

**Summary of the
Environmental Impact Statement
for the
FEDERAL PUBLIC COMMENT PERIOD
on the
Comprehensive Study pursuant to the
*Canadian Environmental Assessment Act***

**Canpotex Potash Export Terminal
and Ridley Island Road, Rail, and Utility Corridor
on Ridley Island,
Prince Rupert, British Columbia**

**Proposed by:
Canpotex Terminals Ltd.
and
Prince Rupert Port Authority**

**Prepared by:
Canadian Environmental Assessment Agency**

Canadian Environmental Assessment Registry Reference Number: 09-03-47632

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INTRODUCTION

The purpose of this Environmental Impact Statement (EIS) Summary is to enable the public to review and provide comments on the environmental effects analysis prepared by Canpotex Terminals Limited and the Prince Rupert Port Authority (the proponent) for the proposed Canpotex Potash Export Terminal and Ridley Island Road, Rail and Utility Corridor Project (the Project) under the *Canadian Environmental Assessment Act* (the Act). It provides a summary of the Project, public participation, and the results to date of the environmental effects assessment carried out by the proponent.

This document and Table 1 summarize:

- the project,
- the components of the environment that may be affected by the Project,
- the nature of that interaction and the proposed mitigation measures,
- the residual environmental effects after taking the mitigation into account, and
- the results of consultation undertaken to date

The primary interest of the Canadian Environmental Assessment Agency (the Agency) is input on whether the environmental assessment (EA) process has addressed the important environmental issues and identified appropriate mitigation measures to avoid or reduce the environmental effects of the project.

Comments received on the proponent's analysis of the environmental effects of the Project as provided by the proponent will be considered by the Agency when preparing a Comprehensive Study Report (CSR). The CSR will describe the project, its potential environmental effects, measures proposed to prevent or mitigate those effects, and document the Agency's conclusions on the significance of any residual environmental effects after taking into account the proposed mitigation. The CSR will also be made available for public comment and then, along with any comments received, will be considered by the Minister of the Environment in reaching an EA decision.

Project Overview

Canpotex Terminals Limited (Canpotex) and the Prince Rupert Port Authority (PRPA) are each proposing to undertake projects on Ridley Island in the Port of Prince Rupert, British Columbia (Port) (figure 1). Canpotex is proposing to construct and operate a potash export terminal (the Canpotex Potash Export Terminal) and the PRPA is proposing to construct enabling transportation and utilities (the Ridley Island Road, Rail and Utility Corridor). The Canpotex Potash Export Terminal will have the capacity to export up to 11.5 million tonnes of potash annually. The Ridley Island Road, Rail and Utility Corridor (RRUC) will service the Canpotex

facility as well as other future developments on Ridley Island. A single Environmental Impact Statement (EIS) has been completed for the Canpotex Potash Export Terminal and the Ridley Island Road, Rail and Utility Corridor (referred to jointly as “the Project”) because the two projects are interdependent.

Figure 1 – Regional Setting for the Project (Source: Project Description – June 21, 2011)



Potash is a stable, non-toxic, non-flammable, non-hazardous mineral compound that consists primarily of potassium chloride (KCl). The potassium in potash is a major constituent of fertilizer and is also used in minimal amounts in sports drinks and a number of industrial processes. Recent increases in global food demand have resulted in an increased demand for fertilizer, and therefore potash. It is expected that this demand will continue to increase as pressures on global food supply increase. To meet this demand the proposed export terminal is being designed to export up to 11.5 million tonnes of potash annually. This will include approximately 500,000 tonnes of white potash and the remainder will be red potash.

Federal Environmental Assessment Requirements

An EA is required under the *Canadian Environmental Assessment Act* before federal authorities may make certain decisions which would enable the project to be carried out. An EA is required for the project because:

- Fisheries and Oceans Canada may issue an authorization under section 35(2) of the *Fisheries Act* for the harmful alteration, disruption or destruction of fish habitat;
- Transport Canada may issue an approval pursuant to section 5(2) of the *Navigable Waters Protection Act*, and
- Environment Canada may issue a permit pursuant to section 127(1) of the *Canadian Environmental Protection Act*.

The EA will be conducted as a comprehensive study because the design capacity for the terminal is to accept vessels that exceed the *Comprehensive Study List Regulations* threshold of 25,000 DWT. As the Project is located on Port property and a Canadian Port Authority is the proponent, completion of an assessment under the *Canada Port Authority Environmental Assessment Regulations* (CPAEAR) is also required.

Federal Environmental Assessment Responsibilities

Minister of the Environment

The Minister of the Environment is required to issue an EA Decision Statement which considers the Comprehensive Study Report (CSR) and public comments received.

The EA Decision Statement includes:

- the Minister's opinion as to whether, taking into account the implementation of any mitigation measures the Minister considers appropriate, the project is, or is not, likely to cause significant adverse environmental effects, and
- any mitigation measures or follow-up program that the Minister considers appropriate.

Canadian Environmental Assessment Agency

Pursuant to amendments to the Act that came into force in July 2010, the Agency is responsible for conducting the comprehensive study for the Project until the CSR is submitted to the Minister of the Environment.

Federal Authorities

In addition to providing input relevant to their respective potential regulatory approvals, Fisheries and Oceans Canada, Environment Canada and Transport Canada are providing expert advice to the Agency in carrying out the comprehensive study. Health Canada is also providing expert advice to the Agency on the comprehensive study.

Scope of the Project

On November 22, 2011 the Agency issued the EIS Guidelines that established the scope of the project, scope of the assessment, and consultation requirements. For the purposes of the EIS the Canpotex Potash Export Terminal is defined as including:

- An approximately 739 meter long marine causeway, access trestle, and berth and all weather ship loading facility capable of receiving vessels of up to 180,000 DWT
- A 180,000 tonne potash storage building with associated conveyor and dust collection systems
- An automated railcar unloading and covered conveyor system
- A settlement pond for storm water and wash down water
- Administrative, personnel, maintenance, and storage buildings
- Site services including water supply, natural gas and sewage

The Ridley Island road, rail and utility corridor will include the following components:

- An approximately 7 – 8 kilometer long rail loop, consisting of a rail bed for up to 14 inbound and 11 outbound tracks
- Three inbound tracks and two outbound tracks will be laid exclusively for the Canpotex Terminal
- An approximately 3 – 4 kilometer long 69 volt transmission powerline connecting the Canpotex Terminal to the BC Hydro power transmission system
- An inner paved access road loop with a rail overpass and underpass

Public Participation

Public participation in the EA process is being coordinated by the Agency. A public comment period on the Project and the conduct of the EA was completed in September, 2011. The document used for the public comment period can be found at: www.ceaa.gc.ca/050/documents-eng.cfm?evaluation=47632.

