofilm, and western sandpiper follow-up program (condition 10.4)**

### **Summary of views and information**

As specified in condition 10.4, the port authority consulted on the salinity, biofilm and western sandpiper follow-up program with First Nations (Roberts Bank), as defined in condition 1.22.

The port authority received views and information from the following First Nations:

- Tsawwassen First Nation
- Musqueam Indian Band

Feedback received from First Nations consisted of commentary on the purpose and objectives of the follow-up program; editorial suggestions to improve clarity of the objectives for individual study component designs; feedback on feasibility of certain study components; questions for clarification and suggestions on data collection study methods, parameters, spatial scope; and questions and feedback on data analysis approaches.

The port authority considered the views and information, as well as Indigenous and community knowledge, provided by First Nations on the salinity, biofilm, and western sandpiper follow-up program and provided a written response indicating how the views, information, and knowledge provided had been integrated into the report, or a rationale for not integrating the input received, where applicable.

**Appendix C**  
**Summary and full record of views and information received from government bodies and stakeholders, and port authority responses**

**Links.**

**[Air quality-related effects on human health follow-up program \(condition 3.6\)](#)**

**[Causeway breach feasibility report \(condition 7.1\)](#)**

## **Air quality-related effects on human health follow-up program (condition 3.6)**

### **Summary of views and information**

The port authority consulted on the air quality monitoring program, a component of the air quality-related effects on human health follow-up program, with the government bodies as specified in condition 3.6.

The port authority received views and information from Metro Vancouver.

Metro Vancouver provided input to the development of the monitoring program, including selection of monitoring parameters, monitoring methods, and the location of a new permanent air quality monitoring station, to be part of the existing Metro Vancouver air quality monitoring network. Comments from Metro Vancouver on the draft air quality-related effects on human health follow-up program focused on the procedures for data collection, methods for data analysis, and applicable air quality criteria.

The other government bodies consulted (Environment and Climate Change Canada (ECCC), Health Canada, BC Ministry of Health, and City of Delta) indicated that their comments would be provided upon review of the draft monitoring program document, which will occur in future reporting years. The BC Ministry of Environment and Climate Change Strategy was invited but declined to participate in consultation, noting that the proper agencies with a regulatory or oversight role for air quality are already involved.

The port authority considered the views and information provided by Metro Vancouver on the air quality-related effects on human health follow-up program and provided a written response indicating how the views and information provided had been integrated into the report, or a rationale for not integrating the input where applicable. The comments received and the port authority's responses are included below.

**Metro Vancouver views and information and port authority response  
(condition 3.6)**



**Metro Vancouver comments on Roberts Bank Terminal 2 Project: draft air quality human health follow-up program (part 1, construction phase), as provided for review on April 13, 2023**

**Comment response table**

These written comments were received from Metro Vancouver by the port authority on June 19, 2023. The responses provided below were sent from the port authority to Metro Vancouver on December 20, 2023.

#	Section	Metro Vancouver question or comment	Port authority response
1.	Section 1, Page 1: <i>"The AQHH FUP element has been developed in consultation with TFN, Musqueam, and other Indigenous groups, as well as <u>Environment and Climate Change Canada (ECCC), Health Canada, BC Ministry of Health, the City of Delta and Metro Vancouver.</u>"</i>	I would suggest local health authorities may also want to review, specifically Fraser Health	<b>Response:</b> The port authority is consulting with all parties specified in the federal condition of approval 3.6. The scope of consultation specified in the federal conditions was determined following an extensive public consultation process and reflects the input of interested parties. Both the BC Ministry of Health and the City of Delta are specified in the condition, and are being consulted with respect to the Air Quality Human Health Follow-up Program (AQHH FUP), and it is anticipated that these entities will provide relevant feedback on behalf of residents. Either or both of these entities could engage Fraser Health Authority directly if they require additional expertise to support their involvement in FUP development.  <b>Changes made:</b> None at this time.
2.	Section 1.1, Page 2: <i>"<u>For any exceedance determined to be attributable to project construction activities, the port authority will implement modified or additional measures to mitigate air emissions from the project, as appropriate</u>"</i>	Exceedances will need to be carefully defined, since some objectives are based on 3-year averages.	<b>Response:</b> Contaminant concentrations, for applicable averaging periods, will be determined during development of the adaptive management section (Part 2) of the AQHH FUP. The port authority acknowledges the complexity of determining thresholds where objectives are based on averages, and will consult with Metro Vancouver and other identified parties to benefit from their expertise on this matter.  <b>Changes:</b> None at this time.
3.	Section 1.2, Page 2: <i>"1.2 Consultation and engagement summary"</i>	As commented earlier, Health Authorities should be consulted.	<b>Response:</b> Please refer to response to comment #1.  <b>Changes:</b> None at this time.
4.	Section 1.2, Page 2: <i>"The key aspects of the design that were discussed and agreed upon through this preliminary consultation include:</i> <ul style="list-style-type: none"><li><i><u>The selection of contaminants of potential concern to be included in the monitoring program</u></i></li></ul>	See previous comment. May be best now to simply refer to what is specified in the condition.	<b>Response:</b> In addition to the contaminants listed in the condition, the AQHH FUP will include contaminants of interest to Tsawwassen First Nation (TFN). The document has been revised to refer to the condition, as suggested, and to the request of TFN.  <b>Changes made:</b> The relevant bullet in Section 1.2 has been revised as follows: <ul style="list-style-type: none"><li>'The selection of contaminants of potential concern to be included in the monitoring program <i>as listed in federal Decision Statement Condition 3.6.1 and additional contaminants requested by the TFN</i></li></ul>
5.	Section 2, Page 3: <i>"Ambient air quality in the Tsawwassen area of Delta, British Columbia is already some of the best in the Lower Fraser Valley"</i>	Please reference the specific documents from the assessment that support this statement. In particular, it should be noted that supply chain emissions were not considered in detail as part of the assessment and it is not clear that the RBT2 project will result in "improved" air quality.	<b>Response:</b> The statements about air quality in the area are based on information contained in the RBT2 environmental impact statement (EIS). This paragraph has been expanded to provide supporting evidence to the statement, as well as applicable references.

#	Section	Metro Vancouver question or comment	Port authority response
	<i>(based on review of monitoring data), and is predicted to improve in the future...</i>		<b>Changes made:</b> Additional text and references added to Section 2.
6.	Section 2, Page 4: <i>“Air quality concentrations in the area of the project, which reflect regional air emissions, are derived from ambient air quality monitoring conducted by Metro Vancouver.”</i>	How is “region” being defined here. From MV’s perspective, it would not be fair to say that Tsawwassen’s air quality is representative of regional air quality or regional emissions.	<b>Response:</b> Thank you for this comment. In the context of defined regional airsheds, the use of the term ‘regional’ is incorrect and has been corrected as shown below. <b>Changes made:</b> The sentence in Section 2 has been revised as follows: “Air quality concentrations in the area of the project, which reflect <i>local and regional</i> air emissions...”
7.	Section 2, Page 4: <i>“Continuous monitoring in Tsawwassen has been conducted at station T39...”</i>	Station T39 is also funded by the Port and operated by MV.	<b>Response:</b> Edit made <b>Changes made:</b> The sentence in Section 2 has been revised as follows: ‘Continuous monitoring in Tsawwassen has been conducted at station T39 since June 2010 <i>and is co-funded by the port authority and Metro Vancouver, and operated...</i> ’
8.	Section 3, Page 4: <i>“The COPCs that will be monitored at the new station on TFN lands, as requested by TFN, include...”</i>	Earlier it was noted that MV was involved in this selection process. May be best to simply refer to the condition.	<b>Response:</b> As noted above in response to comment #4, the contaminants that will be monitored as part of the AQHH FUP go beyond those listed in the condition. The port authority acknowledges that while TFN suggested the additional contaminants, Metro Vancouver was also consulted on the list. The text has been revised to clarify. <b>Changes made:</b> <ul style="list-style-type: none"><li>• ‘The COPCs that will be monitored at the new station on TFN lands, as requested by TFN <i>and discussed in consultation with Metro Vancouver and other consulted parties</i>, include:’</li></ul>
9.	Section 4.2, Page 8: <i>“4.2 Data requirements”</i>	There should be some mention of the frequency of collection for each of the indicators in Table 1	<b>Response:</b> The frequency of data collection has been added to Section 4.3, Methods. <b>Changes made:</b> The following has been added to Section 4.3.1 Data Collection: ‘ <i>All of the CACs in Table 1 and the meteorological measurements in Table 2 will be continuously recorded. The TOCs in Table 1 will be sampled on a 12-day sampling schedule.</i> ’
10.	Section 4.2, Table 1, Page 8: <i>“Particulate matter (PM 10)”</i>	Missing units Also PM10 not currently monitored at T39.	<b>Response:</b> The text has been revised to include the units and specify PM <sub>10</sub> will be monitored only at the new station on TFN lands. <b>Changes made:</b> Table 1 has been revised as follows: <i>‘Inhalable particulate matter (PM<sub>10</sub>) (µg/m<sup>3</sup>), at new TFN lands station’</i>
11.	Section 4.3.1, Page 10: <i>“Laboratory methods for organics or PM2.5 speciation are not made publicly available from ECCC.”</i>	I understand that laboratory methods are included in the data spreadsheets that are available from the federal online data portal.	<b>Response:</b> The port authority has been unable to locate the applicable laboratory methods on the federal online data portal <a href="https://donnees-data.ec.gc.ca/data/air/monitor/networks-and-studies/?lang=en">https://donnees-data.ec.gc.ca/data/air/monitor/networks-and-studies/?lang=en</a> . The information is not critical to the draft AQHH FUP, and as such the sentence has been removed. The port authority welcomes any <a href="#">information</a> from Metro Vancouver for locating the laboratory methods. <b>Changes made:</b> Section 4.3.1 has been revised as follows:

