4.0 REGULATORY FRAMEWORK, SCOPING, AND CONSULTATION AND ENGAGEMENT

Several elements of the Project have triggered the requirement for an EIA, pursuant to Section 5(1) of the EIA Regulation. Additionally, several federal regulatory agencies (termed Responsible Authorities or RAs) have determined that certain elements of the Project trigger the requirement for an EA under *CEAA.*

This chapter:

- Summarizes the regulatory framework applicable to the Project, including the provincial EIA and federal EA requirements as well as other applicable approvals, permits, and authorizations that will be required to enable the Project to be carried out;
- Describes the scope of the EIA/EA as determined by the provincial and federal regulatory agencies responsible for the EIA/EA of the Project under their respective scoping processes;
- Summarizes the issues and comments received from the public, stakeholders, and Aboriginal persons during public, stakeholder and Aboriginal engagement activities for the Project; and
- Identifies the valued environmental components (VECs) that have been selected for the EIA/EA to address the requirements of the Final Guidelines (NBENV 2007a), EA Track Report (Government of Canada 2007a), and public/stakeholder/Aboriginal concerns.

4.1 Regulatory Framework

The Project is subject to the New Brunswick *Environmental Impact Assessment Regulation – Clean Environment Act* and to the *Canadian Environmental Assessment Act* (*CEAA*).

4.1.1 New Brunswick *Environmental Impact Assessment Regulation*

The New Brunswick EIA Regulation was enacted in 1987 under the *Clean Environment Act.* The EIA Regulation requires that the proposed construction, operation, modification, extension, abandonment, demolition or rehabilitation of certain projects or activities, described in Schedule "A" of the Regulation, must be registered. Schedule "A" of the EIA Regulation identifies 24 categories of projects or activities (referred to as undertakings) which must be registered (*e.g.*, petroleum refineries, ports).

Following registration, a review of the registration document is conducted by a technical review committee (TRC) to review potential environmental effects of the Project and proposed mitigation. The TRC then provide their recommendations to the New Brunswick Minister of Environment (the Minister), who determines if the Project may proceed directly with conditions (Determination Review) or if a more detailed EIA is required (Comprehensive Review). If a Comprehensive Review is required, the following key process elements are undertaken:

- Development of Draft Guidelines for the EIA;
- Public input to Draft Guidelines;

- Issuance of Final Guidelines for the EIA;
- Development of Terms of Reference to meet the Final Guidelines;
- Development of an EIA Report (also referred to as an Environmental Impact Statement or EIS);
- Public Meeting; and
- Decision by Lieutenant-Governor-in-Council.

4.1.1.1 EIA Process for Project Eider Rock

Several elements of the Project, as currently conceived, are undertakings under the EIA Regulation. These include, but are not limited to, the following as identified in Schedule "A" of the EIA Regulation:

- *"(f) all commercial extraction or processing of combustible energy-yielding materials, except fuelwood;"*
- *"(h) all pipelines exceeding five kilometres in length, except;*
  - *(i) water, steam or domestic wastewater pipelines; and*
  - *(ii) pipelines or pipe lines that are the subject of an application under the Gas Distribution Act or the Pipe Line Act", and*
- *"(q) all ports, harbours, railroads, or airports."*

Therefore, on January 25, 2007, the Proponent submitted an EIA Registration/Project Description document (Jacques Whitford 2007a) to the New Brunswick Department of Environment (NBENV) pursuant to the EIA Regulation. On February 7, 2007, the New Brunswick Minister of Environment determined that a Comprehensive Review of the Project was required. As mandated in the EIA Regulation and by the Final Guidelines, a Comprehensive Review of the Project was conducted, as documented in this EIA Report.

Draft Guidelines were issued by the Minister on April 5, 2007. The public comment period for the Draft Guidelines ended on May 5, 2007. The Minister, after considering the public input received on the Draft Guidelines, issued Final Guidelines for the EIA on June 4, 2007 (NBENV 2007a).

Section 10(1) of the EIA Regulation requires that the Proponent *"…prepare terms of reference for an environmental impact assessment, setting out his proposals for the carrying out of an assessment in accordance with the final guidelines"*. The specific requirements for the Terms of Reference were outlined in Section 2.8 of the Final Guidelines. Draft Terms of Reference were submitted to the TRC on November 26, 2007 and following regulatory review and public engagement and discussion, were finalized. The Final Terms of Reference for the EIA (Jacques Whitford 2008a), which described the methods proposed for carrying out the EIA and the means by which the Proponent would consult with the public during the course of the EIA/EA process, were submitted to and approved by the Minister on May 9, 2008. The Final Terms of Reference were specifically intended to meet all requirements of Section 10(1) of the EIA Regulation and Section 2.8 of the Final Guidelines.

Following acceptance of the Final Terms of Reference, the Proponent set out to develop an EIA Report to meet the requirements of the Final Guidelines. This EIA Report provides the necessary details as set out by the Final Terms of Reference and serves as the basis for public comment in respect of regulatory decision-making regarding the Project.

Once the Minister has taken the public comments into consideration, the Minister will make a recommendation to the Lieutenant-Governor-in-Council, who will decide if the Project may or may not proceed, and under which conditions.

4.1.1.2 Technical Review Committee (TRC)

The EIA Report was reviewed by members of a TRC, appointed by the Minister to review the technical details of the EIA of the Project. Membership of the TRC was outlined in Section 1.3 of the Final Guidelines, and is summarized in Table 4.1. It is noted that the agencies identified in Table 4.1 are listed for illustrative purposes, and the actual composition of the TRC may vary from that shown, at the sole discretion of the Minister. Many of the provincial, federal, and municipal agencies represented on the TRC are anticipated to have a mandate (regulatory or otherwise) for some aspects of the Project.