Comments from the public are also being sought on this Environmental Impact Statement Summary document.

Aboriginal Consultation

Canpotex and the PRPA have undertaken a number of consultation activities to inform First Nations, the public, stakeholders and government regulatory agencies about the Project, and to seek input during Project planning. Prior to posting the Notice of Commencement which initiated the federal EA process, Canpotex carried out a number of early engagement activities with potentially interested First Nations (Metlakatla, Lax Kw'alaams, Gitxaala, Kitselas and Kitsumkalum) and other stakeholders in the region. On April 8, 2009 a preliminary Project Description was sent to First Nations along with an offering to come to the communities to discuss the Project. Meetings with the interested First Nations have been ongoing since this time and Canpotex and the PRPA have provided capacity-funding to support their participation in consultation activities and the Project review process.

On August 29, 2011 the Proponent submitted draft EIS Guidelines to the Agency for distribution to the working group and interested First Nations. A summary of issues that were raised during the review of the EIS Guidelines is provided in Table ES-1.

Table ES-1: Summary of Issues from Initial First Nations Engagement

Primary Issue	How the Issue is Addressed in the EIS
The scope of the Project should include marine vessel operation and navigation out to the pilotage station at Triple Islands.	Scope of assessment has been increased out to Triple Islands for the assessment of vessel activity and accidents and malfunctions.
The transportation of dredged materials as well as the effects of disposing those materials should be addressed in the assessment.	A separate report assessing the effects of disposal of dredge material at proposed disposal sites has been completed and summarized in the EIS.
Metlakatla and other potential vessel users in Prince Rupert (i.e., tourism operators) should be consulted with regarding their use of waters in the Prince Rupert Area.	Interviews were conducted as part of the Navigation assessment. Traditional Use Studies that include discussions on water use have been requested from First Nations.
Vibration should be included as a VEC.	EIS expanded to include vibration under the heading "Noise and Vibration".
The scope of the project should include traffic along the rail corridor to Lorne Creek.	The scope of assessment has been increased to include the assessment of air, noise and vibration, and ungulate strikes along the rail line to Lorne Creek.
The list of projects to be included in the Cumulative Effects Assessment should include the Port Land Use Plan.	The cumulative effects Project Inclusion List has been expanded to include land use developments as outlined in the Port Land Use Plan.
The Navigation Assessment should include 'interference with existing use' as a measureable	"Interference with Existing Use" has been added as a measureable parameter.

parameter.	
Disposal at sea sites other than Brown Passage should be considered.	Two new disposal at sea sites are being proposed. A full effects assessment has been completed for these sites.
Include the effects of the causeway on water movement in the channel.	The aquatics section includes findings from a modeling exercise on changes in water and sediment deposition as a result of construction of the causeway.
Consider maintaining access to the beach on the southeast corner of Ridley Island.	On land access to the beach via the road on Ridley Island cannot be provided due to Port protocol and public safety. This is discussed in the EIS.
Potential for increases in marine traffic accidents as a result of new projects should be assessed.	This issue is included in the accidents and malfunctions section.

Mitigation Measures

The Proponent has evaluated opportunities to reduce or eliminate potential environmental effects of the Project into the overall planning and design. Key site selection considerations, engineering design features, and operational procedures that have been incorporated into the design and planning process to reduce or eliminate potential adverse environmental effects including:

- selecting the site to avoid any unnecessary new roads, rail lines or infrastructure,
- reduced the length of the causeway by 216 m thus reducing the marine footprint;
- avoiding streams, ponds or open water within the terminal or road, rail and utility corridor footprint, therefore no freshwater fish or waterfowl are affected;
- proposing the location of at-sea disposal sites located within PRPA boundaries as opposed to at Brown Passage to reduce the travel time and associated emissions for disposal of dredged material; and,
- limiting traffic between Prince Rupert and Ridley Island through use of buses, crew cab trucks and other group transportation options when practical. This will primarily apply to travel requirements for shift changes.

Additional consultation with Aboriginal groups will be coordinated by the Agency during the completion of the remainder of the comprehensive study and upon release of the CSR.

Summary of Environmental Effects

The EIS Guidelines directed the proponents to consider potential Project-related environmental effects on the following Valued Environmental Components (VECs):

- Air Quality
- Noise and Vibration
- Ambient Light
- Vegetation Resources
- Wildlife and Wildlife Habitat

- Aquatic Environment
- Human Health
- Archaeological and Heritage Resources
- First Nations Current Use
- Navigable Waters.

The environmental effects analyses undertaken by the proponent are based on existing data, field studies conducted between 2009 and 2011, and emissions modeling. The assessment also considers the potential effects of accidents and malfunctions that may occur during construction or operation of the Project including: spills; derailments; vessel collisions or groundings; marine mammal vessel strikes; and train collisions with an ungulate.

Air Quality

Project air emissions of criteria air contaminants (CAC); sulphur dioxide (SO₂), nitrogen dioxide (NO₂), carbon monoxide (CO), inhalable particulate matter (PM₁₀), inhalable particulate matter (PM_{2.5}) have been assessed. Predicted dispersion concentrations were made using the a US EPA modelling system and results compared with the relevant Canada ambient air quality objectives. The results were also compared with the British Columbia ambient air quality objectives. The dispersion modelling considered four distinct scenarios: the Baseline Case which assessed emissions from the existing facilities; the Project Case that included emissions from the Project alone; the Application Case that included the emissions of the Baseline Case plus emissions of the Project; and the Cumulative Effects Case, which is the Application Case plus emissions from foreseeable future projects and activities in the area. The assessment results indicated that the CAC concentrations for all cases are below the most stringent Canada ambient air quality objectives. The most stringent British Columbia air quality objectives for 24-hour averaged PM10 and annual averaged PM_{2.5} may be exceeded by 49% and 19% respectively, but only for a very small area over the water to the northwest of the wharf. There were no exceedances of any relevant regulatory objectives at any of identified sensitive receptor locations. As the effects of all criteria air contaminants are within the Canada and British Columbia objectives for all averaging periods or the British Columbia objectives exceedances are over areas of no concern, the potential effects of the Project on air quality are not significant.

Project air emissions of greenhouse gases (GHG) were also assessed and compared with the Canada and British Columbia year 2020 projected totals. GHG emissions from Operations are very small in comparison with the year 2020 projected Canada (about 0.004%) and British Columbia (about 0.05%) GHG emission totals. The Proponent concludes that the potential effects of the Project on climate change are expected to be not significant.