#	Section	Metro Vancouver question or comment	Port authority response
			<del>'Laboratory methods for organics or PM2.5 speciation are not made publicly available from ECCC.'</del>
12.	Section 4.3.1, Page 10: "Equipment performance specifications, identification of suitable analyzer makes/models that meet these specifications, sampling protocols, detailed procedures for daily and monthly calibrations, audit criteria, suitable data acquisition systems and QA/QC procedures to convert raw data into final readings are described in detail in these two guidance documents."	Metro Vancouver will preferably be using our procedures and practices in operating the station similarly to other stations operated by MV in the network.	<p><b>Response:</b> Thank you for this comment. This paragraph has been revised to clarify that station operating procedures will be those applied by Metro Vancouver throughout its air quality monitoring network. Reference to the BC Field sampling manual and the Alberta Air Monitoring directive, in relation to equipment specifications etc. has been deleted.</p> <p><b>Changes made:</b> Section 4.3.1 has been revised as follows: 'Metro Vancouver follows National Air Pollution Surveillance (NAPS) station guidance from Environment and Climate Change Canada (ECCC) which is typically limited to methods for CACs. Two important resource documents for the proposed ambient measurements include the British Columbia Field Sampling Manual (BC FSM) and Alberta Air Monitoring Directive (AB AMD). <i>Metro Vancouver will apply similar procedures and practices at the new TFN Lands station as those in use at other stations in the regional air quality network operated by Metro Vancouver. Equipment performance specifications, identification of suitable analyzer makes/models that meet these specifications, sampling protocols, detailed procedures for daily and monthly calibrations, audit criteria, suitable data acquisition systems and QA/QC procedures to convert raw data into final readings are described in detail in these two guidance documents.'</i></p>
13.	Section 4.3.2, Page 10: "1) Conduct quality control and quality assurance (QA/QC) on the data to ensure it is valid and accurate"	<p>If there are discrepancies between the data analyzed by the proponent and the data validated by Metro Vancouver, how will this be addressed. For example, Metro Vancouver may make adjustments to instrument baselines as a result of regular station operations and audits. Metro Vancouver works on an annual data validation cycle, so it will be important to note this in the monthly reporting.</p> <p>The final dataset validated by MV (for those data handled by our monitoring) should be the official station dataset. Use of data at an earlier stage, when not fully validated, should have some caveats related to the fact that the data is preliminary and may undergo change.</p>	<p><b>Response:</b> The port authority appreciates the details provided. The process of data validation will be described in Section 6.2.1, when Part 2 of the AQHH FUP is developed. In the interim, Section 4.3.2 has been revised to include a cross reference to this section for details.</p> <p><b>Changes made:</b> Section 4.3.2 has been revised as follows: '1) Conduct quality control and quality assurance (QA/QC) on the data to ensure it is valid and accurate (<i>see Section 5.2.1</i>)'</p>
14.	Section 5, Page 11: "These criteria and exposure limits will be used in the interpretation of air quality monitoring data to indicate whether human health effects are likely occurring or have the potential to occur in the study area..."	Given the time-horizon for construction and operations, it should be acknowledged that if even more stringent objectives come into force, Table 3 will be modified to assess against the new objectives.	<p><b>Response:</b> The text has been revised to clarify that exposure limits will be reviewed periodically for updated values. If exposure limits have become more stringent, the new values will apply, per condition 3.6.5, in an update to the FUP.</p> <p><b>Changes made:</b> Section 5 has been revised as follows: 'These criteria and exposure limits will be used in the interpretation of air quality monitoring data to indicate whether human health effects are likely occurring or have the potential to occur in the <b>study area</b>, associated with the measured concentrations. <i>These values will be reviewed periodically to determine if there are any updated values.'</i></p> <p>Table 3 has been revised for clarity to include the source of each applicable exposure limit.</p>

#	Section	Metro Vancouver question or comment	Port authority response
15.	Section 5, Table 3, Page 11: “Ambient air quality criteria and human health exposure limits (in µg/m3)”	Please review the Ontario AAQCs and make sure this table reflects these levels: <a href="https://www.ontario.ca/page/ontarios-ambient-air-quality-criteria#section-0">https://www.ontario.ca/page/ontarios-ambient-air-quality-criteria#section-0</a>	<b>Response:</b> The Ontario AAQCs have been added to Table 3 for applicable contaminants, where previously an exposure limit was not identified. <b>Changes made:</b> Table 3 has been revised to include Ontario AAQCs for acetaldehyde (24-hr), acrolein (1-hr, 24-hr), benzene (24-hr), benzo(a)pyrene (annual), 1,3 butadiene (annual), and naphthalene (24-hr).
16.	Section 5, Table 3, Page 11: “Ambient air quality criteria and human health exposure limits (in µg/m3)”	Please review Alberta’s Ambient Air Quality Objectives and make sure this table reflects these levels (i.e. Alberta has a limit for Acrolein, Benzene, etc.): <a href="https://www.alberta.ca/ambient-air-quality-objectives.aspx">https://www.alberta.ca/ambient-air-quality-objectives.aspx</a>	<b>Response:</b> The Alberta AAQOs have been added to Table 3 for applicable contaminants, where previously an exposure limit was not identified. <b>Changes made:</b> Table 3 has been revised to include Alberta AAQOs for PM <sub>2.5</sub> (1-hr), acetaldehyde (1-hr), acrolein (1-hr, 24-hr), benzene (1-hr, annual), and naphthalene (annual).
17.	Section 6, Page 15	No details in this section	<b>Response:</b> Section 6 will be included in Part 2 of the Air Quality Human Health Follow-up Program. <b>Changes:</b> None at this time.
18.	Section 7, Page 15	No details in this section	<b>Response:</b> Section 6 and 7 will be included in Part 2 of the Air Quality Human Health Follow-up Program. <b>Changes:</b> None at this time.

## Causeway breach feasibility report (condition 7.1)

### Summary of views and information

The port authority consulted on the feasibility of a causeway breach with government bodies, landowners, and tenants as specified in condition 7.1., as well as stakeholders. These entities are listed below. The port authority received views and information from those entities shown in italic text.

- **Government bodies** – *Fisheries and Oceans Canada, Environment and Climate Change Canada*
- **Landowners** - *British Columbia Railway Company, BC Ministry of Transportation and Infrastructure*
- **Tenants** - *Global Container Terminals, Westshore Terminals, Ocean Delta Towing,*
- **Stakeholders** – *Blue Water Rail Services, Canadian National Railway, Canadian Pacific Kansas City Railway, Toronto Terminals Railway*

Feedback from these entities focused on areas of the technical and economic assessments pertaining to their individual mandates or business. Comments focused on causeway breach design and location, construction approach, costs including construction, maintenance, and potential economic impacts of service disruption during causeway breach construction. The port authority considered the views and information provided by stakeholders and government bodies on the causeway breach feasibility report, and provided a written response indicating how the views and information provided had been integrated into the report, or a rationale for not integrating the input received, where applicable. The comments received and the port authority's responses are included below.

In the case of condition 7.1, the port authority's written responses to government bodies and stakeholders consist of emails indicating the sections of the final causeway breach feasibility report that were revised based on the views and information provided. This approach was taken, for this particular condition, because the comments received included central themes of feedback, which were considered collectively when revising the report. The final causeway breach report itself provides the indication of how the views and information were integrated, as well as a rationale for why others were not.

**Blue Water Rail Services views and information and port authority response (condition 7.1)**



# Roberts Bank Terminal 2 Project – Draft Causeway Breach Feasibility Report

## Blue Water Rail Services comment table

The table below is provided by the Vancouver Fraser Port Authority to Blue Water Rail Services Limited Partnership (BWRS) as an option for recording comments and providing feedback on the draft Breach Feasibility Report provided for review August 23, 2023.

