

Scoping Document

Deltaport Third Berth Project

1.0 INTRODUCTION

The Vancouver Port Authority (“VPA” or “Proponent”) proposes to construct the Deltaport Third Berth Project (the Development Project) at the existing Roberts Bank Port facility located in Delta, B.C.

The Deltaport Third Berth Project includes the construction of approximately 20 hectares (50 acres) of fill for newly constructed land for container operations and storage, and construction of a wharf to accommodate an additional berth.

Fisheries and Oceans Canada (DFO) and Environment Canada, have federal regulatory responsibilities which have triggered the federal environmental assessment process pursuant to the *Canadian Environmental Assessment Act* (CEAA) in relation to the Vancouver Port Authority’s Deltaport Third Berth Project. The likely CEAA triggers include: an Authorization for the Harmful Alteration, Disruption or Destruction of Fish Habitat from DFO according to Section 35 of the *Fisheries Act*; and, a licence or permit for disposal of dredged material at sea from Environment Canada under subsection 71(1) of the *Canadian Environmental Protection Act* (CEPA).

DFO and Environment Canada have been identified as Responsible Authorities (RAs) as defined by CEAA, and are required to conduct an environmental assessment for this Development Project. Federal Authorities (FAs), such as Natural Resources Canada, Transport Canada, and Health Canada, will provide expert advice in relation to the Development Project.

The VPA is a Canada Port Authority (CPA) as defined under Section 8 of the *Canada Marine Act*. As a result, the VPA has responsibility under the Canada Port Authority Environmental Assessment Regulations of CEAA to also carry out an environmental assessment of this Development Project. Therefore, this environmental assessment review process will help the VPA address its CEAA obligations.

DFO and Environment Canada are working with the VPA in the spirit of federal cooperation to ensure that the federal environmental assessment of the Development Project addresses both the RAs and VPA’s environmental assessment requirements. DFO and Environment Canada as the RAs, will make project-related decisions on matters within their own legislative authority, while the VPA makes a decision, pursuant to the Canada Port Authority Environmental Assessment Regulations, on the entire Development Project.

Under Section 21(1) of CEAA, where a project is described in the comprehensive study list, the responsible authority must ensure public consultation on the proposed scope of the project for the environmental assessment, the proposed factors to be considered in the environmental assessment and the proposed scope of those factors. This scoping document serves as a means to solicit public input on the EA process, and the document serves to outline the ability of the comprehensive study to address issues relating to the project. Following the public comment period, in accordance with Section 21(2) of CEAA the RAs will provide a report to the federal Minister of the Environment with a recommendation to continue with the environmental assessment by means of a comprehensive study or to refer the project to a mediator or a review panel.

The scope of the project refers to the various components of the proposed Development Project that are considered for the purpose of the environmental assessment. This document describes the proposed scope of the project, the proposed factors to be considered in the environmental assessment and the proposed scope of those factors. This document is intended to provide information to assist the public in commenting on this project and the proposed approach to the environmental assessment.

1.1 Environmental Assessment Process

The Deltaport Third Berth Project is subject to a comprehensive study under CEAA, pursuant to paragraph 28 (c) of the *Comprehensive Study List Regulations*, which lists “a marine terminal designed to handle vessels larger than 25 000 DWT (dead weight tonne)”. The CEAA assessment will be conducted along a Comprehensive Study assessment track (described below).

Under section 21(2) of CEAA, following public consultation, the federal RAs must provide a report to the federal Minister of the Environment. The report concerning public input on scoping specifically must include:

- the scope of the project, the factors to be considered in the assessment and the scope of those factors;
- public concerns in relation to the project;
- the potential of the project to cause adverse environmental effects; and
- the ability of the comprehensive study process to address issues relating to the project.

The report must also include a recommendation to the Minister of the Environment to continue with the environmental assessment by means of a comprehensive study or to refer the project to a mediator or review panel.

Federal EA Process

The environmental assessment process for projects listed under the Comprehensive Study Regulations of CEAA may follow one of three assessment tracks: comprehensive study, mediation or panel review. After considering the RAs' report and recommendation, the federal Minister of the Environment will determine whether to refer the project back to the RAs so that they may continue the comprehensive study, or refer the project to a mediator or review panel.