Noise and Vibration

The Canpotex facility is physically separated from the nearest affected residences in Port Edward by distance, the topography of Ridley Island, and the water body separating Ridley

Island from the mainland. The impact of the facility in the construction phase and the operation phase is based on providing the sound metrics advocated by Health Canada for use in EAs. The noise in the construction of the port facilities and the storage facilities will be attenuated by the distance and topography, and sound levels can be adequately controlled in Port Edward despite the need for nighttime construction at the port facility and the storage area. The rail corridor is closer to the village, but construction will be confined to daytime activity. During operations, the distance provides adequate attenuation of the sound from the activities on Ridley Island and the marine terminal. The increased rail traffic that passes through Port Edward and inland is closer to the potentially affected receptors, but remains within the respective criterion of Health Canada. The village of Port Edward is situated on a rail line that is being expanded by growth of the freight and materials shipment through Ridley Terminals and Fairview Terminal. The incremental change of noise by adding the traffic of Canpotex to that of the existing Fairview and Ridley Terminals traffic is less than the respective threshold specified by Health Canada. As a result, effects of the project on noise are expected to be not significant.

Vibration along the route will not change substantially due to the Canpotex operations although train passages will be more frequent and within acceptable limits. The Proponent concludes that effects of the Project in terms of vibration are not expected to be significant.

Ambient Light

Light pollution effects were assessed by considering the visibility during the construction and operational phases. During construction, control over lighting by contractors can be limited, but the topography of Ridley Island will shield Port Edward from most of the temporary lighting that may be used in the construction phase. The lighting for the operational phase has been designed to reduce light pollution. The lighting at the terminal will likely not be visible from Port Edward, and has also been designed with full horizontal cutoff fixtures so that the sky glow due to the project will be substantially reduced than would be the case with older style light fixtures. Tree cover will be retained wherever possible particularly on the highest ground of Ridley Island. This will further reduce the impact of light on Port Edward. With mitigation measures in place, the Proponent concludes the effects of the project on ambient light are not expected to be significant.

Vegetation

During rare plant surveys two provincially listed rare vascular plants were found on Ridley Island, occurring outside of the Project footprint; however, no *Species at Risk Act* (SARA) listed plants were observed. There will be no direct loss of observed rare plants due to the Project.

A total of 69 hectares of wetland occur in the Project footprint and will be lost. These wetlands provide biogeochemical, climate, and habitat functions. Residual effects to wetland function are expected to be neutral as a Wetland Compensation Plan will be developed.

A total of 15.6 hectares of ecological communities of conservation concern occur in the Project footprint and will be lost. This includes one Red-listed wetland community, two Blue-listed wetland communities, and two Blue-listed upland communities. This loss represents 28% of ecological communities of conservation concern mapped on Ridley Island. Loss of wetland

communities of conservation concern will be mitigated through development of a Wetland Compensation Plan. Loss of upland communities of conservation concern is expected to be far below thresholds outlined by the Central and North Coast Order (CNCO) for the Kaien Landscape Unit.

A total of 36 hectares of old forest and 47 hectares of riparian area will be lost due to the Project. These losses are well within the recommendations by the CNCO for retention of old forest and riparian areas in the Kaien Landscape Unit.

Traditional use plants will be lost due to vegetation clearing for the Project; these species are very common on Ridley Island, as well as regionally and provincially. Where practical, traditional use plants will be incorporated into the Wetland Compensation Plan.

Based on the findings of this assessment and the commitment to develop a Wetland Compensation Plan, the Proponent concludes potential effects of the Project on vegetation resources are considered not significant.

Wildlife and Wildlife Habitat

The assessment considered the effects of the Project on SARA listed species, nesting migratory birds and marine birds. To assess effects on species-at-risk, marbled murrelet, northern goshawk and western toad were chosen as indicator species.

The assessment considered Project effects on habitat, animal movement patterns, and mortality. Table ES-2 lists the results of the habitat suitability models for these indicator species.

Table ES-2: Amount of Suitable Habitat on Ridley Island for Indicator Species

Species	Life Requisite and Season	Area of Suitable Habitat at Baseline (ha)	Percent of the LAA ¹ (%)
Marbled Murrelet	Breeding requirements in spring and summer	8.1	1.5%
Northern Goshawk	Breeding requirements in spring and summer	49.0	9.1%
Western Toad	Living requirements in all seasons	360.6	67.0%
	Breeding requirements during spring	24.0	4.5%
Total Mapped Area of Ridley Island		537.9	

NOTE:

¹ LAA- Local Assessment Area

The most common bird species are winter wren, Swainson’s thrush, Townsend’s warbler, and dark-eyed junco. Less common species include hermit thrush, northern flicker, Stellar’s jay, and yellow warbler. Barn swallow is the only listed-species (COSEWIC Threatened) recorded during breeding bird surveys. In addition to migratory bird nests there are two bald eagle nests on Ridley Island which will be avoided by construction activities.

The most abundant species recorded during the marine bird surveys were unidentified species of gulls, bald eagle, northwestern crow, mew gull, and marbled murrelet. Federally listed species-at-risk observed during marine bird surveys included marbled murrelet and great blue heron.

The number of individuals displaced by habitat alteration for most wildlife species on Ridley Island is very small and will not affect their species population. For western toad, habitat availability on Ridley Island will be reduced; however, it is very small compared to the habitat available along the North Coast of British Columbia and throughout their range in the province. Most importantly, the habitat compensation program will replace and protect terrestrial and breeding habitat for western toads, and will provide habitat for many other species of wildlife. Given the proposed wetland habitat compensation, the Project effect of change in habitat availability on wildlife is predicted to be not significant.

Overall, with mitigation measures in place, the risk of mortality for most wildlife is low. Consequently, the proponent considers the risk of mortality on wildlife as not significant.

With mitigation measures in place, the effect of alteration of movement on wildlife is anticipated to be not significant.

Aquatic Environment

The aquatic environment assessment considers effects of the Project on marine fish and fish habitat. Effects on freshwater fish and fish habitat are not considered, as previous studies conducted on Ridley Island indicate there is no suitable freshwater fish habitat within the Project footprint. Project activities associated with the construction and operation of the marine terminal and the road, rail and utility corridor may result in: loss or alteration of marine fish habitat; direct mortality or physical injury; sensory disturbance (related to underwater noise); and degradation of water and sediment quality. The *Fisheries Act* provides legal protection to fish and their habitats. Section 35 of the Act prohibits harmful alteration, disruption or destruction of fish habitat (HADD) without authorization, and Section 32 prohibits killing of fish without authorization. Where HADD is unavoidable, compensation measures must be undertaken to ensure that there is no net loss of productive capacity of fish habitats.