Table 4.1 Composition of the Technical Review Committee

Department or Agency	Primary Mandate, or Specific Area(s) of Focus
Provincial	
New Brunswick Department of Environment	Various branches of the Department, with varying responsibilities for administration of provincial environmental legislation
New Brunswick Department of Natural Resources	Fish and wildlife; Crown lands
New Brunswick Department of Health	Public health
New Brunswick Department of Public Safety	Provincial building, electrical, plumbing, and pressure vessel codes; public safety; emergency services
New Brunswick Department of Energy	Pipelines, energy policy
New Brunswick Department of Fisheries	Commercial fisheries
New Brunswick Department of Tourism and Parks	Tourism and recreation
New Brunswick Department of Agriculture and Aquaculture	Agriculture and commercial aquaculture
New Brunswick Aboriginal Affairs Secretariat	Administration of Aboriginal affairs in New Brunswick
New Brunswick Department of Transportation	Road infrastructure
New Brunswick Museum	Palaeontological resources
New Brunswick Workplace Health and Safety Commission	Occupational health and safety
New Brunswick Department of Wellness, Culture and Sport	Archaeological Services: Heritage and archaeological resources; Historic Places Section: Built heritage resources.
Federal	
Fisheries and Oceans Canada	Fish and fish habitat
Transport Canada	Navigable waters; marine safety; aviation safety
Environment Canada	Ocean dredging and disposal at sea; various environmental quality concerns (*e.g.,* air quality, climate change)
Health Canada	Public health
Natural Resources Canada	Climate change, energy policy
Canadian Environmental Assessment Agency	Federal Environmental Assessment Coordinator (FEAC)
Municipal	
City of Saint John	Municipal development; zoning; building permits; emergency services; local transportation networks

The TRC provides a federal-provincial harmonized review of the Project, although a separate EIA Report and Comprehensive Study Report (CSR) have been developed to meet the specific scopes of the provincial EIA and federal EA under *CEAA*, respectively. Members of the TRC are tasked with assessing the Project against the mandate of their department or agency in respect of the Project.

4.1.2 *Canadian Environmental Assessment Act*

The requirements for federal EA are defined by *CEAA* for projects or activities under federal jurisdiction. For *CEAA* to apply, there must first be a project as defined under the *Act*. There must also be a trigger. Thus, an EA is not automatically required for a project; rather, *CEAA* does not require an EA unless there is a project as defined in the *Act*, and there are one or more triggers in respect of the Project.

The requirement for an EA is triggered under Section 5(1) of *CEAA* when a federal authority (Responsible Authority (RA)):

- Proposes a project;
- Provides financial assistance to a proponent to enable a project to be carried out;
- Sells, leases, or otherwise transfers control or administration of federal land to enable a project to be carried out; and/or
- Provides a license, permit or an approval that is listed in the *Law List Regulations* that enables a project to be carried out.

All EAs under *CEAA* are screenings, unless they are on the *Comprehensive Study List Regulations* or have been referred to mediation or a review panel.

Section 28(c) of the *Comprehensive Study List Regulations* states that a Comprehensive Study is required for the proposed construction, decommissioning or abandonment of a marine terminal designed to handle vessels larger than 25,000 dead weight tonnes (dwt), unless the terminal is located on lands that are routinely and have been historically used as a marine terminal or that are designated for such use in a land-use plan that has been the subject of public consultation. A Comprehensive Study under *CEAA* includes the following elements:

- Upon receipt of a Project Description, federal authorities initiate the federal coordination process to determine who are the likely RAs and which federal authorities may be in the possession of expert or specialist information in respect of the Project;
- Completion of a Comprehensive Study Track Process, including public consultation, to determine whether the EA of the Project will remain as a Comprehensive Study or if it will be referred to a review panel;
- Development of draft Scoping Document for the EA, and public comment period;
- Finalization of the Scoping document and the release of an Environmental Assessment Track Report (EA Track Report) and Scoping Document, outlining the federal Minister of Environment's Comprehensive Study Track Decision;
- Development of a Comprehensive Study Report (CSR) by RAs (or by the Proponent if delegated by RAs);
- Review and acceptance of the CSR by RAs;
- Public release of CSR and public comment; and
- Decision by the Ministers of the federal RAs, and subsequent issuance of the requisite authorizations under respective legislation.

4.1.2.1 EA Process for Project Eider Rock

The Project requires an EA under *CEAA* because of the authorizations required that are listed in the *Law List Regulations* to enable the Project to be carried out, specifically in respect to the construction and operation of the marine terminal and other marine-based facilities associated with the Project. These may include:

- An authorization for harmful alteration, loss, disruption or destruction (HADD) of fish habitat, or the authorization for the destruction of fish by means other than fishing, under the *Fisheries Act*;
- A permit under the *Navigable Waters Protection Act* for works in, over or under navigable waters; and
- A permit for disposal at sea under the *Canadian Environmental Protection Act*.

The marine terminal to be constructed as part of the Project requires a Comprehensive Study, according to Section 28(c) of the *Comprehensive Study List Regulations* under *CEAA*.

On January 25, 2007, the EIA Registration/Project Description document for the Project was also submitted as a "project description" under *CEAA* to the Canadian Environmental Assessment Agency (the "Agency") and the likely RAs – Environment Canada (EC), Department of Fisheries and Oceans Canada (DFO), and Transport Canada (TC), for the purpose of initiating the EA under *CEAA*.

In accordance with the *Regulations Respecting the Coordination by Federal Authorities of Environmental Assessment Procedures and Requirements* (known as the Federal Coordination Regulations), the Agency, acting as the Federal Environmental Assessment Coordinator (FEAC) under Section 12 of *CEAA*, distributed the Project Description to the federal authorities that were or may be RAs, as well as those that may be in possession of specialist or expert information or knowledge with respect to the Project. The Agency distributed the EIA Registration/Project Description to:

- Environment Canada (EC);
- Fisheries and Oceans (DFO);
- Health Canada (HC);
- Indian and Northern Affairs Canada (INAC);
- Industry Canada (IC);
- National Energy Board (NEB);
- Natural Resources Canada (NRCan);
- Canadian Transportation Agency (CTA);
- Saint John Port Authority; and
- Transport Canada (TC).