These written comments were received on September 29, 2023.

	Report Section / Topic	Comment
1	General/ Ecological	Explain what fish movement problem we are trying to solve? Even if the breach is constructed, there is still the BC Ferries causeway in the vicinity. Setting aside the cost and impacts, is the solution even going to be effective?
2	Economic/ financial impact	What will the effect of the rail disruptions be on BWRS' labour and employment. For short periods of time, BWRS may be able to re-deploy some impacted employees to work at another BWRS customer terminal, but even that would be challenging because other customer terminals would already have sufficient labour with little to no vacancies. Prolonged or frequent rail outages would affect retention of BWRS employees. If we need to hire, it takes time to respond to the need and attract new employees. Moreover, the available workforce from which to hire is limited because there is a specific skillset of qualifications required to handle unit trains.
3	Economic/ financial impact	Detouring trains during a rail outage requires a high degree of logistics coordination. A precision schedule for trains to arrive or depart is not realistic or feasible, nor is a precision construction schedule. There will always be lag time to recover from an outage; freight movements are not turned on and off like light switches. In the even of construction delay that already inbound, where is there track capacity to hold back unit trains? Is it even in Canada? Does the hold-back location block other rail movements to other destinations, or block crossings? Must consider the cascading effects from origin to destination and extends the expected duration of a rail outage but a train is consequential impacts. Is this captured in the economic analysis done in the report?
4	Economic/financial impact	Prolonged planned rail outages would give shippers the time, and opportunity, to adapt and change ports to avoid disruption to their business. COVID-19 was an unplanned outage that caused universal global disruption essentially affecting supply chains equally. How will shippers react where the disruption only affects VFPA? Will shippers return after the project is complete? Or will VFPA's or Westshore Terminals' competitors have incentivizes such that supply chains do not return to pre- project state? How would prolonged disruption affect market reputation as a reliable port?

**From:** [Karaloff, Kevin](#)  
**To:** [Emily Mak](#)  
**Subject:** Breach Feasibility Report  
**Attachments:** [image001.png](#)  
[image002.png](#)

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Hi Emily,

I wanted to let you know that on Friday we submitted the port authority's report on the feasibility of a breach in the Roberts Bank causeway to the Impact Assessment Agency of Canada, in accordance with federal project condition 7.1. The final report is available here: [Link to report](#)

We would like to thank you once again for sharing your feedback throughout the 60-day comment period. This input has been considered and integrated into the final report, including:

- An updated response that reflects the input provided by stakeholders on the draft report (see the executive summary and section 6)
- A new consultation section summarizing comments received during the 60-day comment period from stakeholders, including BWR (see section 5)
- An updated appendix to include your comments as received (see appendix 5)

Please let me know if you have any follow-up questions.

Kind regards,

**Kevin Karaloff** P.Eng MBA  
Director Infrastructure Partnerships



**Vancouver Fraser Port Authority**  
100 The Pointe, 999 Canada Place  
Vancouver, B.C. Canada V6C 3T4

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[portvancouver.com](http://portvancouver.com)

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**British Columbia Railway Company views and information and port authority response (condition 7.1)**



# Roberts Bank Terminal 2 Project – Draft Causeway Breach Feasibility Report

## BC Railway Company "BCR" comment table

The table below is provided by the Vancouver Fraser Port Authority to BC Railway Company as an option for recording comments and providing feedback on the draft Breach Feasibility Report provided for review July 6, 2023.

These written comments were received on September 6, 2023.

#	Report Section / Topic	Comment
1.	Technical/Design	<p>BCR generally accepts the technical design of the concrete box culverts as being the most practical approach.</p> <p>The incorporation of interior lighting rather than solar domes is a critical design component for BCR.</p> <p>BCR remains concerned that the box culverts would impose an unacceptable impediment for future linear utilities (storm drainage, water, power, etc...). The proposed utility access corridors located only at the southern and northern edges of BCR's existing causeway is problematic.</p>
2.	Safety	<p>BCR has concerns about the inherent safety conflicts of constructing a causeway breach through the middle of an operating rail yard. This issue was not adequately addressed in the Feasibility Report.</p> <p>BCR's Roberts Bank rail yard is an extraordinarily busy facility. It operates 24x7x365 and directly serves the largest container terminal in Canada (GCT Deltaport) and the largest export coal facility in Canada (Westshore). On a typical day we see about 10 arriving trains and 10 departing trains and process about 75,000 lineal feet of railcars (CN, CPKC and BNSF) in and out of the two terminals. There are 11 staging tracks on the causeway that are at least half full of railcars at almost all times. There are internal railway access roads that are constantly used for ancillary railway activities, including transporting train crews, transporting mechanical crews, protecting railcar movements and providing lineal work areas supporting nearly continuous mechanical inspection and railcar repair activities.</p> <p>Under the Railway Safety Regulations, BCR has a regulatory responsibility for ensuring the safety of any persons that we permit onto our railway property. BCR takes on legal risk and liability anytime we permit anyone into our rail yard. The rail yard on BCR's existing causeway is extremely busy and already a high-risk</p>

#	Report Section / Topic	Comment
		<p>workplace. The construction of a causeway breach would require extensive contract labour, materials and heavy equipment performing construction right in the middle of a busy operating rail yard.</p> <p>Unless Construction Approach 1 was taken (the improbable scenario of shutting down all terminal and railway operations at Roberts Bank to facilitate construction), then BCR would be required to assume the added risk and liability associated with this highly invasive construction work by others within our rail yard.</p>
3.	Construction and Maintenance Costs	BCR has no questions/comments regarding the estimated construction and maintenance costs. The methodology and estimated amounts appear reasonable.
4.	Financial Impacts/Losses	<p>BCR has reviewed the estimated financial impacts/losses in the Feasibility Report. We are only qualified to comment on the estimated impacts to the railways.</p> <p>BCR considers the methodology taken to analyse the operational impacts and estimate the financial losses to the railways to be a reasonable approach and provides a valid approximation. If anything, BCR considers the estimated impacts to be on the optimistic side. The estimated railway impacts are derived primarily based on proportionate losses of staging/storage tracks and train transit impacts. The Feasibility Report does not appear to give thorough consideration to the impacts on the ancillary railway activities in the rail yard.</p> <p>As noted in BCR’s Comment #2 above, the tracks in BCR’s rail yard on the causeway are not simply used for staging and transiting rail cars. There are internal railway access roads between the tracks that are constantly used for ancillary railway activities, including transporting train crews, transporting mechanical crews, protecting railcar movements and providing lineal work areas supporting nearly continuous mechanical inspection and railcar repair activities. The construction staging and sequencing plans described under Approaches 2 and 3 would have a profound impact on all of the ancillary railway activities performed on the causeway. While likely impossible to accurately estimate, BCR would anticipate a further 10% to 20% loss of productivity due to the impact on ancillary activities, over and above that estimated in the Feasibility Report.</p>
5.	Alternative Breach Locations on BCR Causeway	<p>The Feasibility Report assesses 5 alternate locations, the original 1, 2 and 3 proposed by the VFPA’s consultants and locations A and B suggested by BCR. A total cost comparison is provided for the 5 locations.</p> <p>The Report notes that Location 3 has “notable construction-related advantages over Locations 1 and 2”. BCR strongly concurs with that assessment. Having reviewed and considered detailed construction sequencing plans, BCR is of the opinion that Locations 1 and 2 are</p>

#	Report Section / Topic	Comment
		<p>simply not feasible. Both Locations 1 and 2 are cutting through congested cross-sections of 11 parallel railway tracks, with narrow access roads. Construction (materials and equipment) access, staging and execution would be extraordinarily difficult to undertake safely without shutting down all ancillary railway activity.</p> <p>Location 3 has fewer railway tracks and more open ground providing more flexibility for the construction/operational interface. It is BCR’s opinion that the only truly feasible location for a causeway breach through BCR’s rail yard would be at or west of Location 3 (ie. - an optimized location in the vicinity of Location 3 and Location B).</p>
6.	<p>Breach Location on VFPFA Property (Location A)</p>	<p>BCR had previously suggested that the VFPA also consider an alternative causeway breach location on VFPA land to the west of the mid-causeway overpass. The Feasibility Report now includes this alternative as Location A. While the Report includes this alternative and incorporates it into the cost comparison table, the Report does not really highlight the advantages of this location. It is only a few hundred metres west of Locations 3/B, but most importantly is located entirely on lands owned by the VFPA.</p> <p>While this location would still have construction costs and overall financial impacts/losses similar to Location 3/B, the fact that it would be entirely located on lands owned and controlled by the VFPA, would simplify many of the most complex contractual challenges of this project. The causeway breach would no longer require the consent of other third-party landowners (ie - BCR and MoTI). It would remove the Province and BCR from many issues and all of the negotiations and contractual agreements pertaining to land tenure, access rights, future SRW’s, future inspection and maintenance access and many safety/liability concerns.</p>
7.	<p>Class 1 Railway Consent and Compensation</p>	<p>BCR owns the majority of the existing causeway and the railway infrastructure upon it. However, BCR does not operate any of its own trains. BCR’s mandate, on behalf of the Province, is to own and maintain the shared railway infrastructure in order to provide fair and equal access for the three Class 1 railways (CN, CPKC and BNSF) to serve the Roberts Bank port terminals (GCT and Westshore).</p> <p>BCR is essentially a railway property and facilities owner/manager and does not have a commercial stake in the Roberts Bank train traffic. BCR operates on a simple cost-recovery basis from the Class 1 railways, regardless of the rail traffic volume.</p> <p>BCR has a quasi-landlord/tenant relationship with the Class 1 railways. All three Class 1 railways are party to a Joint Section Agreement with BCR that provides them with a contractual right to operate their trains over the shared BCR Roberts Bank railway facility. The Joint Section Agreements govern the respective contractual rights and obligations between BCR and the Class 1 railways.</p> <p>Depending on the causeway breach location and the construction approach, the Feasibility Report estimates financial impacts/losses to</p>