Project construction activities will result in the loss, alteration, and/or disruption of 265,550 m² of marine fish habitat. This includes 66,200 m² of intertidal substrate loss/alteration (infilling), 12,720 m² of subtidal substrate loss/alteration (infilling), 161,000 m² of subtidal substrate disruption (dredging), 25,350 m² of backshore vegetation loss (clearing), and small areas of kelp and eelgrass habitat (infilling). All species of fish, invertebrates and algae surveyed are common on the north coast of British Columbia; no rare or endangered species were observed. To ensure that there is not net loss of productive capacity of marine fish habitats, a detailed habitat compensation plan (HCP) is being developed in collaboration with Fisheries and Oceans Canada. This plan will include the creation of high-productivity habitats, including a subtidal reef and an eelgrass bed, as well as the restoration of intertidal and subtidal habitats.

Shoreline infilling and dredging activities will result in the direct mortality of some marine invertebrates. Mobile species such as fish and marine mammals are expected to move away from the construction area, and are not likely to be affected. Loud in-water construction activities such as blasting and pile driving may cause some fish and marine mammals to temporarily avoid the ensonified area; however, sound levels will not be of sufficient intensity to cause

physical harm. A blasting management plan will be developed to reduce underwater pressure levels and minimize potential effects on marine organisms. Where feasible, piles will be installed using a vibratory driver, which produces significantly less noise than the conventional impact hammer. If an impact hammer is required, bubble curtains will be employed to provide noise attenuation and reduce sound levels emitted in the marine environment.

Dredging of subtidal sediment and the disposal of this material at sea will result in localized increases in total suspended solid (TSS) levels. TSS monitoring will be conducted throughout project construction to ensure that levels do not exceed the established guidelines. Re-suspension of contaminants is not considered an issue, as sediment sampling within the dredge area revealed no exceedances of regional contaminant guidelines. All stormwater, wastewater and sewage associated with the terminal will be collected and treated prior to being discharged into the marine environment.

Marine fish habitats affected by the Project represent a small fraction of the available habitat in the Prince Rupert region. The creation of compensation habitats will ensure that the productive capacity of the marine environment is not diminished. Throughout all phases of the Project, best management practices will be employed to reduce or eliminate adverse effects on marine fish and fish habitat. With the proposed mitigation, the Proponent concludes the residual effects of the Project on the Aquatic Environment are predicted to be not significant.

Human Health

The human health assessment evaluated potential human health effects associated with project-related air emissions, ambient light and noise emissions, changes in local water and sediment quality, and potash exposure. Dredging and construction of marine facilities have the potential to mobilize contaminants into water and sediment which may be transferred up the food chain. Emissions from trains and vessels may adversely affect ambient air quality. Changes in ambient light and noise associated with Project activities may result in disturbances to local people

Accumulation of metals and polycyclic aromatic hydrocarbons (PAHs) in fish as a result of dredging is not anticipated, as suspension of sediments will be short-term and localized. Therefore, no adverse human health effects are anticipated as a result of fish consumption.

Predicted maximum ground level concentrations of criteria air contaminants (SO₂, NO₂, CO, PM₁₀, and PM_{2.5}) are below regulatory air quality objectives; therefore, air emissions will not pose a risk to humans near the site.

Modeling of predicted light levels during operations indicates no effects to most local residents. During construction of the plant and marine terminal, use of mobile equipment will not be visible to local residents, other than somewhat greater skyglow. Implementation of mitigation measures will reduce potential increases in ambient light. Predictive noise modeling indicates no exceedance of Health Canada guidance, and therefore, no noise-related human health effects.

Potash (potassium salt) is nontoxic at concentrations that would be encountered near the site and does not pose a risk to local residents. On-site dust control measures and personal

protective equipment will minimize exposure of workers, preventing potential health effects such as eye or skin irritation.

The assessment concluded that use of appropriate mitigation practices during construction and operations will ensure that regulatory objectives are met and protect the quality of life and the health of local residents. The Proponent concludes the project-related effects on human health are predicted to be not significant.

Archaeological and Heritage Resources

Seventeen heritage sites, including 18 culturally modified tree (CMT) sites, are recorded on Ridley Island. However, a 2011 archaeological impact assessment conducted on the Canpotex Terminal footprint, including offshore components on and east of Coast Island, did not identify any intertidal, terrestrial or CMT sites within the terminal footprint (i.e., low archaeological potential). Previous studies on Ridley Island have concluded that portions of seven CMT sites are located within the Project's road, rail and utility corridor component and could be affected by project development.

In the very unlikely event that unrecorded terrestrial or intertidal sites are encountered during development, every effort will be made to avoid them. Where avoidance is not possible, effects on these sites will be mitigated through a program of detailed data collection, including systematic data recovery. Where CMTs cannot be avoided by development, effects on them will be mitigated through a complete systematic recording and dating program. Therefore, as none of the information regarding traditional aboriginal, terrestrial and intertidal use within the Project footprint will be lost, the Proponent concludes the effects on Archaeological and Heritage Resources are considered to be not significant.

First Nations Current Uses

The Project will occur on Port lands within the claimed traditional territories of Tsimshian Nations. Five Tsimshian First Nation communities claim Aboriginal Rights and/or interests in the Prince Rupert Harbour area and/or up to Kitaelas Canyon: Metlakatla First Nation, Lax Kw'alaams First Nation, Gitxaala Nation, Kitselas Indian Band, and Kitsumkalum Band.

Vegetative resources (e.g., bark, berries) will be affected and will either be removed or inaccessible in the immediate Project area. Marine resources (e.g., fish, shellfish) in the intertidal and subtidal environments directly associated with the Project will also be affected or inaccessible. This includes resources affected during dredging and disposal activities. However, the general availability of First Nations traditional resources in the areas adjacent to the Project footprint are not expected to diminish and alternative locations to carry out traditional activities exist nearby. It is expected that members of nearby First Nations communities will be able to continue their traditional resource use activities; however, the locations of these activities will now be restricted to areas that are outside of the Project footprint.

Navigable Waters

The navigable waters assessment considered the Project's ability to comply with the *Navigable Waters Protection Act* (NWPA), which protects the public's right to navigate, and regulates construction of works that may infringe on this right. The assessment considered the effects of the Project on all navigable waters between the Project site and the pilot station at Triple Islands.