On May 7, 2007, DFO, EC, and TC announced that they were RAs for the EA of the Project under *CEAA* and that they would conduct a Comprehensive Study of the marine terminal and other marine-based infrastructure associated with Project Eider Rock.

On May 23, 2007, the RAs released a draft Scoping Document to outline the scope of the EA under *CEAA* (Government of Canada 2007b). The draft Scoping Document outlined the draft scope of the Project, factors to be considered, and scope of factors to be considered for the EA under *CEAA* as determined by the Responsible Authorities. The draft Scoping Document proposed that the scope of the EA under *CEAA* consider the aspects of Project Eider Rock that are to be constructed and operated in the marine environment (*e.g.,* jetty, outfall). The public comment period on the draft Scoping Document ended on June 30, 2007.

After considering the comments received from the public on the draft Scoping Document, the federal Minister of the Environment released his Comprehensive Study Track Decision ("Notice of Decision to Continue as a Comprehensive Study" (Government of Canada 2007c) on November 21, 2007, in which the Minister outlined the form of the EA under *CEAA*. At the same time, the Scoping Document was finalized and released to the public. The federal Minister determined that the EA under *CEAA* would continue as a Comprehensive Study of the marine terminal and marine infrastructure associated with the Project. The Minister also released an EA Track Report (Government of Canada 2007a) that outlined the scope of Project, factors to be considered, and scope of factors to be considered as part of the EA under *CEAA*.

A separate Comprehensive Study Report (CSR), based on this EIA report, is being submitted to the federal RAs in parallel to this EIA Report to satisfy the requirements of the EA Track Report and to allow for public discussion and decision-making by the federal RAs in respect of the Project. The RAs have delegated the preparation of the CSR to the Proponent.

4.1.3 Other Approvals, Permits, and Authorizations

The Final Guidelines required that the Proponent identify the following details in the EIA Report:

- The activities requiring regulatory approval;
- The name of the approval, permit, or authorization required;
- The legislation requiring compliance; and
- The regulatory agency responsible.

Table 4.2 provides a summary of the legislation that may be or is likely to be applicable to the Project, including the regulatory agency responsible and summary details on the activity/activities that are subject to the legislation, as well as possible approvals, permits, and authorizations that may be required. It is noted that this list is intended to summarize the main pieces of environmental legislation and authorizations that are likely to be applicable to the Project, mainly for illustrative purposes; the list of permits, approvals and other forms of authorization listed in Table 4.2 is not intended to be all-inclusive. The Proponent will work with legal counsel during the permitting phase of the Project to confirm these requirements and identify any additional legislation or authorizations that may be applicable to the Project.

Table 4.2 Selected Summary of Legislation that May be Applicable to the Project, and Possible Approvals, Permits or Authorizations Required

Legislation	Department/Agency	Approval, Permit, or Authorization Required	Activity or Component
Federal			
Canadian Environmental Assessment Act	Fisheries and Oceans Canada, Transport Canada, Environment Canada, Canadian Environmental Assessment Agency	▪ Approval of Comprehensive Study Report.	▪ Construction, Operation, and Decommissioning and Abandonment of the marine terminal and other marine-based infrastructure.
Canadian Environmental Protection Act	Environment Canada	▪ Disposal at Sea Permit under S. 127(1); ▪ S. 185 and S.190 require a permit for import/export of hazardous materials; ▪ *Environmental Emergencies Regulations.*	▪ Ocean dredging and disposal at sea for marine terminal; ▪ Hazardous material and Petroleum Oil and Lubricants storage, NPRI Reporting, *Environmental Emergencies Regulations*.
Fisheries Act	Fisheries and Oceans Canada, Environment Canada	▪ HADD authorization (S. 35(2); ▪ Authorization for destruction of fish (S. 32); ▪ Authorization for deleterious substances (S. 36). ▪ *Petroleum Refinery Liquid Effluent Regulations*	▪ Construction of marine terminal and other marine-based infrastructure; ▪ Operation of seawater cooling water intake structure (if applicable); ▪ Release of wastewater.
Navigable Waters Protection Act	Transport Canada	▪ NWPA permit under S. 5(1)(a) to allow for interference to navigation.	▪ Works or construction activity in, over, or under navigable waters. Applies to the proposed marine terminal structures in the Bay of Fundy as well as to any watercourse crossings that might be required for the linear facilities.
Migratory Birds Convention Act	Environment Canada	--	▪ Construction of land-based facilities, particularly from disturbance during clearing and site preparation.
Species at Risk Act	Fisheries and Oceans Canada, Environment Canada	▪ S. 73 requires agreement or a permit to engage in an activity that affects a listed wildlife species or its habitat.	▪ Construction of land-based facilities, particularly from disturbance during clearing and site preparation.
Canada Shipping Act, 2001 and Regulations	Transport Canada	--	▪ Shipping activities during Construction and Operation; ▪ Oil Handling Facility Oil Pollution Emergency Plan; ▪ TERMPOL review.
Canada Marine Act	Transport Canada, Saint John Port Authority	▪ S. 56 – Clearance to Enter Waters of a Port; ▪ S. 27 may require authorizations for specified activities such as travelling through or docking at the Port of Saint John.	▪ Shipping activities during Construction and Operation; ▪ Anchorage, pilotage, berthing, and deberthing activities.
National Building Code; National Fire Code; National Plumbing Code; National Energy Code for Buildings	National Research Council, Natural Resources Canada	▪ Building, fire, plumbing, and electrical permits.	▪ Construction and Operation of the Project.