#	Report Section / Topic	Comment
		<p>the railways to be in the range of \$100 million to \$400 million. Those impacts/losses would be incurred by the three Class 1 railways, not by BCR.</p> <p><b>BCR does not have the legal and contractual authority to unilaterally agree to the causeway breach or any other any third-party activity on the causeway that would interfere with the Class 1 railway’s operations or impose any financial impacts/losses onto them. In order for a causeway breach to be constructed across BCR’s property, the federal agency/proponent would first need to secure the consent of the three Class 1 railways, including their agreement to whatever terms of compensation for their financial impacts/losses and a waiver of liability against BCR.</b></p>

**From:** [Karaloff, Kevin](#)  
**To:** [Gord Westlake](#)  
**Subject:** Breach Feasibility Report  
**Attachments:** [image001.png](#)  
[image002.png](#)

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Hi Gord,

I wanted to let you know that on Friday we submitted the port authority's report on the feasibility of a breach in the Roberts Bank causeway to the Impact Assessment Agency of Canada, in accordance with federal project condition 7.1. The final report is available here:  [Link to report](#)

We would like to thank you once again for sharing your feedback throughout the 60-day comment period. This input has been considered and integrated into the final report, including:

- An updated response that reflects the input provided by stakeholders on the draft report (see the executive summary and section 6)
- A new consultation section summarizing comments received during the 60-day comment period from stakeholders, including BCRC (see section 5)
- An updated appendix to include your comments as received (see appendix 5)

Please let me know if you have any follow-up questions.

Kind regards,

**Kevin Karaloff** P.Eng MBA  
Director Infrastructure Partnerships



**Vancouver Fraser Port Authority**  
100 The Pointe, 999 Canada Place  
Vancouver, B.C. Canada V6C 3T4

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**Canadian National Railway views and information and port authority response (condition 7.1)**

**From:** Karen Jensen <[REDACTED]>  
**Sent:** Monday, September 18, 2023 7:47 AM  
**To:** Fong, Selina <[REDACTED]>; Darren Reynolds <[REDACTED]>; Tyler Banick <[REDACTED]>  
**Cc:** Long, Jarret <[REDACTED]>; Karaloff, Kevin <[REDACTED]>  
**Subject:** [External] - RE: Review requested on port authority's draft breach feasibility report

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello Selina;

Roberts Bank Terminal (RBT) currently provides Canadian coal producers and Intermodal shippers with an expanded and diversified market for their products. Asian and Indian countries represent the largest global demand for coal and Intermodal products. This expanded market is critical for Canadian producers and receivers as they can participate in the higher-value international pricing.

The Roberts Bank Terminal 2 (RBT2) is focused on increasing through put of the Intermodal business to international markets. This expansion allows Intermodal companies to participate in higher-value international Asian markets, which means improved netbacks for the Intermodal shipper. Furthermore, RBT2 will also increase exports through the Vancouver Fraser Port Authority (VFPA) by improving supply chain efficiency. This benefits the Intermodal terminals inland as well as supports future growth and development of VFPA. The RBT2 expansion also increases the performance of the rail transportation system at Deltaport, and this contributes to an increase in the volume of goods exported from Canada to overseas markets. This expansion will also ensure that the future growth opportunities within Deltaport are not encumbered by rail access in and out of Roberts Bank Terminal.

Regarding the installation of the concrete culverts under the causeway, it is CN's expectation that there would not be any disruption to CN's ability to provide rail service to our customers into Deltaport. CN has a common carrier obligation to our customers, and we strongly want to continue to provide this service without any disruptions.

## **CN Karen Anne Jensen**

---

Senior Manager, Business Development | Marketing  
Vancouver, BC

T: [REDACTED] C: [REDACTED]  
Email: [REDACTED]



**From:** [Karaloff, Kevin](#)  
**To:** [Karen Jensen](#)  
**Subject:** Breach Feasibility Report  
**Attachments:** [image001.png](#)  
[image002.png](#)

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Hi Karen,

I wanted to let you know that on Friday we submitted the port authority's report on the feasibility of a breach in the Roberts Bank causeway to the Impact Assessment Agency of Canada, in accordance with federal project condition 7.1. The final report is available here: [Link to report](#)

We would like to thank you once again for sharing your feedback throughout the 60-day comment period. This input has been considered and integrated into the final report, including:

- An updated response that reflects the input provided by stakeholders on the draft report (see the executive summary and section 6)
- A new consultation section summarizing comments received during the 60-day comment period from stakeholders, including CNR (see section 5)
- An updated appendix to include your comments as received (see appendix 5)

Please let me know if you have any follow-up questions.

Kind regards,

**Kevin Karaloff** P.Eng MBA  
Director Infrastructure Partnerships



**Vancouver Fraser Port Authority**  
100 The Pointe, 999 Canada Place  
Vancouver, B.C. Canada V6C 3T4

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**Fisheries and Oceans Canada views and information and port authority response (condition 7.1)**



# Roberts Bank Terminal 2 Project - Draft Causeway Breach Feasibility Report

## Fisheries and Oceans Canada “DFO” comment table

The table below is provided by the Vancouver Fraser Port Authority to Fisheries and Oceans Canada (DFO) as an option for recording comments and providing feedback on the draft Breach Feasibility Report provided for review July 6, 2023.

These written comments were received on September 15, 2023.

#	Report Section / Topic	Comment
1.	VFPA Response to Condition 7.1: Breach Feasibility- Section 3.5, page 17	Permitting: The proponent will need to apply for a <i>Fisheries Act</i> authorization for the RBT2 project and breach(es). Breaches should be included as a component of either the mitigation (terminal breach) or offsetting plans (causeway breach).
2.	VFPA Response to Condition 7.1: Breach Feasibility- Section 1.2, page 3	“Determine that a causeway breach will provide a greater benefit to juvenile salmon productivity than a terminal breach, as required by condition 7.2”. The terminal breach and causeway breach are both technically feasible and should both be considered by the Proponent to either mitigate or offset impacts to chinook salmon.
3.	Technical Appendices- Summary and Conclusions, question 8 (page 40/ xxvi)	“a causeway breach can be located generally anywhere along the causeway”. The proponent should consider the best breach location between location 3 and B based on fish access (the longest duration of time the culvert remains accessible to fish migration) and the length of the culvert (190 m vs 240 m). A breach near/at location A or B should be investigated further in terms of both benefits and risks to fish.
4.	Executive Summary (page ii)	The report suggests that it would be technically and economically feasible for the Minister of Fisheries and Oceans to secure permission from landowners, obtain permits and determine whether a causeway breach would be beneficial. If it would be technically and economically feasible for Fisheries and Oceans Canada to undertake this work, why would it not be technically and economically feasible for the VFPA? Fisheries and Oceans Canada is not contemplating undertaking this work. DFO is of the opinion that if it is technically and economically feasible to undertake a causeway breach, and if it would provide benefits to fish, the VFPA should include this in their offsetting plan, to counterbalance the increased estuary fragmentation likely to result from the project, regardless of whether the causeway breach would provide greater benefits than the terminal breach.

Vancouver Fraser Port Authority  
 Roberts Bank Terminal 2 Project - Draft Causeway Breach Feasibility Report | Fisheries and Oceans  
 Canada "DFO" comment table

#	Report Section / Topic	Comment
5.	Technical Appendix 3d	If negotiations over disruption to the users of the existing causeway is anticipated to require more time than the current construction schedule allows, the VFPA should consider installing the components of the breach during construction of the expanded causeway and completing the remaining sections of the breach at a later date.
6.		To address increased estuary fragmentation and potential impacts to salmon migration from the construction of the Roberts Bank Terminal 2 Project, VFPA should consider removal of other existing barriers in the Fraser River Estuary. DFO strongly recommends that the VFPA consider whether breaches of other existing barriers in the Fraser River Estuary are available for inclusion in the offsetting plan.