Multiple navigation systems and controls will be in place to guide Project-related vessel movements during terminal construction and operation. Based on the assessment, the proponent concludes the potential effects on vessel traffic will be low and not significant.

Effects of the Environment on the Project

The types of environmental factors that have potential to affect the Project include slope instability, extreme weather, seismic activity and tsunamis, and climate change and sea level rise. There are no hills within the project area that could lead to a landslide. Due to the exposure of Ridley Island to wave action from Chatham Sound there is the possibility that extreme weather resulting in high winds and waves, dense sea foam and poor visibility could result in temporary closure of the terminal. However, the potential for extreme weather to affect operations is considered low due to the low probability of an extreme weather event and the design criteria followed during project development.

The Project is located in an area of high seismic activity. An earthquake of significant magnitude could lead to permanent lateral ground movement and alter the berth and trestle foundation, potentially leading to settlement and/or damage to the structure. To minimize the potential for these effects, the structure was designed to accommodate the seismic movement in a 1 in 475 year seismic event. Should an earthquake result in a tsunami, the Project is designed to withstand significant waves in 50 year return periods. As a result of project design measures, the Proponent concludes that seismic activity is not expected to have a significant impact on the Project.

Increasing concentrations of greenhouse gases in the atmosphere are believed to be causing global climate change. Increased temperature may contribute to a sea level rise. The Project has been designed to meet extreme weather criteria identified in the National Building Code (2005). In addition, a conservative sea level rise of 1.0 meter has been incorporated into the design.

Based on a consideration of the various mitigative strategies applied throughout design criteria and the EMP, the Proponent concludes that significant adverse effects of the environment on the Project are not likely.

Accidents and Malfunctions

Potential accidents and malfunctions that were considered in the EIS are:

- Train derailment along the Skeena River (upstream of the eulachon spawning reach)
- Fuel spill at the terminal refuelling station
- Potash spill to the marine environment
- Marine vessel collision with another vessel or grounding
- Marine vessel collision with a marine mammal
- Train collision with an ungulate.

A train derailment along the Skeena River has the potential to result in the release of toxic and non-toxic substances into the Skeena River potentially affecting Aquatic Resources, Current Traditional Use and/or Human Health. Depending on the timing and location of the release there is the potential to affect juvenile salmon and/or eulachon and their habitat. However, given the mitigation in place and the Emergency Response Plans the effects of a spill would likely be localized though it may result in temporary disturbance to some freshwater species and habitat during clean up. Such a disturbance is expected to be short term, localized and reversible. Therefore the Proponent concludes that the potential residual effects associated with a train derailment are expected to be not significant. A fuel spill at the terminal is not expected to pose a major risk to the environment as it would occur in a disturbed area where there are no watercourses and all on-site drainage would be collected in an on-site retention pond. As a result, an on-site spill is only expected to affect surface soil.

The release of potash into the marine environment as a result of equipment malfunction or operator error could cause localized increase in salinity in the marine environment, which has the potential to affect marine species intolerant to salinity changes. Marine waters surrounding the terminal exhibit dynamic fluctuations in salinity (as a result of seasonal inputs of freshwater from the Skeena River) and any localized increases in salinity would dissipate rapidly. Species living in environments with dynamic salinity fluctuations have adapted to those conditions and are generally tolerant of changes. If the spill accumulated on intertidal habitat it could result in death of organisms that have low salt tolerance levels. However, because potash is non-toxic, only those organisms directly exposed to it would be affected. The accidental input of potash to the marine environment may have temporary, localized effects on marine biota. However, as potash dissolves rapidly in water and is non-toxic, these effects are expected to be minimal.

Marine vessel collisions and groundings could result in the puncturing of a vessel's fuel tank. In a worst case scenario, this could result in the release of 4,000 m³ of heavy fuel oil. Given recent records the likelihood of such incidents occurring is considered very low. For the period of 1998 to 2008, there were six reported incidents involving marine vessels in the Prince Rupert area. Of the six reported incidents, three involved bulk cargo vessels. In two cases, the vessel sustained considerable to extensive damage as a result of grounding, but in neither case were fuel tanks punctured. The last recorded incident involving a bulk carrier in the Prince Rupert area occurred in 2001, again with no fuel loss. Considering the number of vessels that call on

the Port of Prince Rupert every year (increasing from 215 to 380 between 2006 and 2010) the incidence of vessel collisions and groundings is extremely low.

Vessels strikes with marine mammals can result in injury or death of those mammals. Within the assessment area, bulk carrier vessels may encounter several species of large baleen whales, including humpback whales. The probability that a bulk carrier vessel will strike a humpback whale is extremely low. In an extensive worldwide review of vessel collisions with whales only 44 cases of humpback whales being struck by vessels were identified. The maximum speed limit (14 knots) that will be observed by bulk carriers calling on the Canpotex Terminal will reduce the likelihood of a collision with a humpback whale. Current research suggests that the probability and severity of a vessel strike is positively correlated with a vessel's speed. With the proposed mitigation measure to reduce vessel speed, it is considered highly unlikely that a bulk carrier calling on the Canpotex Terminal will strike a marine mammal.

Train collisions with an ungulate could lead to injury and death. Such incidences are known to occur along the rail line between Ridley Island and Lorne Creek. Studies are underway to identify ways to reduce the likelihood of a strike including use of fencing, whistle calls and brush and snow management. The number of trains associated with the Canpotex Project is not expected to result in a significant effect on ungulate population numbers. The cumulative effect of collisions as a result of all projects in the area is a concern for the local population, but not regionally, because populations are relatively strong and can handle hunting pressures that result in the loss of up to 9% of the population annually. As a result, the Proponent considers the effects on the regional population as not significant.

Capacity of Renewable Resources

Renewable resources on Ridley Island and in Prince Rupert Harbour include vegetation, wildlife, and aquatic resources. An adverse effect on these resources could result in a reduced capacity to support sustainable forestry, fishing, hunting and trapping. However, after consideration of Project design and Project—specific mitigation and compensation measures, none of these thresholds or standards were exceeded. Therefore the Proponent has determined that for each of the renewable resources, the Project would not result in significant adverse residual effects. Due to the lack of residual effects, the Proponent predicts that the effects of the Project on the capacity of renewable resources are not significant.