Table 4.2 Selected Summary of Legislation that May be Applicable to the Project, and Possible Approvals, Permits or Authorizations Required

Legislation	Department/Agency	Approval, Permit, or Authorization Required	Activity or Component
Canada Transportation Act– Flammable Liquids Bulk Storage Regulations and Liquified Petroleum Gas Bulk Storage Regulations	Transport Canada	▪ Authorization may be required to have tanks on site.	▪ Construction or Operation of petroleum storage tanks.
Transportation of Dangerous Goods Act, 1992	Transport Canada	▪ S. 31 – Permit may be required for transportation.	▪ Transportation of dangerous goods, including hazardous materials (*e.g.,* sulphur) and petroleum products.
Explosives Act	Natural Resources Canada	▪ S. 7(b) and S. 9 require a permit for the transportation of explosives and importation of explosives.	▪ Temporary magazine license for blasting during site preparation (if applicable).
Provincial			
Environmental Impact Assessment Regulation – Clean Environment Act	NB Department of Environment	▪ Approval of the Undertaking.	▪ Construction, Operation, and Decommissioning and Abandonment of the Project.
Air Quality Regulation – Clean Air Act	NB Department of Environment	▪ Section 3(1)(a) Approval to Construct and Approval to Operate a Source; ▪ S. 14 Approval to release smoke.	▪ Construction of land-based facilities; ▪ Operation of the refinery and other land-based infrastructure.
Water Quality Regulation – Clean Environment Act	NB Department of Environment	▪ S. 3(2) Discharge into waters of the Province; ▪ S. 3(3) Approval to Construct and Approval to Operate for the wastewater treatment system; ▪ S. 3(4) Sewage work and approval to discharge; ▪ S. 3(5) Approval for construction/operation of waterworks; and ▪ S 3(6) Connecting to a municipal water system.	▪ Construction of land-based facilities; ▪ Operation of wastewater treatment, cooling water, and sanitary wastes; and ▪ Withdrawal of water during Construction and Operation.
Clean Water Act and Regulations *(*including *Watercourse and Wetland Alteration Regulation)*	NB Department of Environment	▪ S. 12(1) Release of contaminant into or upon water; ▪ S. 14(15(1)(b) Permit for a Watercourse and Wetland Alteration.	▪ Construction of linear facilities within 30 m of a watercourse or wetland.
Petroleum Product Storage and Handling Regulation – Clean Environment Act	NB Department of Environment	▪ S. 23(1) Installation of a petroleum storage tank; ▪ S. 6(1) Petroleum Storage Site License.	▪ Construction and Operation of petroleum storage systems.
Ozone Depleting Substances and Other Halocarbons Regulation – Clean Air Act	NB Department of Environment	▪ S. 14 Record keeping and reporting for ozone depleting substances and other halocarbons; ▪ S.15 maintenance requirements for equipment containing ozone depleting substances and other halocarbons.	▪ Construction and Operation of refrigeration, air conditioning, and fire suppression systems associated with the land-based facilities.
Pipeline Act, 2005	NB Department of Energy	▪ Pipeline approval.	▪ Construction and Operation of hydrocarbon pipelines.

Table 4.2 Selected Summary of Legislation that May be Applicable to the Project, and Possible Approvals, Permits or Authorizations Required

Legislation	Department/Agency	Approval, Permit, or Authorization Required	Activity or Component
Gas Distribution Act, 1999	NB Department of Energy	▪ S. 6 – authorization to distribute or connect to natural gas pipeline.	▪ Construction and Operation of natural gas pipeline.
Health Act	NB Department of Health	▪ On-site sewage disposal system licence under the *General Regulation – Health Act*.	▪ Construction and Operation of on-site sewage disposal systems.
Employment Standards Act	NB Department of Post-Secondary Education, Training and Labour	--	▪ Construction and Operation of the Project.
Fire Prevention Act Section 23 (c)	NB Department of Public Safety	--	▪ Construction and Operation of the Project, including fire prevention, control, and response systems.
Occupational Health and Safety Act and Regulations	NB Department of Post-Secondary Education, Training and Labour; Worksafe New Brunswick	▪ S. 8 and S. 17(2) require a Health and Safety Policy; ▪ Workplace standards, WHMIS, first aid providers, *etc*.	▪ Construction and Operation of the Project.
Provincial Building Regulation – Community Planning Act	NB Department of Local Government	▪ Building permits.	▪ Construction and Operation of the Project.
Boiler and Pressure Vessel Act	NB Department of Public Safety	▪ S. 13 requires certificate of inspection; ▪ S. 113(1) requires permit to install boilers or pressure vessels.	▪ Construction and Operation of boilers and pressure vessels.
Electrical Installation and Inspection Act and Regulations	NB Department of Public Safety	▪ S. 4(1) requirement to meet electrical installation standards; ▪ Approval for electrical installation.	▪ Construction and Operation of the Project.
Use of Highway Regulation – Highway Act	NB Department of Transportation	▪ S. 6 requires permission to lay gas/water mains near highways.	▪ Construction of linear facilities.
Municipal			
Zoning By-Law for City of Saint John	City of Saint John	▪ Planning approval.	▪ Construction of land-based facilities.
Municipal Development Plan for the City of Saint John	City of Saint John	▪ Building permits.	▪ Construction of land-based facilities.

Various activities of the Project will require compliance with the applicable federal and provincial legislations. Other activities of the Project may require permits, approvals and/or authorizations to these activities to take place. All permits, approvals, and/or authorizations will be applied for and obtained prior to initiating the work associated with the particular activity of the Project.

4.2 Scope of the EIA/EA

The scope of the environmental assessment, as determined by the New Brunswick Minister of Environment to satisfy the requirements of Final Guidelines for the EIA under the EIA Regulation as well as by RAs to satisfy the requirements for the EA under *CEAA*, is described below.

4.2.1 New Brunswick *Environmental Impact Assessment Regulation*

4.2.1.1 Scope of Project

As described in Section 3.1 of the Final Guidelines, the scope of the Project to be assessed pursuant to the EIA Regulation was determined to include, but was not limited to, the following.

- The petroleum refinery and all associated facilities and infrastructure (land-based and marine-based) including location, size, layout, laydown, capacity, and boundaries for:
  - Steam-generating boilers;
  - Freshwater systems;
  - Wastewater systems;
  - Tankage for storage of crude oil, raw materials, refined petroleum products, and feedstocks;
  - Petroleum coke storage and handling facility;
  - Marine terminal(s); and
  - ROWs for pipelines, electrical power, petroleum coke conveying, rail spur and access roads.
- The layout of the road, laydown, storage and office infrastructure, construction-related lay down areas, infrastructure (including worker facilities), temporary wastewater systems.
- Freshwater requirements, proposed source(s) and methods of access and extraction.
- Process wastewater treatment systems and discharge locations.
- On-site sewage handling.
- Petroleum coke and sulphur storage, handling and offloading facilities, storage tanks, secondary containment systems.
- Rail spur.
- Pipelines to and from the refinery, including size, alignment and content.
- Power generating infrastructure and an estimate of the energy required to operate the facility.
- Fire prevention and control equipment.