**From:** [Menezes, Charlene](#)  
**To:** [Morgan Weverink](#)  
**Subject:** FW: RBT2 condition 7.1: Causeway breach feasibility  
**Date:** October 23, 2023 4:14:23 PM  
**Attachments:** [image001.png](#)  
[image002.png](#)

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For your records, see below.

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**From:** Menezes, Charlene  
**Sent:** Monday, October 23, 2023 4:13 PM  
**To:** Carter, David <[REDACTED]>; Richardson, Tessa <[REDACTED]>;  
[REDACTED]; Russo, Stephanie (she, her elle, la ) (DFO/MPO) <[REDACTED]>;  
[REDACTED]  
**Cc:** Harlos, Erin <[REDACTED]>  
**Subject:** RBT2 condition 7.1: Causeway breach feasibility

Hi Dave, Tessa, Stephanie and Brad,

I wanted to let you know that on Friday we submitted the port authority's report on the feasibility of a breach in the Roberts Bank causeway to the Impact Assessment Agency of Canada, in accordance with federal project condition 7.1. The final report is available here: [Link to report](#)

We would like to thank you once again for sharing your feedback throughout the 60-day comment period. This input has been considered and integrated into the final report, including:

- An updated response that reflects the input provided by stakeholders and regulators on the draft report (see the executive summary and section 6)
- A new consultation section summarizing comments received during the 60-day comment period from stakeholders and regulators, including DFO (see section 5)
- An updated appendix to include your comments as received (see appendix 5)

Please let me know if you have any follow-up questions.

Kind regards,  
Charlene

**Charlene Menezes** M.Eng., P.Geo., ENV SP (she/her/hers)  
Manager, Infrastructure Projects – Environmental Program Delivery



**PORT of  
vancouver**

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Port Authority**

**Canada**

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C: [REDACTED] [portvancouver.com](mailto:portvancouver.com)

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**Global Container Terminals views and information and port authority response (condition 7.1)**

September 05, 2023

Wylen Wong  
Manager, Real Estate- Terminal & Land Strategies  
Vancouver Fraser Port Authority  
100 The Pointe, 999 Canada Place  
Vancouver, B.C. Canada  
V6C 3T4  
[REDACTED]

Dear Wylen:

**Re: GCT Canada feedback on the RBT2 Project: VFPA draft response to condition 7.1 Breach Feasibility**

Thank you for the opportunity for GCT Global Container Terminals Canada (GCT) to provide high level feedback on the draft VFPA response to condition 7.1 Breach Feasibility for the RBT2 Project.

GCT, a majority Canadian-owned and operated company with headquarters in Vancouver, has operated on the west coast of Canada since 1907. Under long-term leases with the Vancouver Fraser Port Authority (VFPA), GCT is responsible for operating both GCT Vanterm and GCT Deltaport. These two state-of-the-art west coast Canadian container terminals provide our mutual customers and carriers with reliable and convenient access to all major Asia-Pacific trade lanes and are representative of our involvement in the development and operation of Canada's Asia-Pacific Gateway.

GCT Deltaport is Canada's flagship container terminal, the largest in the country and handles the largest transpacific container vessels calling in Canada's largest port, the Port of Vancouver. GCT Deltaport also has the largest and most productive on-dock marine rail yard facility in North America which distributes rail containers to/from Canada's prairie provinces, Eastern Canada and into the Mid-West region of the U.S.A.

In 2022, GCT Deltaport handled approximately 1.10 million container throughputs including .747 million intermodal rail lifts and .406 million truck gate lifts.

In our remarks, GCT will not comment on land ownership, feasibility, engineering design, maintenance, effectiveness, and constructability concepts to allow water flows and facilitate fish passage between the areas to the north and south of the Roberts Bank causeway. GCT will limit our feedback to the potential breach feasibility, proposed locations and constructability options that might affect our ability to operate GCT Deltaport on behalf of the people of Canada, while at the same time deliver leading services to our mutual Ocean carrier customers and maintaining the fluidity of Canada's Pacific Gateway.

In reviewing the Draft RBT2-VFPA Response to condition 7.1: Breach Feasibility, GCT has the following comments:

### **1. Potential Breach Locations:**

- At this time, with the limited information provided, GCT cannot comment on the technical and economic feasibility of the breach option at the site where the potential RBT2 terminal will meet the existing Roberts Bank terminals (Westshore and GCT Deltaport). GCT is open to receiving further information on the topic, and is committed to support where required should it be identified as a preferred option.
- GCT does not support a “causeway breach” in the proposed **location A** for a variety of reasons including:
  - It would be at the widest location (like **location B**), potentially increasing cost, time to build and create a major disruption to the day-to-day operations at the terminal.
  - It would be within the GCT Deltaport lease boundaries.
  - It is estimated that this location would produce the lowest amount of daily container rail production of all the proposed locations as it would directly affect the length and number of on-dock rail tracks working at any given time.
  - It would be within the on-dock “semi-automated” rail area which generally operates daily, 24 hours per day.
  - The “semi-automated” rail operation is a high safety risk area that requires sophisticated safety devices to warn employees of imminent danger. This is not an area to engage in construction activities while semi-automated rail operations are ongoing.
  - Under GCT’s lease with the VFPA, GCT assumes all legal risk and liability anytime we permit anyone into the rail yard and terminal boundaries.
  - The on-dock rail operation is manned by the ILWU (International Longshore and Warehouse Union) and GCT experienced considerable cost escalation when redeveloping its rail yard in 2015-2018 due to site safety and manning protocols during construction.
  - GCT is concerned that a **location A** breach of the causeway would cause an unacceptable level of operational disruption, financial impacts, pose unacceptable safety risks and create added potential financial liabilities.
  - **Location B** is also less desirable from a GCT perspective when compared to **Locations 1-3**
- If the Government of Canada decides to move forward with a potential breach of the causeway, GCT may support **location 3** as the best potential location. This is based on information provided by the VFPA to date, including there being fewer existing rail tracks in this location and the potential of large space available for road and rail detours.

### **2. Construction Approach, staging and duration.**

- At this time, with the information provided, GCT does not support **Approach 1: Minimized Construction Duration**
- Although this approach has the shortest duration to deliver, the required results would shut down Container and Bulk operations 100% for approximately 1 year.



- i. This approach assumes a full shutdown of all existing operations at Westshore and GCT Deltaport.
  - ii. This approach would mean massive job layoffs for thousands of middle-class people working at both existing operations.
  - iii. This approach would paralyze the movement of Canadian Exports to Foreign markets and Imports arriving in Vancouver. British Columbia may not have capacity at other terminals to handle the volumes of business that currently exist at the Roberts Bank terminals.
  - iv. Ocean Carrier customers would have to find other destinations to move their containers/bulk cargo under this approach. If this happens there is no guarantee that these customers will bring back these volumes of business once construction has taken place. The Financial impacts to the existing tenants at Roberts Bank could be long term in nature and extend well beyond the completion of a causeway breach.
- Construction **Approach 2** and **Approach 3** are more balanced than **Approach 1** and allow for the existing terminals to still carry out their business but at a reduced rate.
  - At this time and based on the information provided, GCT may support construction **Approach 2** with appropriate mitigation and compensation, as it would be a more balanced approach, take less time to construct than **Approach 3** and be less disruptive to GCT's business overall. Having said that, **Approach 3** may take longer to construct but would minimize disruption to existing operations and maintain relatively minor, short -term outages to install and remove required detours or relocations. This approach may potentially be acceptable to GCT based on the information provided to date.

### 3. **Other comments:**

- GCT understands Indigenous groups concerns regarding the effects of existing causeways at Roberts Bank on the movement of juvenile salmon migration.
- GCT would support further investigation and determination by the appropriate federal authorities into a comparison and determination of the actual benefits to juvenile salmon productivity between:
  - i. A terminal breach at the proposed RBT2 site;
  - ii. A causeway breach at one of the three original locations along the causeway; and
- Third parties are expected to be impacted by the construction of a causeway breach. These include landowners, operators / tenants, railways, trucking companies, service suppliers and the thousands of employees working at Roberts Bank daily. Impacts will also reach beyond the existing on terminal operations and will include off terminal jobs such as harbour pilots, tug operators, custom brokers, freight forwarders, trans load operations and warehousing to name a few.
- **Financial losses due to container volume reduction:**
  - i. GCT has an existing lease arrangement for GCT Deltaport with the VFPA
  - ii. GCT may be financially impacted by construction of a causeway breach due to the potential reduction in container volumes and associated revenues from construction impacts and restrictions.
  - iii. GCT will not comment on the estimated reduction in cargo throughput and resulting financial losses as outlined in the draft report as we have not had the opportunity to perform our own independent analysis.