Comprehensive Study

The Canadian Environmental Assessment Agency (CEA Agency) in its role as the Federal Environmental Assessment Coordinator (FEAC) facilitates participation amongst the federal departments during the Comprehensive Study assessment process.

During the Comprehensive Study process, the RAs will facilitate the public's continued participation in the Comprehensive Study. In addition to public input at the scoping stage (i.e. the purpose of this document), the CEA Agency will invite the public to comment on the Comprehensive Study Report prior to the Minister of the Environment making his determination.

The Minister of the Environment also has the power to request additional information or require that public concerns be addressed before issuing the environmental assessment decision statement. Once the environmental assessment decision statement is issued, the Minister refers the project back to the Responsible Authority for action.

Mediation

The mediation process consists of an environmental assessment with the assistance of an independent and impartial mediator appointed by the Minister of the Environment, after consulting with the Responsible Authorities and all interested parties. The Minister of the Environment sets the terms of reference of the mediation.

Mediation only occurs if interested parties have been identified and are willing to participate and if the Minister of the Environment has decided to refer the project to a mediator. The mediator must prepare a report of the results of the mediation and provide that report to the Responsible Authority and the Minister of the Environment, who then makes the report public. The Responsible Authority must take the mediator's report into consideration before determining the significance of the environmental effects of the project.

Individuals and organizations having a direct interest in or directly affected by a proposed project would be involved in the mediation. A public information program, in which the general public is kept informed of the progress of talks, would form part of the mediation process. If mediation does not successfully resolve the issues under negotiation, the Minister of the Environment can order its conclusion.

Panel Review

Panel reviews usually entail public hearings conducted by a Panel of experts appointed by the Minister of the Environment and representing different sectors. The Minister of the Environment sets the terms of reference of the panel. During the panel review process, the proponent presents the project to the public and explains the project environmental effects. Members of the public may participate in scoping meetings to identify issues that need to be addressed. The public also has an opportunity to hear the views of government experts with respect to the project and individuals may present evidence, concerns and recommendations at public hearings.

Once the review panel has completed the public hearings and its analysis, it must prepare an environmental assessment report which summarizes its rationale, conclusions and recommendations, and includes a summary of comments received from the public. This report is submitted to the Responsible Authority and the Minister of the Environment who then makes the report public. The responsible authority must take the review panel's report into consideration before making any decision with regard to the project. The RAs must also take into consideration the Cabinet response before making any decision with regard to the project.

Joint Canada-BC EA Process

As the project is also subject to review under the British Columbia *Environmental Assessment Act*, the terms of the Canada-BC Agreement on Environmental Assessment Cooperation apply. Under the Agreement, projects that require an environmental assessment by both the Government of Canada and the Government of British Columbia will undergo a single assessment, where possible, administered cooperatively by both governments. The CEA Agency in its role as Federal Environmental Assessment Coordinator (FEAC) facilitates the harmonization of the federal review process with the provincial review process. Both governments will use the information generated through the cooperative environmental assessment as the basis for their respective decisions on the project. As the Agreement does not provide for delegation of authority, each government will retain its ability to make project-related decisions on matters within its own legislative authority.

1.2 Project Overview

1.2.1 Project Location

The Deltaport Third Berth Project, located at the existing Roberts Bank Port facility in Delta, B.C., will involve the construction of approximately 20 hectares (50 acres) of fill for newly constructed land for container operations and storage. This will increase the area of Deltaport from 65 hectares (160 acres) to approximately 85 hectares (210 acres), as shown on **Figure 1** below.

Land use in the Delta area primarily consists of agriculture, with lesser amounts of land used for residential, commercial and industrial purposes (including transportation). In addition, the following First Nations have been identified as those who have traditional interests in the study area:

- Tsawwassen First Nation
- Musqueam First Nation
- Katzie First Nation
- Stó:lo First Nation
- Semiahmoo First Nation

Of these First Nations, the Tsawwassen First Nation (TFN) has the closest reserve land to the proposed Deltaport Third Berth Project. The TFN reserve land is located south of the Deltaport Way along the Roberts Bank shoreline.