Cumulative Environmental Effects

The Proponent conducted a screening of the cumulative environmental effects of the Project, in combination with the residual environmental effects from past, current, and likely future projects and activities, to determine if there is a risk of meaningful cumulative environmental effects. The cumulative effects assessment was conducted in two stages. The initial stage consisted of answering the following three questions for each of the VECs:

1. Is the Project predicted to have demonstrable residual environmental effects?

2. Are these effects likely to act in a cumulative fashion with the residual environmental effects of past, current, and likely future projects and activities?
3. Is there a reasonable expectation that the combined cumulative effects (from question 1 and 2) will result in significant adverse environmental effects?

A total of 20 past, current, and future projects and activities in the vicinity of the Port of Prince Rupert were included in the cumulative effects assessment.

All VEC's assessed for cumulative effects were determined to not result in significant environmental effects.

Follow-up Program and Monitoring

In accordance with the Act, the Follow-up Program is designed to verify the accuracy of EA predictions and determine the effectiveness of mitigation measures. It can also support the implementation of adaptive management strategies designed to respond to unanticipated environmental effects.

In addition to several VEC-specific monitoring programs, a qualified environmental monitor will oversee general construction activities and ensure compliance with environmental requirements. Habitat compensation monitoring will also be conducted to monitor effectiveness of compensation projects in the marine and freshwater environments. The proponents will undertake to adaptively manage adverse environmental effects identified through monitoring.

Monitoring and Follow-up commitments are outlined in the commitments column in the Environmental Effects Summary Table (Table 1).

Conclusion

The environmental effects of the Project, as summarized in this report, have been determined using assessment methods and analytical tools that reflect current best practices of environmental and socio-economic practitioners. It is the conclusion of the EIS that the Project can be constructed, operated and decommissioned without significant adverse effects, including consideration of cumulative effects and accidents and malfunctions.

Next Steps

Based on the information obtained during the review of the EIS and from comments received from the public, a CSR will be prepared. The purpose of the CSR is to provide a summary of the information and analysis that the Agency will consider in reaching its recommendation on whether the Project is likely to result in significant adverse environmental effects. The Minister of the Environment will consider this report and comments received from the public and Aboriginal groups when issuing the EA decision statement.

The Minister may request additional information or require that public concerns be addressed further before issuing the EA decision statement. Following the EA decision statement, the

Minister will refer the Project back to Environment Canada, Fisheries and Oceans Canada and Transport Canada to allow the appropriate course of action decision to be undertaken.

Comments

At this time, the Agency is seeking comments from the public on the EIS Summary (this document). Persons wishing to submit comments may do so in writing to the following address:

Canpotex Potash Export Terminal and Ridley
Island Road, Rail, and Utility Corridor Project,
Canadian Environmental Assessment Agency
410-701 West Georgia Street
Vancouver BC V7Y 1C6
Fax: 604-666-6990
Email: Canpotex@ceaa-acee.gc.ca

Comments must be received by the close of business day on **January 20, 2011**.

Please clearly reference the Canpotex Project and the Canadian Environmental Assessment Registry file number 09-03-47632 in your submission. Also note that all comments received are considered public and will become part of the public registry.

Table 1: Environmental Effects Summary Table

Section	Potential Effects	Proposed Mitigation	Potential Residual Effects	Potential Cumulative Effects	Standards and Guidelines	Public Comments and Responses	Aboriginal Comments and Responses Received to Date	Proposed Commitments
Air Quality	Change in CAC emissions	<ul style="list-style-type: none"> Equipment maintenance Low sulphur fuel Dust suppressants Scheduling Minimize disturbance Preserve vegetation Erosion control structures Cover trucks Site paving 	<ul style="list-style-type: none"> Construction: none Operations: none except for PM10 over the water, northwest of the berth. 	<ul style="list-style-type: none"> Modelling results indicate that the addition of publicly disclosed projects in the assessment area do not have a substantial effects on maximum predicted concentration of CACs. 	<ul style="list-style-type: none"> National Ambient Air Quality Objectives BC Ambient Air Quality Objectives Guidance for Air Quality Dispersion Modelling in British Columbia 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Comment 1: Scope should be increased out to Lorne Creek Response 1: Scope increased to Lorne Creek 	<ul style="list-style-type: none"> Use grid (rather than generator set) electrical power for equipment wherever feasible Use clean fuels in heavy duty diesel vehicles and/or equipment where practical Sweep paved routes adjoining unpaved traffic areas
	Change in GHG	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Effects of GHGs cannot be attributed to any specific project, and as such, the significance of their cumulative effect was not assessed. 	<ul style="list-style-type: none"> Incorporating Climate Change Considerations in Environmental Assessments: General Guidance for Practitioners (CEA Agency 2003) Third Assessment Report of Intergovernmental Panel on Climate Change (IPCC, 2001) 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Visual inspections to address potential dust emissions Use suppressants to reduce dust Implement Air Quality and Dust Control Plan Maintain construction equipment
Noise and Vibration	Change in noise level	<ul style="list-style-type: none"> Avoid night-time and weekend construction activities along the east side of Ridley Island where possible. Use welded track if practical. Maintain mufflers on internal combustion engines. Near sensitive receptors, reduce number of construction equipment in operation simultaneously. Proper maintenance of conveyors. 	<ul style="list-style-type: none"> Construction: in Port Edward sound pressure levels are unlikely to cause more than a brief annoyance during moments of particularly intensive activities. Operations: Closest residents will occasionally perceive the operational sounds, and will hear the train passages. 	<ul style="list-style-type: none"> Modelling results indicate that the addition of future projects in the assessment does not result in exceedances in Health Canada criteria for noise. Therefore cumulative effects of the Project on noise are expected to be not significant. 	<ul style="list-style-type: none"> Draft Guidance on Noise Assessment for CEAA Projects (Health Canada 2005) Useful Information for Environmental Assessment (Health Canada 2010) Prince Rupert Noise control Bylaw No. 2430 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Comment 2: Vibration should be included as a VEC Response 2: Vibration included as part of the Noise and Vibration section Comment 3: Scope should extend out to Lorne Creek. Response 3: Scope extended 	<ul style="list-style-type: none"> Blasting will be completed in accordance with Blast Management Plan Position stationary noise emission sources as far as is practical from sensitive receptors Maintain log of noise complaints and address if related to the Project Develop communication plan to advise residents of noise-causing construction Avoid construction during the night and weekend where practicable.
	Change in vibration	<ul style="list-style-type: none"> Vibration effects at nearby receptors have not been predicted, however the mitigation measures identified for noise will also reduce vibration effects. 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> ISO 2613: evaluation of Human Exposure to Whole-body Vibration, Part 2 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> None