- iv. GCT will not comment on the analysis of construction costs, estimates for future maintenance costs and other potential compensatory costs.
  - v. If the Federal Government determines that a causeway breach will go ahead, then GCT would have to be compensated for any losses incurred because of disruption to operations during the breach construction and potentially after construction.
  - vi. Considerations will also have to be given for potential loss contracts, revenues and non-financial impacts that might be a result of reduced volumes as the container business is long term in nature and may extend beyond the completion of any causeway breach. A formula that considers continued business losses after construction completion may need to be included in any agreed upon arrangement.
- The Federal government needs to seriously consider any potential supply chain challenges, delays, and loss of production at Roberts Bank as it relates to broader economic implications of lost cargo volume during and after breach construction. This may include substantial trade impacts and GDP growth opportunities for Canada which could last longer in duration than any breach construction period.
  - GCT to date, has not been involved with any discussions regarding a potential breach of the causeway at Roberts Bank associated with the RBT2 Project. Moving forward, GCT would recommend that a future working committee include the existing tenants and other relevant stakeholders on this important topic.

In closing, GCT would like to thank the VFPA for the opportunity to comment and provide feedback on this important topic. We also thank the Federal Government for ensuring that we have had the opportunity to review and comment on the preliminary work done to date.

Sincerely,

Michael E. McLellan,  
Vice President-Project Development,  
GCT Global Container Terminals Canada

**From:** [Wong, Wylen](#)  
**To:** [Morgan Weverink](#)  
**Subject:** FW: Breach Feasibility Report  
**Date:** October 23, 2023 3:42:21 PM  
**Attachments:** [image001.png](#)  
[image002.png](#)

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GCT email

[Wylen Wong](#)  
Manager, Real Estate - Terminals & Land Strategies  
C: [REDACTED]

---

**From:** Wong, Wylen <[REDACTED]>  
**Sent:** Monday, October 23, 2023 3:40 PM  
**To:** Mike McLellan <[REDACTED]>; Dallas Leung <[REDACTED]>; Marko Dekovic <[REDACTED]>; Roy Kristensen <[REDACTED]>  
**Subject:** Breach Feasibility Report

Hi Mike, Dallas, Marko and Roy,

I wanted to let you know that on Friday we submitted the port authority's report on the feasibility of a breach in the Roberts Bank causeway to the Impact Assessment Agency of Canada, in accordance with federal project condition 7.1. The final report is available here: [Link to report](#)

We would like to thank you once again for sharing your feedback throughout the 60-day comment period. This input has been considered and integrated into the final report, including:

- An updated response that reflects the input provided by stakeholders on the draft report (see the executive summary and section 6)
- A new consultation section summarizing comments received during the 60-day comment period from stakeholders, including GCT (see section 5)
- An updated appendix to include your comments as received (see appendix 5)

Please let me know if you have any follow-up questions.

Kind regards,  
**Wylen Wong** (he/him)  
Manager, Real Estate – Terminal & Land Strategies



**Vancouver Fraser Port Authority**  
100 The Pointe, 999 Canada Place  
Vancouver, B.C. Canada V6C 3T4

C: [REDACTED] portvancouver.com

The Vancouver Fraser Port Authority's Canada Place office sits on the traditional territory of the xʷməθkʷəy̓əm (Musqueam), Skwxwú7mesh (Squamish), and səliłwətaʔ (Tseil-Waututh) Nations.

The Vancouver Fraser Port Authority's Delta community office sits on the traditional territory of the xʷməθkʷəy̓əm (Musqueam), q̓əy̓cəy̓ (Katzie), qʷɑːn̓l̓ən̓ (Kwawntlen), Semiahmoo, and sc̓əwəθən məsteyəxʷ (Tsawwassen) Nations.

**Canadian Pacific Kansas City Railway views and information and port authority response (condition 7.1)**



# Roberts Bank Terminal 2 Project – Draft Causeway Breach Feasibility Report

## Canadian Pacific Kansas City Railway comment table

The table below is provided by the Vancouver Fraser Port Authority to Canadian Pacific Kansas City Railway as an option for recording comments and providing feedback on the draft Breach Feasibility Report provided for review August 23, 2023. Please add additional rows as needed.

Comments are requested no later than September 15, 2023. Following receipt of comments, this table will be modified with an additional column to include the port authority’s responses to each of the comments received.

#	Report Section / Topic	Comment
1.	General	CPKC has a vested interest in ensuring the continuous rail operation when any work is proposed in proximity to track CPKC operates on.
2.	Section 1.2	Notable to CPKC is the reference of financial exposure to third parties during construction, and that those losses would be compensated.
3.	Section 6.5	As a primary rail user, CPKC has a vested interest in how funds may be expended as it relates to any indirect financial exposure to CPKC through the levelling of apportioned fees.
4.		
5.		
6.		

**From:** [Karaloff, Kevin](#)  
**To:** [REDACTED]  
**Subject:** RE: Breach Feasibility Report  
**Attachments:** [image001.png](#)  
[image002.png](#)

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Hi Heather,

I realised that your access to the report uses your new email address.

Cheers,

**Kevin Karaloff**

CELL: [REDACTED]  
[portvancouver.com](http://portvancouver.com)

---

**From:** Karaloff, Kevin  
**Sent:** Monday, October 23, 2023 4:27 PM  
**To:** Heather Macmahon <[REDACTED]>  
**Subject:** Breach Feasibility Report

Hi Heather,

I wanted to let you know that on Friday we submitted the port authority's report on the feasibility of a breach in the Roberts Bank causeway to the Impact Assessment Agency of Canada, in accordance with federal project condition 7.1. The final report is available here: [Link to report](#)

We would like to thank you once again for sharing your feedback throughout the 60-day comment period. This input has been considered and integrated into the final report, including:

- An updated response that reflects the input provided by stakeholders on the draft report (see the executive summary and section 6)
- A new consultation section summarizing comments received during the 60-day comment period from stakeholders, including CPKC (see section 5)
- An updated appendix to include your comments as received (see appendix 5)

Please let me know if you have any follow-up questions.

Kind regards,

**Kevin Karaloff** P.Eng MBA  
Director Infrastructure Partnerships



**Vancouver Fraser Port Authority**

100 The Pointe, 999 Canada Place  
Vancouver, B.C. Canada V6C 3T4

CELL: [REDACTED]  
[portvancouver.com](http://portvancouver.com)

Vancouver Fraser Port Authority's Canada Place Office sits on the traditional territory of the xʷməθkʷəy̅əm (Musqueam), Skwxwú7mesh (Squamish), and səliłwətał (Tseil-Waututh) Nations.

Vancouver Fraser Port Authority's Delta Office sits on the traditional territory of the xʷməθkʷəy̅əm (Musqueam), q̅áyc̅əy̅ (Katzie), q̅wɑ:n̅ł̅ən̅' (Kwantlen), Semiahmoo, and sc̅əwaθ̅ən̅ məstey̅əx̅ʷ (Tsawwassen) Nations.

**Ministry of Transportation and Infrastructure views and information  
and port authority response (condition 7.1)**





# Roberts Bank Terminal 2 Project – Draft Causeway Breach Feasibility Report

## Ministry of Transportation and Infrastructure (MOTI) comment table

The table below is provided by the Vancouver Fraser Port Authority to the BC Ministry of Transportation and Infrastructure (MOTI) as an option for recording comments and providing feedback on the draft Breach Feasibility Report provided for review July 6, 2023.

These written comments were received on September 20, 2023.