In addition, the EIA Report was required to discuss the following:

- The regulatory standards to which all project components will be built and operated;
- The construction methodology and design description for the marine terminals, loading and offloading systems;
- The construction methodology and design description for the refinery;
- The ship operation characteristics, including planned vessel traffic in the Bay of Fundy;
- All Project-related emissions and wastes, including information on upsets of environmental control equipment which may change the nature of emissions and/or effluent;
- The required land and marine exclusion zones;

- The transportation, handling and storage methods for chemicals, reagents, catalysts and other hazardous substances;
- Upsets of environmental control equipment which may change the nature of emissions and/or effluent;
- The environmental effects of Project-related traffic on road infrastructure and the transportation network;
- An outline of the facility commissioning; and
- Lighting requirements.

The Final Guidelines further required that the following aspects of the Project also be addressed:

- The purpose, rationale, and need for the Project;
- Identification and analysis of alternatives to the Project, including:
  - The "null" or do nothing alternative (*i.e.,* not proceeding with the Project);
  - Alternative locations for the Project;
  - Alternative means of carrying out the Project that are technically and economically feasible and the environmental effects of such alternative means, including alternative shipping corridors, alternative methods of receiving and shipping petroleum products, alternative environmental control technologies, and alternatives to specific components proposed in the Project; and
  - An assessment of the various models that can be used to predict air contaminant emissions, and a justification for the models selected.

An assessment and analysis of emerging environmental control technologies with special analysis of proven control technologies was also required.

4.2.1.2 Factors to be Considered

The description of the existing environment and assessment of potential environmental effects of the Project were to be described for the Valued Environmental Components (VECs) within the study boundaries. The Final Guidelines suggested the following VECs to be assessed as part of the EIA:

- Atmospheric Environment;
- Freshwater Resources;
- Public Health and Safety;
- Freshwater Environment;
- Terrestrial Environment;
- Wetland Environment;
- Marine Environment;
- Commercial Fisheries;
- Labour and Economy (and other Socio-economic Effects);
- Community Services and Infrastructure;

- Land Use;
- Current Use of Land and Resources for Traditional Purposes by Aboriginal Persons;
- Heritage and Archaeological Resources;
- Land Based Transportation/Road Infrastructure;
- Navigation/Shipping; and
- Effects on the Environment on the Project.

The factors to be considered for each of these VECs were further elaborated in the Final Guidelines, and the reader is referred to the Final Guidelines (NBENV 2007a) for more information in this regard. Detailed work plans and methodologies that were proposed and accepted to meet the requirements of the Final Guidelines were detailed in the Final Terms of Reference dated May 9, 2008, and are further elaborated and assessed in this EIA Report.

4.2.2 *Canadian Environmental Assessment Act*

The scope of the Comprehensive Study federal environmental assessment has been determined by the Responsible Authorities (RAs) to be limited to the marine aspect of the Project. The federal EA scope is further discussed in the following section.

4.2.2.1 Scope of Project

The RAs, as authorized under subsection 15(1) of *CEAA,* confirmed in Section 3.3 of the EA Track Report that the federal scope of the Project, as was outlined in the Scoping Document, would be limited to:

> *"the construction, operation, decommissioning and/or abandonment of the following triggered components of the development proposal, and the related activities (e.g., blasting, dredging, infilling, disposal at sea):*
>
> - *the pier or monobuoy for crude tanker unloading, and/or the use of the existing monobuoy at Canaport;*
> - *the pier and associated breakwater for loading of petroleum coke products onto ships and for shipping the refined petroleum products to their intended markets; and*
> - *the barge landing facility, constructed on either a temporary or permanent basis, for unloading large equipment during the construction phase or as required thereafter."*

In the Scoping Document, the RAs also proposed that the scope of project would include docking and deberthing of vessels. However, the scope of project does not include shipping, as shipping issues will be addressed via a TERMPOL Review Process.

The scope of project also includes a fourth component, as noted in Section 4.4 of the Environmental Assessment Track Report:

- *"in-water physical structures, constructed on either a temporary or permanent basis, in the marine environment, and any navigational dredging that may be required."*

Section 4.4 of the EA Track Report clarifies that the inclusion of the existing monobuoy within the scope of project is only in the context to any proposed modifications to the structure, not to the existing use of the structure.

The EA Track Report also identified that the potential environmental effects of Accidents, Malfunctions, and Unplanned Events shall also be assessed.

These components and related activities scoped for the federal EA are encapsulated under the broader requirements of the Final Guidelines.

The EA Track Report confirmed that the EA under *CEAA* would take the form of a Comprehensive Study, as it involves the construction of a marine terminal for vessels having a capacity greater than 25,000 dwt. The RAs would conduct their assessment of the Project based on their scope of Project associated with the marine environment. As reflected in Table 4.1, several federal departments/agencies that are RAs or FAs are also members of the provincial TRC for the EIA under the EIA Regulation, and may thus participate in the provincial EIA to achieve their respective mandates under federal legislation for other components of the Project that are not being assessed under *CEAA*.

4.2.2.2 Factors to be Considered

All environmental assessments conducted under *CEAA* require specific factors to be considered. Section 16(1) of *CEAA* establishes the mandatory factors to be considered for all EAs under *CEAA*.