1.2.2 Project Description

The components of the Deltaport Third Berth Project consist of construction of a wharf to accommodate a third berth, land for the container storage yard, a tug moorage area, extension of the ship channel, an additional truck exit gate, additional rail support track, some limited road improvements and operation of the facility. Widening of the Roberts Bank causeway is not required for the Deltaport Third Berth Project.

Marine Works

The new land area will be created through placement of material from dredging (preliminary estimates indicate a total dredging volume of approximately 2 million cubic metres of material is required to create the ship channel for the third berth and to construct the terminal area) and landfill operations, with soil densification works required along the perimeter berm and under most new structures. The revetment works (*i.e.*, shoreline protection) for the northern shoreline of the container yard will consist of rock armoured slopes.

Upland Works and Terminal Facilities

There will be limited construction of new site services for the Development Project, as many of the existing Deltaport site services are adequate to meet the Deltaport Third Berth Project needs. The site services required include an on-site water storage tank, terminal lighting and a stormwater run-off collection system. A truck exit gate is the only building required on the terminal as part of the Deltaport Third Berth Project.

Road and Rail Infrastructure

Preliminary rail analysis indicates that there will be a requirement for approximately 7,000 metres (23,000 feet) of additional rail track for the Deltaport Third Berth Project. This rail track will be provided by extending the arrival/departure tracks at the Gulf siding (east of Arthur Drive to 64th Street) and adding support track on the 4.1 km long causeway. All of the rail improvements will be constructed within BC Rail's property on the Roberts Bank causeway and within their existing right-of-way and will be constructed by BC Rail. The rail extensions at the Gulf siding will require closure of the road-rail grade crossing at 57B Street. No changes are required at the 41B Street grade crossing and this will remain open to vehicular traffic.

No new road infrastructure along the causeway or on Deltaport Way will be required to support the Deltaport Third Berth Project.

1.3 Background

The VPA has prepared a container terminal expansion strategy to enable the Port of Vancouver to maintain its competitive position as a North American gateway for container trade. VPA reports that Trans-Pacific container shipments are increasing due to the growth in global trade, particularly with China, and the ongoing containerization of products. As a result, major ports on the West Coast of North America, such as the Ports of Seattle and Tacoma, expect their container traffic to triple in the next twenty years and are making major investments in terminal facilities. VPA proposes to expand its container terminal facilities in order for the port to continue serving Canada's trade. The VPA has considered a number of alternatives to Deltaport, including increasing capacity at existing terminals within Burrard Inlet as well as further expansion at Roberts Bank. The addition of Deltaport Third Berth will increase the capacity at Deltaport from 900,000 TEUs to 1,300,000 TEUs per annum (an increase of 400,000 TEUs).

1.4 Project Schedule

The Deltaport Third Berth Project development schedule proposed by VPA is presented below.

Environmental and Engineering Studies	Summer 2003 - Summer 2004
Submission of VPA's environmental assessment report (the "Application")	Fall 2004
Application Review	Winter 2004 - Summer 2005
Start of Construction	Spring 2006
Construction Completion/Third Berth Operational	Summer 2008

1.5 Environmental Assessment Schedule and Opportunities for Public Participation

DFO, on behalf of all RAs, expects to submit a report and recommendation to the Minister of the Environment in the Fall of 2004 on whether the environmental assessment continues by means of a comprehensive study or be referred to a mediator or a review panel. The public has the opportunity to provide comments in relation to the proposed environmental assessment process.

Comprehensive Study Process Schedule

If the assessment continues by means of the comprehensive study process, coordinated with the provincial environmental assessment process, VPA proposes to submit its environmental assessment report (the "Application") in the Fall of 2004. The Application will be made available for review by government agencies, First Nations and the public. The review would include up to a 75 day public comment period on the Application, a series of public open houses and other public consultation measures as may be required. It is estimated that the open houses and public comment period would occur in late 2004/early 2005.