#	Report Section / Topic	Comment
1.	Feasibility	<p>MOTI's position remains unchanged that there is no significant impact to MOTI's infrastructure if a terminal breach option is selected, and that there are impacts to MOTI's infrastructure that need to be considered if any of the causeway breach options are to proceed.</p> <p>The impacts to MOTI's infrastructure are included in the technical review comments below. Based on the review conducted, MOTI accepts that concrete box-culvert causeway breach is technically feasible and can be constructed. If approved/selected, MOTI agrees that further engineering is required on the final location selected to ensure required design standards are met.</p> <p>MOTI understands there are several commercial agreements and operations that would be impacted to varying degrees depending on the causeway breach location and construction approach. MOTI also recognizes there are other economic impacts in addition to the direct and indirect costs of constructing and maintaining a causeway breach, that must be considered that may not be accounted for in VFPA's report (e.g., financial impacts to other supply chain users, tug operators, trucking companies, and off-dock facilities).</p> <p>MOTI trusts that VFPA's economic feasibility investigation will inform IAAC of the economic impacts that must be considered, as well as technical feasibility, to render its decision.</p>

2.	Technical/Design	<p><u>Structural:</u></p> <p>The proposed structure is designed to have a service life of 75 years. No corrosion protection methods were proposed for the sheet pile wingwalls, which will be continuously subjected to chlorides. Cathodic Protection is highly recommended for this application to control corrosion and increase service life of these bare steel wingwalls.</p> <p>The proposed breach structure comprises box culverts that are to be post-tensioned longitudinally and transversely and will be assembled in the 'dry' achieved via a cofferdam. Special care should be taken to ensure that post-tensioning strands are protected against corrosion (e.g.: watertight sheathing, grouting, ... etc.) resulting from in-service continuous exposure of the structure to saltwater in a tidal zone. The selected approach for strands protection will affect the structural design and shall be decided before detailed design stage. This comment is applicable to either a terminal or a causeway breach.</p> <p>In section 2.6 of Appendix 2, it was stated that seismic loading was not included in the analysis and design of the culvert structure as the governing code does not require such analysis for culverts, as per Chapter 8, Part 16, Article 1.6.4 of AREMA 2019. Seismic lateral pressures and deformation resulting from liquefaction and other dynamic soil-structure interactions shall be considered in the design of the breach structure, regardless of the location selected. No seismic performance criteria seem to have been developed for this structure, and as such, the Ministry advises developing seismic performance criteria for the breach structure.</p> <p><u>Hydrotechnical Comments for Technical Appendices Report:</u></p> <p>MOTI previously requested that a full hydraulic assessment of the entire surface area of the causeway be conducted to determine stormwater management needs as part of any exploration of a causeway breach and causeway expansion. It is clearly indicated in the Feasibility Report that VFPA retained a hydraulics consultant to assess the hydraulics of the causeway breach and its surroundings, but it is not clear to MOTI if a full hydraulic assessment of the entire area of the causeway (existing and proposed) was conducted as part of this hydraulic investigation.</p> <p>The Breach scenarios between terminals is discussed but not shown. Provide more information on these breach options.</p>
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		<p>2.3.1</p> <ul style="list-style-type: none"> <li>• Include: BC supplement to CHBDC, BC technical circular T-04/19, EGBC guideline Developing Climate Change Resilient Designs for Highway Infrastructure in BC 2020.</li> <li>• Remove BC riprap installation guide - this guide is outdated and SS205 is updated with relevant information from the guide.</li> </ul> <p>2.3.2</p> <ul style="list-style-type: none"> <li>• Should there be an environmental criteria section? For example, min and max water velocities, embedment depth of culverts, minimum wetted time that will allow salmonids etc.</li> </ul> <p>2.3.2.2</p> <ul style="list-style-type: none"> <li>• MOTI's structural code requirements should also be satisfied. Loading requirements for railway will be more than highway requirements but there will be other code requirements from MOTI that still need to be considered- for example, some hydrotechnical items that are typically considered are flow return period that considers climate change, freeboard requirements, scour considerations.</li> </ul> <p>2.7</p> <ul style="list-style-type: none"> <li>• NHC's report comments on the hydraulic and geomorphic results of the 1st three breach scenarios. The additional 2 breach scenarios should also be modelled to support the options analysis.</li> <li>• The report summarizes the amount of time the breach culverts are wetted enough for salmonids to use the culverts. Will these results be considered when choosing the final location.</li> <li>• NHC comments that tidal channels are likely to be formed with the installation of a breach crossing. The impacts of these channels to the breach are unclear.</li> <li>• Riprap appears to be sized based on the velocity results from NHC's model. Coastal influences should also be considered when sizing riprap.</li> </ul> <p><u>Geotechnical:</u></p> <p>The report demonstrates geotechnical aspects of the construction of the breach are technically feasible.</p> <p><u>Drainage:</u></p> <ul style="list-style-type: none"> <li>• Future design works should include drainage assessment of the existing and proposed configuration of the roadway.</li> <li>• Elaborate the design return period of the proposed culverts. Generally, MOTI's culverts shall be designed to the 200-year event.</li> </ul>
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		<ul style="list-style-type: none"> <li>• Similarly, confirm all design components would match the Ministry's design criteria requirements. For example, is the assumed wave heights generating mechanism during the design event match the rest of the culvert design criteria return period?</li> </ul> <p><u>Highway Design:</u></p> <ul style="list-style-type: none"> <li>• The existing typical cross section of the roadway should be shown.</li> <li>• Show the proposed roadway cross section without the solar tubing.</li> <li>• Future design works should confirm the geometric design criteria of the roadway.</li> </ul> <p><u>Properties:</u></p> <p>The ownership of land presented in the report is accurate.</p> <p><u>Permitting:</u></p> <p>Ensuring further engineering is completed, and a thorough technical design review is completed, at the final chosen location will be critical for MOTI to be able to help facilitate and coordinate any required land access and permitting it may be responsible for.</p>
3.	Construction	<p>VFPA presented three construction approaches for a causeway breach and proceeded in detail with Approach 3 (minimal disruption to terminal operations). MOTI supports this selection from the three proposed approaches to minimize the negative impacts on the transportation and supply chain networks if a causeway breach is pursued further with an open-pit excavation method. With respect to locations, a breach at wider segments of the causeway may allow for a longer portion of the culvert to be assembled in stage 1, which may result in a better overall staging sequence.</p> <p>Trenchless construction methods were excluded as per Technical Appendix 2: 3.2.1.1. based on several challenges identified in an initial evaluation on Installation methodologies. The challenges presented were primarily driven by the lack of local expertise in trenchless methods. Further investigation involving trenchless methods experts to confirm its applicability to a causeway breach construction is recommended. The scale of economic impacts resulting from service disruptions associated with an open-pit excavation rationalizes further in-depth investigations into trenchless methods. A combination of trenchless construction (for the existing causeway) and open-pit excavation (for the proposed expansion) may provide a less disruptive construction approach.</p>

		<p><u>The advantages of the alternate causeway breach locations, particularly Location A, which is located entirely on lands owned by VFPA, should be further investigated as it appears that it wouldn't require the involvement and/or review/approval of third parties and could help mitigate many of the challenges presented.</u></p> <p>Coordination of all third-party construction activities within MOTI jurisdiction will require an involved coordination approach to ensure the safety of the travelling public and ensuring operational requirements are able to be met throughout construction.</p> <p>Any planned traffic detours throughout the duration of construction would be subject to a Category 3 Traffic Management Plan as per the MOTI's latest Traffic Management Manual for Work on Roadways and must consider the volume of commercial traffic (and type of commercial vehicles) utilizing this route. The Traffic Management Plan must be reviewed and accepted by the MOTI prior to implementation.</p>
4.	Operations/Maintenance	<p>While a portion of the box culvert(s) will be constructed within MOTI Right-of-Way, the structure will pass through multiple jurisdictions. To protect the integrity of the highway network, MOTI reaffirms that while the box culvert would become the responsibility of VFPA, MOTI would require full control of the structure and unfettered access to perform all required activities to ensure the safety of the travelling public. MOTI would require that after substantial completion, the operation, maintenance, and rehabilitation of the structure be completed in accordance with an Operations and Maintenance Agreement, issued by MOTI to VFPA.</p> <p>MOTI must also ensure that the operability of this highway segment is maintained throughout construction as it is a critical link providing regional connectivity for this vital transportation network. The coordination of required road maintenance activities during the length of construction is critical, particularly snow clearing activities. This must be taken into consideration during construction staging/planning. Further conditions may be applied when there are disturbed road surfaces and snow clearing is not achievable by MOTI's maintenance contractor.</p> <p>Given that the causeway services a marine port, its importance as a critical route in the event of an emergency must be considered.</p>

**From:** [Fong, Selina](#)  
**To:** [Morgan Weverink](#)  
**Subject:** FW: Final breach feasibility report  
**Date:** October 23, 2023 4:54:26 PM  
**Attachments:** [image001.png](#)  
[image002.png](#)

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**From:** Fong, Selina  
**Sent:** Monday, October 23, 2023 4:54 PM  
**To:** Kazemi, Maziar TRAN:EX <[REDACTED]>  
**Subject:** Final breach feasibility report

Hi Maziar,

I wanted to let you know that on Friday, October 20, 2023, we submitted the port authority's report on the feasibility of a breach in the Roberts Bank causeway to the Impact Assessment Agency of Canada, in accordance with federal project condition 7.1. The final report is available here: [Link to report](#)

We would like to thank you once again for sharing your feedback throughout the 60-day comment period. This input has been considered and integrated into the final report, including:

- An updated response that reflects the input provided by stakeholders on the draft report (see the executive summary and section 6)
- A new consultation section summarizing comments received during the 60-day comment period from stakeholders, including the Ministry of Transportation and Infrastructure (see section 5)
- An updated appendix to include your comments as received (see appendix 5)

Please let me know if you have any follow-up questions.