As outlined in the EA Track Report, the Comprehensive Study will consider the mandatory factors outlined in Sections 16(1) (a) to 16(1) (d) of *CEAA*, as follows:

> *(a) "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;*
>
> *(b) the significance of the* [environmental] *effects referred to in paragraph (a);*
>
> *(c) comments from the public that are received in accordance with this Act and the regulations;*
>
> *(d) measures that are technically and economically feasible and that would mitigate any significant adverse environmental effects of the project."*

Section 16(1) (e) of *CEAA* establishes additional factors to be considered. Additional factors that can be determined as relevant by the RAs include:

> *(e) "any other matter relevant to the screening, comprehensive study, mediation or assessment by a review panel, such as the need for the project and alternatives to the project, that the responsible authority or, except in the case of a screening, the Minister after consulting with the responsible authority, may require to be considered."*

In addition, Section 16(2) of *CEAA* requires consideration of the following additional mandatory factors as part of the EA of the scoped Project for a Comprehensive Study:

> *(a) "the purpose of the project;*

(b) alternative means of carrying out the project that are technically and economically feasible and the environmental effects of any such alternative means;

(c) the need for, and the requirements of, any follow-up program in respect of the project; and

(d) 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."

In addition, the EA Track Report identified the following additional factors to be considered in accordance with subsection 16(1) (e) of *CEAA*:

(e) the "need for" the project; and

(f) "alternatives to" the project.

The reader is referred to the official text of the EA Track Report and Scoping Document for further details on the specific requirements for the EA of the Project under the *Canadian Environmental Assessment Act*.

4.3 Consultation and Engagement

Consultation with and engagement of public, stakeholders, and Aboriginal persons is an essential component of any EIA/EA. At the onset of the Project, the Proponent identified and actively pursued various consultation and engagement opportunities to engage the public, stakeholders, government agencies, and Aboriginal persons, with a particular focus on those potentially affected by the Project.

The overarching goal of the consultation and engagement program conducted as part of the EIA/EA was, and continues to be, to ensure that those potentially affected by the Project were:

- Aware of the Project and its potential environmental effects;
- Able to obtain information about the Project; and
- Able to express any concerns they may have about the Project or its potential environmental effects.

The public consultation and engagement program conducted as part of the EIA/EA process to date was also an important vehicle for the identification, scoping, and resolution or mitigation of potential issues or concerns, and for the exchange of information in respect of the Project.

To achieve its consultation and engagement goals, the Proponent was and continues to be committed to a public and stakeholder consultation and First Nations engagement program based on open, forthright and responsive communication with the public, regulatory agencies, First Nations, and other stakeholders. The objectives of the public consultation and engagement program implemented for Project Eider Rock were to:

- Provide information about the Project to members of the general public, First Nations, stakeholders and interested parties, and seek their input;
- Identify, document, and monitor issues and concerns arising from the consultation process;

- Request information on the current use of lands and resources for traditional purposes by Aboriginal persons in the vicinity of the Project activities and how those activities might be affected by the Project; and
- Identify the need for planning, design and management measures that will mitigate or resolve the issues raised through the consultation process.

All issues identified in the course of consultation and engagement activities were tracked and were responded to when appropriate. Issues, questions, concerns or comments raised through consultation and engagement initiatives during the EIA/EA process were documented as they arose so that they could be considered, as appropriate, in the scoping or conduct of the EIA/EA.

The consultation and engagement program for the Project included regulatory consultation, First Nations engagement, and public and stakeholder consultation. While some engagement activities and initiatives were designed to specifically target only one or more of these groups, most were designed to reach all three.

4.3.1 Regulatory Consultation

A regulatory consultation program was conducted involving various provincial and federal government representatives, the Technical Review Committee (TRC), and the federal government Responsible Authorities (RAs). Several meetings were held with provincial and federal regulatory authorities on an as-needed basis, to clarify and answer questions regarding the EIA Registration/Project Description, to seek clarification on Project details, and to discuss specific matters relating to the scope of the assessment. A summary of meetings conducted with federal and provincial government departments and agencies in the course of the EIA/EA to date is provided in Table 4.3. Note that the list of meetings or participating agencies is not necessarily all-inclusive.

Table 4.3 Summary of Meetings Held with Federal and Provincial Government Departments and Agencies

Meeting Date	Lead Agency	Purpose of Meeting	Departments and Agencies in Attendance
October 26, 2006	NB Department of Environment	Provide initial presentation regarding proposed Project Eider Rock.	▪ NB Department of Environment (Sciences and Planning Division, Project Assessment Branch, Approvals Branch, Sciences and Reporting Branch, Environmental Management Division)
November 2, 2006	Canadian Environmental Assessment Agency – Atlantic Region	Provide initial presentation regarding proposed Project Eider Rock.	▪ Canadian Environmental Assessment Agency (Atlantic)
November 14, 2006	Canadian Environmental Assessment Agency/ Environment Canada/ Transport Canada/ Fisheries and Oceans Canada - Ottawa	Provide initial presentation regarding proposed Project Eider Rock.	▪ Canadian Environmental Assessment Agency ▪ Environment Canada ▪ Department of Fisheries and Oceans ▪ Transport Canada

Table 4.3 Summary of Meetings Held with Federal and Provincial Government Departments and Agencies