Section	Potential Effects	Proposed Mitigation	Potential Residual Effects	Potential Cumulative Effects	Standards and Guidelines	Public Comments and Responses	Aboriginal Comments and Responses Received to Date	Proposed Commitments
Ambient Light	Change in ambient light quality	<ul style="list-style-type: none"> Use of "dark sky" shielded luminaires for outdoor lighting. Retain tree line directed to Port Edward where possible. Control outdoor light levels. Centralized lighting control systems. 	<ul style="list-style-type: none"> Some light from the Project will be observable from Port Edward 	<ul style="list-style-type: none"> The addition of light effects from publicly disclosed sites in the assessment area will not result in significant cumulative effects 	<ul style="list-style-type: none"> Guide on the Limitation of the Effects of Obtrusive Light from Outdoor Lighting Installations LEED, Green Building Rating System 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Vegetation buffers will be left were practical
Vegetation Resources	Loss of rare vascular plants	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Given the less than 5% of the RAA is developed or is slated for development by publicly disclosed projects there is no reasonable expectation that the Project's contribution to cumulative effects will compromise the sustainability of the affected resources regionally. 	<ul style="list-style-type: none"> <i>Species at Risk Act</i> Policy on Wetland Conservation British Columbia Conservation Framework <i>British Columbia Weed Control Act</i> <i>British Columbia Forest and Range Practices Act</i> 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Comment 4: Cumulative Effects should include Land Use Plan Response 4: Land Use Plan included for vegetation and wildlife cumulative effects assessment 	<ul style="list-style-type: none"> Implement Weed Management Plan Reduce risk of invasive species by inspecting all construction equipment arriving on the Project site Wetland Compensation Plan
	Loss of ecological communities of conservation concern	<ul style="list-style-type: none"> Development of a drainage and erosion control plan (as outlined in the EMP). 	<ul style="list-style-type: none"> None for wetland communities of conservation concern 1.8 ha of blue-listed upland communities 					
	Loss of old forest	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Old forest within the Project footprint will be lost 					
	Loss of wetland function	<ul style="list-style-type: none"> Development of a drainage and erosion control plan (as outlined in the EMP). These techniques may include the construction of berms to direct runoff and maintain hydrological regimes of sensitive plants and plant communities, as well as the installation of silt fences to remove suspended solids before runoff water leaves the Project site. Development of a weed control plan to manage indirect effects from introduction of invasive species. Development of a wetland compensation plan as determined through consultation with CWS. 	<ul style="list-style-type: none"> None 					
	Loss of riparian areas	<ul style="list-style-type: none"> Development of a drainage and erosion control plan (as outlined in the EMP). 	<ul style="list-style-type: none"> 47 ha of riparian habitat will be lost 					
	Loss of traditional use plants	<ul style="list-style-type: none"> The wetland compensation plan will include planting of traditional use plant species where possible and practicable. 	<ul style="list-style-type: none"> Some traditional use plants will be lost 					

Section	Potential Effects	Proposed Mitigation	Potential Residual Effects	Potential Cumulative Effects	Standards and Guidelines	Public Comments and Responses	Aboriginal Comments and Responses Received to Date	Proposed Commitments
Wildlife and Wildlife Habitat	Change in habitat availability	<ul style="list-style-type: none"> Limit and mark Project footprint clearing limits. Establish wetland compensation program to replace and protect habitat for use by western toads. 	<ul style="list-style-type: none"> 36.3 ha of moderately suitable habitat for marbled murrelets and northern goshawks will be lost 119.9 ha of highly suitable terrestrial habitat and 4.15 ha of highly suitable breeding habitat for western toads will be lost though some will be compensated through the wetland compensation plan 	<ul style="list-style-type: none"> There is no reasonable expectation that the Project's contribution to cumulative impacts will affect the sustainability of wildlife resources in the Prince Rupert Region because (1) most wildlife population in the region are secure; (2) alteration of movement to wildlife will be low in magnitude; (3) Project related effects to the risk of mortality will be minor as they will be mitigate using proven measures; (4) the total are of habitat affected by the Project will primarily affect wildlife species with secure populations; (5)habitat loss of western toads will be mitigated through wetland compensation 	<ul style="list-style-type: none"> Migratory Birds Environmental Assessment Guideline (EC 1998) Environmental Assessment Best Practices Guide for Wildlife at Risk in Canada. Addressing Species at Risk Considerations under the <i>Canadian Environmental Assessment Act</i> for Species under the Responsibility of the Minister responsible for Environment Canada and Parks Canada. 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Comment 5: Cumulative Effects should include Land Use Plan Response 5: Land Use Plan included for vegetation and wildlife cumulative effects assessment 	<ul style="list-style-type: none"> Clearing activities will be completed outside of nesting season where possible If clearing during nesting season a nest survey will be completed in advance to ensure there are no nests present. Avoid construction within 50 m of eagles nests where practical Salvage and relocate toads during migration Prohibit feeding and harassment of wildlife Drivers must follow posted speed limits
	Risk of mortality	<ul style="list-style-type: none"> Clear vegetation outside of the nesting season for birds (April 1 to July 31). Establish a 50 m no-development and no-disturbance setback around the two trees with Bald Eagle nests. Prohibit feeding and harassment of wildlife. Establish a wildlife encounter management plan to report Project related wildlife deaths and nuisance animals to Canpotex, and the appropriate provincial wildlife authority. Salvage and relocate western toads prior to vegetation clearing and grubbing. Salvage and relocate western toads to prevent road and rail mortality. Place exclusion fencing around western toad breeding ponds. 	<ul style="list-style-type: none"> None 					
	Alteration of movement	<ul style="list-style-type: none"> Properly maintain equipment 	<ul style="list-style-type: none"> Some minor disturbance to marine birds as a result of vessel activity 					