Following the review of the Application, RAs will prepare a comprehensive study report on the findings of the environmental assessment and will submit it to the CEA Agency. The CEA Agency will ensure that the comprehensive study report will be made available for public comment. At this time, it is estimated that the public comment period on the comprehensive study report would occur in the summer of 2005. After the public comment period, the comprehensive study report would be provided to the Minister of the Environment, along with any comments submitted in relation to the report. The Minister would then consider the comprehensive study report, and any comments on that report, and issue a decision statement in relation to the project.

The Province would also prepare a report on the findings of the assessment, which would be provided to provincial ministers for decision. While federal and provincial agencies would work to coordinate the assessment process and the timing of decisions to the extent practicable, both levels of government retain separate decision-making authority.

Panel Review Schedule (if applicable)

If the Minister of the Environment determines that a review panel will be established to undertake the environmental assessment, the schedule described above would not apply. The schedule would be developed after the Minister had appointed the panel members and fixed the terms of reference for the panel.

2.0 SCOPE

2.1 Scope of the Project

The scope of the project for the purpose of the environmental assessment refers to those components of the proposed project that require a Regulatory decision by an RA and those components which require an environmental assessment by the VPA. DFO and Environment Canada as the RAs, will make project-related decisions on matters within their own legislative authority, while the VPA makes a decision, pursuant to the Canada Port Authority Environmental Assessment Regulations, on the entire Development Project. The scope of the project includes the physical works related to the construction, operation, modification and decommissioning or abandonment of the proposed components of the project and related undertakings.

The proposed scope of the project for the environmental assessment of Deltaport Third Berth will be the following components.

Principal components:

- Construction of a fill area of approximately 20 hectares (50 acres) of land for an expanded container storage yard (dredge and fill) (Likely requires a regulatory decision under the *Fisheries Act*).
- Construction of a wharf to accommodate a third berth (Likely requires a regulatory decision under the *Fisheries Act*).

- Expansion of the existing ship channel to the north (part of the dredge works) (Likely requires a regulatory decision under the *Fisheries Act*).

Ancillary components:

- Creation of a tug moorage area adjacent to north side of the third berth (Likely requires a regulatory decision under the *Fisheries Act*).
- Relocation of a safety boat launch (currently located on the north side of Deltaport) (Likely requires a regulatory decision under the *Fisheries Act*).
- Addition of approximately 7,000 meters (23,000 feet) of rail track, which includes:
 - the extension of the Gulf siding arrival/departure tracks from east of Arthur Drive to 64th Street, Delta (within BC Rail's right-of-way)
 - additional support track on the causeway, within BC Rail's property.

The operation of the Deltaport Third Berth facility includes:

- Increase in associated marine traffic (container vessels and tugs).
- Increase in terminal loading and unloading equipment (ship-to-shore gantry cranes, rubber tire gantries, rail mounted gantries, tractor trailers).
- Increase in associated road and rail traffic.

2.2 Scope of Assessment

The scope of assessment defines both the proposed factors that are considered in the environmental assessment and the proposed scope of those factors to be assessed.

2.2.1 Factors to be Considered

The factors proposed to be considered in the environmental assessment, pursuant to Section 16 of CEAA, will be:

- the environmental effects of the project, including the environmental effects of malfunctions or accidents that may occur in connection with the project and any cumulative environmental effects that are likely to result from the project in combination with other projects or activities that have been or will be carried out;
- the environmental effects of the project, including any change that the project may cause to listed wildlife species, its critical habitat, or the residences of individuals of that species, as those terms are defined in subsection 2(1) of the *Species at Risk Act* (SARA), (species also include those identified by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) (e.g., status as endangered, threatened, etc));
- the significance of the environmental effects referred to above;
- comments from the public ;
- measures that are technically and economically feasible and that would mitigate any significant adverse environmental effects of the project;
- the purpose of the project;
- alternatives to the project;
- alternative means of carrying out the project that are technically and economically feasible and the environmental effects of any such alternative means;
- the need for, and the requirements of, any follow-up program in respect of the project;
- the capacity of renewable resources that are likely to be significantly affected by the project to meet the needs of the present and those of the future; and,
- the effects on the environment that may impact social, economic, heritage and health effects of the projects.

2.2.2 Scope of Factors to be Considered

- The following provides details on the proposed scope of the factors to be considered by the RAs and the VPA in the environmental assessment.