Kind regards,  
**Selina Fong** P.Eng  
Manager – Infrastructure Delivery, Procurement



**Vancouver Fraser Port Authority**  
100 The Pointe, 999 Canada Place  
Vancouver, B.C. Canada V6C 3T4

C: [REDACTED] [portvancouver.com](mailto:portvancouver.com)

The Vancouver Fraser Port Authority's Canada Place office sits on the traditional territory of the xʷməθkʷəyəm (Musqueam), Skwxwú7mesh (Squamish), and səliilwətaʔ (Tsleil-Waututh) Nations.

The Vancouver Fraser Port Authority's Delta community office sits on the traditional territory of the xʷməθkʷəyəm (Musqueam), qáycáy (Katzie), qʷɑ:nʷən' (Kwantlen), Semiahmoo, and scəwaθən məsteyəxʷ (Tsawwassen) Nations.

**Ocean Delta Towing views and information and port authority response (condition 7.1)**



# Roberts Bank Terminal 2 Project – Draft Causeway Breach Feasibility Report


## Ocean Delta Towing Inc. comment table

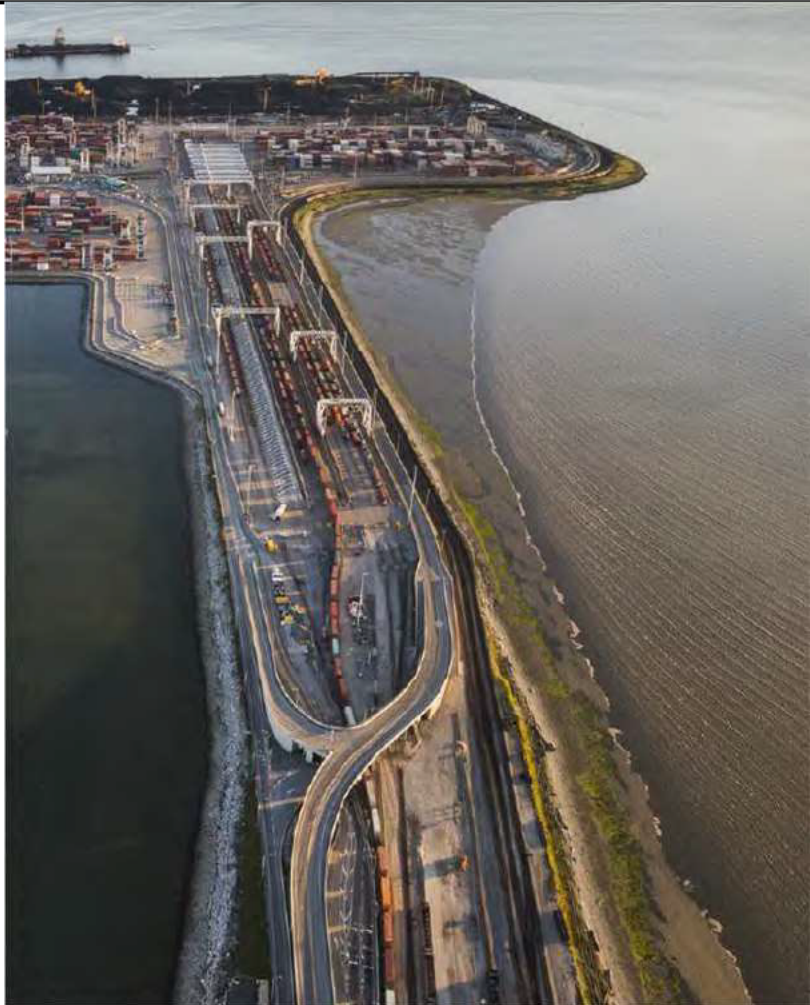
The table below is provided by the Vancouver Fraser Port Authority to Ocean Delta Towing Inc. (Ocean) as an option for recording comments and providing feedback on the draft Breach Feasibility Report provided for review July 6, 2023.

These written comments were received on August 30, 2023.

#	Report Section / Topic	Comment
1.	3.1.2 Main Tenant (4.4-Financial losses to third party)	<p>In accordance with VFPA and the Stantec (Response to Condition #7.1: Breach Feasibility Technical + Appendix 2), the construction of such breach will cause some variable disruptions depending on the selected Approach 1-2-3. Any reduction in port traffic will significantly impact Ocean’s revenues as we are assisting all the incoming and outgoing ships to Roberts Bank. Therefore, if any loss of revenues occurs due to the implementation of this measure, Ocean would require to be compensated for such a loss of revenue due to limited traffic during construction.</p> <p>An increase in tug tariff services to the shipowners could also be considered. These costs have apparently not been calculated nor included in the current study.</p>
2.	Page 93, 6.1.3 Hydrotechnical Considerations	<p>In addition, if the breach changes the flow regime and increases sedimentation at the Ocean tug basin, we must ensure that maintenance dredging operations will be included to maintain the water depth for both the ships and tugboats.</p> <p>To better predict the possible accumulation of sedimentation, it would be advisable to carry out an impact study by realizing some 2D hydraulic simulations of sediment bearing flows passing through the breach at the various proposed locations and the resulting rates of sediment transport and deposition from the North to the South side of the causeway.</p> <p>We clearly see on “Figure 1: Causeway breach, Overview plan of the five identified locations” that the Northwest side of the causeway is heavily sedimented (brownier) with shallower depths and that the East side is deeper (bluer).</p>



#	Report Section / Topic	Comment
		 <p>It is expected that the opening of the Causeway at breach locations A-B and potentially at location #3 could increase the sedimentation experienced at the tug basin and the GCT Terminal more than locations #1 or #2, but this preliminary conclusion would need to be verified by the proposed Hydraulic modelling and Sediment Transport Flow calculations (Page 93, 6.1.3 Hydrotechnical Considerations).</p> <p>The sedimentation flow may also block/clog eventually the breach, so if no maintenance is done, the efforts will be cancelled. We see that on some of the photographs, the breach would have no water at low tide, thus not functional unless it be deepened below the sea level at low tide. What is the efficiency rate of the salmon passage, if at each low tide there is no water, and eventually filled with sedimentation?</p>

#	Report Section / Topic	Comment
		 An aerial photograph showing a large port terminal. A prominent feature is a long, curved causeway or road that runs parallel to the water's edge. The terminal is filled with numerous shipping containers, mostly in shades of red and blue. Several large gantry cranes are visible, positioned along the causeway. The water is dark and calm, and the sky is overcast. The overall scene depicts a busy industrial port environment.

**From:** [Wong, Wylen](#)  
**To:** [Morgan Weverink](#)  
**Subject:** FW: Breach Feasibility Report  
**Date:** October 23, 2023 3:42:30 PM  
**Attachments:** [image001.png](#)  
[image002.png](#)

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Group Ocean email

[Wylen Wong](#)  
Manager, Real Estate - Terminals & Land Strategies  
C: [REDACTED]

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**From:** Wong, Wylen <[REDACTED]>  
**Sent:** Monday, October 23, 2023 3:41 PM  
**To:** Steve Côté ([REDACTED]) <[REDACTED]>; Jacques Tanguay <[REDACTED]>; William Castleton <[REDACTED]>  
**Subject:** Breach Feasibility Report

Hi Steve, Jacques and William,

I wanted to let you know that on Friday we submitted the port authority's report on the feasibility of a breach in the Roberts Bank causeway to the Impact Assessment Agency of Canada, in accordance with federal project condition 7.1. The final report is available here: [Link to report](#)

We would like to thank you once again for sharing your feedback throughout the 60-day comment period. This input has been considered and integrated into the final report, including:

- An updated response that reflects the input provided by stakeholders on the draft report (see the executive summary and section 6)
- A new consultation section summarizing comments received during the 60-day comment period from stakeholders, including Group Ocean (see section 5)
- An updated appendix to include your comments as received (see appendix 5)

Please let me know if you have any follow-up questions.

Kind regards,  
**Wylen Wong** (he/him)  
Manager, Real Estate – Terminal & Land Strategies



**Vancouver Fraser Port Authority**  
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The Vancouver Fraser Port Authority's Canada Place office sits on the traditional territory of the x<sup>w</sup>məθk<sup>w</sup>əyəm (Musqueam), Skwxwú7mesh (Squamish), and səliilwətaf (Tsleil-Waututh) Nations.

The Vancouver Fraser Port Authority's Delta community office sits on the traditional territory of the x<sup>w</sup>məθk<sup>w</sup>əyəm (Musqueam), qáycáy (Katzie), q<sup>w</sup>a:nlən' (Kwantlen), Semiahmoo, and scəwaθən məsteyəx<sup>w</sup> (Tsawwassen) Nations.