Meeting Date	Lead Agency	Purpose of Meeting	Departments and Agencies in Attendance
November 27, 2006	Environment Canada – Atlantic Region	Provide initial presentation regarding proposed Project Eider Rock.	▪ Environment Canada – Atlantic Region (Environmental Assessment Section, Climate Change Section, Pollution Control Division, Disposal at Sea program, NPRI program, Air Issues Branch, Environmental Emergencies Division, Species at Risk program, New Brunswick Provincial Office)
November 27, 2006	Transport Canada – Atlantic Region	Provide initial presentation regarding proposed Project Eider Rock.	▪ Transport Canada – Atlantic Region (Environmental Assessment Section, Marine Safety Branch)
January 20, 2007	NB Department of Environment	Provide presentation on EIA Registration document to be filed.	▪ NB Department of Environment (Sciences and Planning Division, Project Assessment Branch, Environmental Management Division)
February 7, 2007	NB Department of Environment/ Canadian Environmental Assessment Agency	Provide presentation to technical review committee and responsible authorities on EIA Registration/Project Description.	▪ NB Department of Environment (Project Assessment and Approvals Branch, Sciences and Reporting Branch, Saint John Regional Office, Watercourse and Wetland Alteration Section) ▪ Canadian Environmental Assessment Agency ▪ NB Department of Natural Resources ▪ City of Saint John ▪ NB Department of Health ▪ NB Department of Agriculture, Fisheries and Aquaculture ▪ Environment Canada- Atlantic Region ▪ Transport Canada
March 23, 2007	NB Department of Environment/ Canadian Environmental Assessment Agency/ Transport Canada	Provide update presentation to technical review committee and responsible authorities on marine aspects of Project Eider Rock.	▪ NB Department of Environment (Project Assessment and Approvals Branch) ▪ Canadian Environmental Assessment Agency ▪ Fisheries and Oceans Canada ▪ Transport Canada
April 19, 2007	Transport Canada – Atlantic Region	Discussion on permit requirements of *Navigable Waters Protection Act.*	▪ Transport Canada (Navigable Waters Protection program)
April 19, 2007	Canadian Environmental Assessment Agency – Atlantic Region	Discussion on *CEAA* scoping process and comprehensive study track.	▪ Canadian Environmental Assessment Agency
May 22, 2007	NB Department of Environment/ Canadian Environmental Assessment Agency/ Transport Canada	Discuss shipping, navigation and marine environment issues.	▪ NB Department of Environment (Project Assessment and Approvals Branch) ▪ Environment Canada (New Brunswick Provincial Office) ▪ Transport Canada Atlantic Region (Environmental Assessment Section, Marine Safety) ▪ Canadian Coast Guard ▪ Environment Canada Atlantic Region

Table 4.3 Summary of Meetings Held with Federal and Provincial Government Departments and Agencies

Meeting Date	Lead Agency	Purpose of Meeting	Departments and Agencies in Attendance
May 25, 2007	NB Department of Environment	Human Health and Ecological Risk Assessment/Air Quality Workshop for regulatory agencies.	▪ NB Department of Environment (Project Assessment and Approvals Branch, Sciences and Reporting Branch) ▪ NB Department of Health ▪ NB Department of Natural Resources ▪ Environment Canada Atlantic Region ▪ Health Canada
July 25, 2007	NB Department of Environment/ Canadian Environmental Assessment Agency	Provide update presentation on Project Eider Rock.	▪ NB Department of Environment (Project Assessment and Approvals Branch) ▪ Canadian Environmental Assessment Agency - Atlantic ▪ Fisheries and Oceans Canada ▪ Transport Canada - Atlantic Region ▪ Environment Canada - Atlantic Region
August 28, 2007	NB Department of Environment/ Environment Canada	Discuss possible requirements for effluent quality and effluent release from Project Eider Rock.	▪ Fisheries and Oceans Canada ▪ Environment Canada - Atlantic Region ▪ Transport Canada- Atlantic Region ▪ New Brunswick Department of Environment (Project Assessment and Approvals Branch)
November 1, 2007	NB Department of Environment	Review draft Terms of Reference.	▪ NB Department of Environment (Project Assessment and Approvals Branch)
November 29, 2007	NB Department of Environment	Discuss Socio-Economic components of EIA report.	▪ NB Department of Environment (Project Assessment and Approvals Branch)
December 5, 2007	NB Department of Environment/ Canadian Environmental Assessment Agency	Present the path forward in terms of expected process for EIA review.	▪ NB Department of Environment (Project Assessment and Approvals Branch) ▪ Canadian Environmental Assessment Agency – Atlantic
January 11, 2008	NB Department of Environment	Present the Terms of Reference to the Technical Review Committee.	▪ Canadian Environmental Assessment New Brunswick Agency – Atlantic ▪ NB Department of Environment (Project Assessment and Approvals Branch, Saint John Regional Office, Sciences and Reporting Branch, Climate Change Section) ▪ New Brunswick Department of Health ▪ Transport Canada – Atlantic Region ▪ New Brunswick Department of Natural Resources ▪ New Brunswick Aboriginal Affairs Secretariat ▪ New Brunswick Department of Wellness, Culture and Sport ▪ Environment Canada – Atlantic region ▪ Health Canada ▪ City of Saint John ▪ New Brunswick Department of Public Safety
January 18, 2008	NB Department of Environment	Discuss air quality concerns of NBENV regarding the Terms of Reference.	▪ New Brunswick Department of Environment (Project Assessment and Approvals Branch, Sciences and Reporting Branch)
March 19, 2008	NB Department of Environment	Discuss air quality concerns of NBENV regarding the Terms of Reference.	▪ New Brunswick Department of Environment (Project Assessment and Approvals Branch, Sciences and Reporting Branch)

Table 4.3 Summary of Meetings Held with Federal and Provincial Government Departments and Agencies

Meeting Date	Lead Agency	Purpose of Meeting	Departments and Agencies in Attendance
October 28-30, 2008	NB Department of Environment/ Canadian Environmental Assessment Agency	Present and discuss the Preliminary Draft EIA Report to the Technical Review Committee and federal Responsible Authorities	▪ Canadian Environmental Assessment New Brunswick Agency – Atlantic ▪ NB Department of Environment (Project Assessment and Approvals Branch, Saint John Regional Office, Sciences and Reporting Branch) ▪ New Brunswick Department of Health ▪ Transport Canada – Atlantic Region ▪ New Brunswick Department of Natural Resources ▪ New Brunswick Aboriginal Affairs Secretariat ▪ New Brunswick Department of Wellness, Culture and Sport ▪ Environment Canada – Atlantic region ▪ Health Canada ▪ City of Saint John ▪ New Brunswick Department of Public Safety
December 17, 2008	NB Department of Environment	Discuss issues related to air quality and human health and ecological risk assessment	▪ Canadian Environmental Assessment New Brunswick Agency – Atlantic ▪ NB Department of Environment (Project Assessment and Approvals Branch, Sciences and Reporting Branch) ▪ New Brunswick Department of Health ▪ Environment Canada – Atlantic region ▪ Health Canada
February 17, 2009	NB Department of Wellness, Culture and Sport	Review of potential for the presence of shipwreck sites.	▪ NB Department of Wellness, Culture and Sport (Archaeological Services, Heritage Branch)
February 19, 2009	NB Department of Environment	Discuss the results of the Air Quality Technical Study	▪ NB Department of Environment (Project Assessment and Approvals Branch, Sciences and Reporting Branch, Climate Change section) ▪ New Brunswick Department of Health ▪ Environment Canada – Atlantic region ▪ Health Canada ▪ Natural Resources Canada ▪ Transport Canada
February 25, 2009	NB Department of Wellness, Culture and Sport	Review of proposed changes to Chapter 19 of the EIA with respect to built heritage resources.	▪ NB Department of Wellness, Culture and Sport (Historic Places Section, Heritage Branch)
March 6, 2009	NB Department of Health	Discuss methodologies used in the Human Health and Ecological Risk Assessment	▪ Health Canada ▪ NB Department of Health ▪ NB Department of Environment
March 18, 2009	NB Department of Environment	Discuss Climate Change Action Plan and GHG emissions from Project Eider Rock	▪ NB Department of Environment (Climate Change Secretariat)