Coastal Geomorphology

A coastal geomorphology study will be completed to determine how the ocean waves, river and tidal currents (coastal processes) might impact the proposed Development Project at Roberts Bank. The study will consider the effects of coastal process on Roberts Bank, both with and without the project in place. Modeling of the geomorphological process will be completed to predict what the environmental effects might be, and to determine appropriate mitigation measures.

Geology / Seismic

A geology and seismic overview study will be completed in order to better understand the conditions in the project area. The study will show how the geology and seismic conditions may impact the proposed project or influence its location. The results of the study will be factored into the engineering design and construction of the Development Project.

Sediment Quality

A sediment quality assessment will be carried out to determine the baseline sediment quality in the area of the proposed development which will help determine dredging requirements and dredge disposal options, including ocean disposal. The sediment quality assessment will consider the environmental impacts of disturbing, moving and disposing of sediments in the Roberts Bank area and determine appropriate mitigation measures.

Water Quality

Baseline water quality will be collected to characterize the pre-project water quality conditions, such that post-project impacts on these conditions can be predicted, mitigated and monitored. The results of the water quality study will compare existing water quality in the study area to established water quality criteria and the data used to determine monitoring plans.

Marine Environment

A marine environmental assessment will be completed in order to assess the environmental effects of the Project on the marine environment, specifically for the following marine components:

- Fish and fish habitat;
- Intertidal habitat and epibenthic macro-invertebrates;
- Eelgrass;
- Intertidal ecology; and,
- Marine mammals.

Waterfowl and Coastal Seabird

A waterfowl, coastal seabird and shorebird assessment will be conducted to determine baseline bird use in the project area and potential project impacts. The assessment involves year long bi-weekly bird surveys at Roberts Bank.

The waterfowl, coastal seabird and shorebird assessment will also include an overhead powerline bird impact assessment, even though no powerline upgrades are required for the Development Project. The goal of the proposed study is to test the efficacy of the vibration dampers installed in 1997/1998 on the causeway powerlines to reduce collisions by birds.

Terrestrial Wildlife

The terrestrial wildlife assessment will assess the environmental effects of the Development Project on the terrestrial wildlife environment, specifically for the following terrestrial components:

- Terrestrial mammals (including the Pacific Water Shrew);
- Amphibians;
- Reptiles;
- Aquatic Invertebrates;
- Birds (including raptors, waterfowl, herons, songbirds);
- Insects (including dragonflies and butterflies);
- Vegetation;
- Species at Risk (red and blue listed species (CDC), and species identified under SARA, and COSEWIC listed species);
- Species identified by First Nations; and,
- Related wildlife resources.

Air Quality

An air quality assessment will be conducted in order to determine baseline air quality conditions, and to predict air quality impacts associated with the construction and operational phases of the Project. Based on this assessment, appropriate mitigation measures can be developed. The impact assessment will focus on health risks to people living in communities in closest proximity to the Roberts Bank facility, as well as addressing environmental receptors.

Noise

A noise study will include assessing existing acoustic conditions in the vicinity of the proposed Project, determining sensitive receptors within an appropriate study area, predicting noise impacts associated with both the construction and operational phases of the Development Project and determining appropriate mitigation measures. The noise study will also look at low frequency sound waves and measure the vibration response of window glass due to impact noise from trains, specifically on the Tsawwassen First Nation reserve land.

Socio-Economic

The socio-economic study will focus on key base socio-economic conditions that could be potentially impacted by the construction and operation of the Development Project, such as:

Socio-Community: Population and demographics; land use; resource use (including agricultural community); health services (clinics, ambulance, hospital); emergency services (police and fire); social services; schools; traffic (commuter and residential use); recreation; and, visual and noise characteristics.

Economic: Employment/job generation; wages and salaries paid; goods and services purchased; taxes paid; economic development; labour force; local businesses; personal income characteristics; and, housing.

Appropriate mitigation measures will be identified as part of the study.

Visual Landscape

A visual landscape impact assessment will be conducted and will include project impacts on views, shading, and aesthetics. Appropriate mitigation measures will be identified as part of the study.