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Aquatic Environment	Habitat loss or alteration	<ul style="list-style-type: none"> Habitat compensation for lost/disturbed fish habitats Best management practices 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Given the limited amount of regional development (67 ha) and the abundance of undisturbed marine fish habitat, cumulative effects of past, present and future projects on the marine environment are not expected to impact any population of fish, invertebrate or marine mammal at the regional level. 	<ul style="list-style-type: none"> Policy for the Management of Fish Habitat (DFO 2001) Habitat Conservation and Protection Guidelines, Second Edition (DFO 1998) Decision Framework for the Determination and Authorization of Harmful Alteration, Disruption or Destruction of Fish Habitat (DFO 2008) Practitioners Guide to the Risk Management Framework for DFO Habitat Management Staff, Version 1 (DFO 2010) DFO Operational Policy Statements for the Pacific Region 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Comment 6: transportation of dredged materials and the effect of disposing them should be assessed Response 6: Disposal at sea, including transportation activities, is assessed as part of the Project Comment 7: The Aquatic cumulative effects section should include Land Use Plan Response 7: Land Use Plan not included as part of aquatic assessment because it is unknown if or how future development will use the aquatic environment Comment 8: Disposal at sea site other than Brown Passage should be considered Response 8: two new proposed disposal at sea sites are being assessed as part of the EIS 	<ul style="list-style-type: none"> Development of a Habitat Compensation Plan and post construction monitoring plan Water quality monitoring program
	Direct mortality or physical injury	<ul style="list-style-type: none"> Seasonal Avoidance Marine Mammal Monitoring Program Bubble curtains Fish Salvage Program Blasting Guidelines Best management practices 	<ul style="list-style-type: none"> Construction: sedentary invertebrate with high reproductive rates are expected to be affected by the Project. 					
	Sensory disturbance	<ul style="list-style-type: none"> Seasonal Avoidance Use of vibratory pile driver wherever feasible Bubble curtains Best management practices 	<ul style="list-style-type: none"> Construction: Some short term sensory disturbance and localised displacement for fish and marine mammals 					
	Degradation of water and sediment quality	<ul style="list-style-type: none"> Erosion Control Waste water treatment Best management practices 	<ul style="list-style-type: none"> Construction: localized increases in TSS 					
Human Health	Changes in country foods to affect human health	<ul style="list-style-type: none"> Waste water treatment Best management practices 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Consistent with cumulative effects assessment results for the air quality, noise and vibration, ambient light and aquatics sections, no significant effects as a result of past present and future projects are expected. 	<ul style="list-style-type: none"> CCME marine Aquatic Life Sediment Quality Guidelines (ISQG) BC Ministry of Environment (MoE) and Health Canada Ambient Air Quality Objectives Canada-wide Standard for Respirable Particulate Matter FCSAP Ecological Risk Assessment Guidance (EC, 2010) 	<ul style="list-style-type: none"> Comment: Loss of access to small beach located on the south west corner of Ridley Island. Response: Land access to the beach is lost irrespective of the project due to Port security requirements. Water access will not be affected. 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> As identified under Air Quality, Noise and Vibration, Ambient Light and Aquatic Environment
	Changes in air emissions to affect human health	<ul style="list-style-type: none"> Equipment maintenance Low sulphur fuel Dust suppressants Scheduling Minimize disturbance Erosion control structures Cover trucks Site paving if necessary 	<ul style="list-style-type: none"> Negligible increase in PM 					

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	Changes in ambient light to affect human health	<ul style="list-style-type: none"> Use of “dark sky” shielded luminaires for outdoor lighting Retain tree line directed to Port Edward Control outdoor light levels Centralized lighting control systems 	<ul style="list-style-type: none"> Low level increases in light levels in Port Edward 					
	Changes in noise levels to affect human health	<ul style="list-style-type: none"> Avoid night-time construction activities on the east side of the island Internal combustion engines Near sensitive receptors the number of construction equipment in operation simultaneously will be reduced Proper maintenance of conveyors 	<ul style="list-style-type: none"> Brief annoyance during moments of particularly intensive activity 					
Archaeological and Heritage Resources	Destruction of CMTs	<ul style="list-style-type: none"> Avoidance of CMTs within or adjacent to the Project footprint where possible. Equipping construction foremen with Chance Find Protocol. Systematic recording, including stem-round collection, of all CMTs identified within the Project footprint. 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Though other projects have affected this resource in the past, the lack of residual effects associated with the current Project means there is no potential for cumulative effects. 	<ul style="list-style-type: none"> Reference Guide on Physical and Cultural Heritage Resources (CEAA 1996) 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Develop Archaeological Resource Monitoring Plan Protect CMTs where feasible. If not feasible systematic recording will be conducted
	Disturbance or destruction of terrestrial archaeological or heritage sites	<ul style="list-style-type: none"> Equipping construction foremen with Chance Find Protocol. Systematic recording of identified archaeological and heritage sites. Additional mitigation by systematic data recovery and/or archaeological monitoring of development where warranted. 	<ul style="list-style-type: none"> None 					
	Disturbance or destruction of intertidal archaeological or heritage sites	<ul style="list-style-type: none"> Equipping construction foremen with Chance Find Protocol. Systematic recording of identified archaeological and heritage sites. Additional mitigation by systematic data recovery and/or archaeological monitoring of development where warranted. 	<ul style="list-style-type: none"> None 					
First Nations Current	Changes to current	<ul style="list-style-type: none"> As per mitigation outlined for Archaeology and Heritage Resources, 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Based on available information no 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> None

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Uses	traditional use patterns	<p>Aquatic Resources and Navigation.</p> <ul style="list-style-type: none"> Where possible traditional use plants will be used for replanting. Canpotex and the PRPA have offered accommodation to compensate for loss of access to the project site. 		significant effect on First Nation current use is expected.				
Navigable Waters	Physical interference	<ul style="list-style-type: none"> Marine communication plan. Protection zones. Use of dark sky shielded fixtures. Installation of navigational aids on the new structure where required. Updated navigational charts showing the jetty location. 	<ul style="list-style-type: none"> Loss of access to shallow waters between Coast and Ridley Islands Increased lighting from trestle 	<ul style="list-style-type: none"> Given the negligible overlap between the Project and other facilities generating vessel traffic within the RAA and the separation distance between the Project and other local projects the cumulative effects, if any, would not affect the viability of navigation within the RAA. 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Comment 9: Assessment should include marine vessel operation and navigation out to the pilotage station at Triple Islands Response 9: scope increased as requested Comment 10: Projects proposing to ship to Kitimat and to use Triple Island pilotage station should be included in the Navigable Waters and Accident and Malfunctions cumulative effects sections Response 10: Vessel travelling to Kitimat travel west of Triple Islands and therefore were not included in the assessment Comment 11: First Nations and other potential vessel users should be consulted Response 11: Assessment included consultation with vessel users. Requests for TUSs were submitted to First Nations. 	<ul style="list-style-type: none"> Marine communication plan to ensure vessel operators are aware of construction activities in the area. All shipping in PRPA waters will be conducted following the rules of shipping established by the Port under the Canada Marine Act
	Change in vessel traffic	<ul style="list-style-type: none"> Marine communication plan. Protection zones. Standard procedures will be followed by vessels entering the port. 	<ul style="list-style-type: none"> Increase in vessel traffic between Triple Islands and Ridley Island 					