Lighting

A lighting impact assessment will be conducted and will include project impacts on day time light (glare); spill-over light (light trespass); night time glare from point light sources; and, sky-glow. Appropriate mitigation measures will be identified as part of the study.

Archaeological and Heritage Resources

An archaeological and heritage resources study will consist of an overview assessment (which identifies and assesses archaeological resource potential or sensitivity within the proposed study area) and an impact assessment (according to the BC Archaeological Impact Assessment Guidelines). First Nations input will be included in the assessment of cultural significance of any identified archaeological resources. Study results will be provided in the Application subject to any confidentiality agreements with relevant First Nations.

Traffic and Transportation

Traffic and transportation studies (road, rail and marine) will be conducted and will include an assessment of potential effects on marine traffic and navigability.

Malfunctions and Accidents

- The possible malfunctions or accidents associated with the project and the potential adverse environmental effects of these events
- Contingency measures for responding to emergencies.

Any change to the project that may be caused by the environment

The environmental factors that may affect the project and the predicted effects of those environmental factors. The following are examples of issues that would be addressed:

- seismic activity;
- climate change;
- erosion; and,
- flooding (*i.e.*, tsunamis).

Cumulative Environmental Effects

The cumulative environmental effects that are likely to result from the project in combination with other projects or activities that have been or will be carried out will be identified and assessed. The approach and methodologies used to identify and assess cumulative effects will be explained.

Other projects and activities that will be considered are:

- The past development of the Roberts Bank port facility;
- The past development of the Tsawwassen Ferry Terminal;
- The proposed future development of Container Terminal 2 at Roberts Bank; and,
- Other proposed future projects in the study area.

The Container Terminal 2 project is proposed as part of the Roberts Bank Container Expansion Project and would involve creating a new three berth container terminal, approximately 81 hectares (200 acres) in size adjacent to the existing Roberts Bank Port facilities.

Sustainability of the Resource

The environmental assessment will consider the renewable resources that may be significantly affected by the project and whether their sustainable use will be affected.

Spatial and Temporal Boundaries

The spatial boundaries vary with each study factor (*e.g.*, marine environment, wildlife, noise). The spatial boundaries for each study factor will be presented in the Application. A broad study area for the Deltaport Third Berth Project includes land and water:

- Between the mouth of South Arm of the Fraser River and Point Roberts (approximately 8 km south of Tsawwassen Ferry Terminal); and,
- Between 64th Street in Delta and 3 kms seaward from the Roberts Bank Port facility.

The temporal boundaries of the project include a short-term construction phase of approximately 3 years and a long-term operation phase (100+ years). Decommissioning and abandonment will not be addressed in the Application as the Deltaport Third Berth Project facility is intended to be a permanent structure.

Need for a Follow-up Program

The purpose of a follow-up program is to verify the accuracy of impact predictions and determine the effectiveness of mitigation measures. The environmental assessment will determine what follow up program will be implemented and who (the responsible authorities or the VPA) will be responsible for implementing them.

3.0 PUBLIC PARTICIPATION

The public is invited to provide its views in relation to the following matters:

- the proposed scope of the project, as set out in section 2.1;
- the factors proposed to be considered in the assessment and the proposed scope of those factors, as set out in section 2.2; and
- the ability of the comprehensive study to address issues relating to the project.

Should a comprehensive study be conducted for the project, the public will be provided with additional opportunities to participate and provide comment during the environmental assessment, as outlined in sections 1.1 and 1.5. Should the project be referred to a panel for review, the public would have the opportunity to participate in panel hearings.

Following the Minister of the Environment's decision on the type of environmental assessment that is to be conducted, funding will be available from the Canadian Environmental Assessment Agency for members of the public to participate in the environmental assessment.

References

Letter of Intent to Initiate Pre-Application Review, Deltaport Third Berth Project, Roberts Bank, Delta, British Columbia. Letter from D.J. Desjardin, VPA to Raymond L. Crook, Environmental Assessment Office, February 24, 2003.

Preliminary Project Description for the Roberts Bank Container Expansion Program – Deltaport Third Berth Project, Delta, British Columbia. Vancouver Port Authority, June 08, 2004.