In addition, weekly teleconference calls were conducted with the NBENV EIA project manager and the CEA Agency representative to review progress and plans for delivery and review of the EIA Report and to discuss any issues requiring resolution.

4.3.2 First Nations Engagement

The Proponent, assisted by Jacques Whitford and Aboriginal Resource Consultants (ARC, a New Brunswick Aboriginal firm specializing in Aboriginal relations), initiated a thorough Aboriginal engagement program with the Mi'kmaq, Maliseet, and Passamaquoddy First Nation peoples of New Brunswick, as well as with the Aboriginal umbrella organizations that represent these communities (Union of New Brunswick Indians, Mawiw Council, and New Brunswick Aboriginal Peoples' Council).

Its objectives were to:

- Share information about the Project;
- Establish how Aboriginal leadership wished to have the Proponent engage their respective communities;
- Gather information on the current use of land and resources for traditional purposes by Aboriginal persons in the vicinity of the Project as it relates to the EIA/EA;
- Assist in the identification of potential issues and concerns from Aboriginal persons in relation to the Project; and
- Facilitate any formal consultation activities with First Nations that may be conducted by the provincial and/or federal Crown at some time during the EIA/EA.

Participants were asked to share their comments, questions, and concerns about the Project in general, and specifically about traditional activities (*e.g.,* hunting, fishing, gathering, and/or spiritual/ceremonial activities) currently ongoing in the vicinity of the Project and specifically at the Project location.

4.3.2.1 Engagement Activities Conducted

The Chiefs of the 15 Maliseet and Mi'kmaq First Nations communities of New Brunswick were initially contacted by telephone or in person to inform them of the Project and the EIA/EA. Meetings were held individually with all Chiefs to brief them regarding the Project, and to determine if they desired more detailed information and in what format. Several Chiefs indicated a desire for more information to be provided in the form of an open house in their community. Others requested a briefing of the Chief and Council, and others simply wanted to be kept informed via mail, or not at all.

Permission was requested of the Chiefs to visit their communities in order to gather information about any traditional activities currently carried out. Chiefs were also asked of their personal knowledge of the prevalence of traditional activities in the vicinity of the Project. If a Chief was aware of any individuals they felt might be able to provide information relevant to the EIA/EA, he or she was asked to provide contact information for this person so that they could be interviewed.

In addition to the individual briefings and discussions with the leadership, presentations were made to Aboriginal umbrella organizations that represent the interests of Aboriginal persons in New Brunswick, either living on or off reserve. Meetings were held with: the Natural Resource Committee of the Union of New Brunswick Indians (June 19, 2007), the Chiefs of the Union of New Brunswick Indians (October 17, 2007), the Chiefs of the Mawiw Council (April 24, 2008), and the New Brunswick Aboriginal Peoples' Council (January 23, 2009).

Following initial discussions with the Chiefs, open houses were held in the First Nations communities that desired such an event. The locations, dates, and approximate number of attendees of the First Nations open houses are provided in Table 4.4.

Table 4.4 Locations, Dates, and Attendees of First Nations Open Houses

First Nation	Date of Open House	Approximate Number of Attendees
Metepenagiag (Red Bank) First Nation	February 12, 2008	12
Esgenoopetitj (Burnt Church) First Nation	February 12, 2008	17
Oromocto First Nation	March 11, 2008	4
Woodstock First Nation	March 12, 2008	7
Indian Island First Nation	March 18, 2008	12
Elsipogtog (Big Cove) First Nation	March 18, 2008	40
Eel River Bar First Nation	March 25, 2008	10
Tobique First Nation	March 26, 2008	13
Kingsclear First Nation	June 3, 2008	9
Eel Ground First Nation	February 16, 2009	10

Additionally, a presentation was provided to Chief Hugh Agaki of the Passamaquoddy First Nation on April 14, 2008.

An open house was also scheduled for the Madawaska First Nation on March 26, 2008, but it was cancelled by the Chief while the Study Team was in transit to the open house. It was not possible to coordinate a suitable date for an open house at the Pabineau First Nation (originally scheduled for March 25, 2008); the Chief of this community has since indicated that an open house is no longer required but the community would like to be kept informed of progress regarding the Project.

It is noted that the Chiefs of the Fort Folly, Buctouche, and St. Mary's First Nations did not wish to be further engaged in respect of the Project.

Interviews were conducted with community elders and other members of the First Nations communities potentially having information relevant to the Project. In addition to these engagement activities, a review of available information concerning current uses of land and resources for traditional purposes was conducted.

4.3.2.2 Summary of Key Issues Raised by First Nations and Aboriginal Persons

A summary of the key issues raised by First Nations and Aboriginal persons during the engagement activities conducted is provided in Table 4.5. Predominantly, First Nations participants indicated a strong desire to participate in economic benefits associated with the Project (*e.g.,* employment, contracting opportunities), and many indicated a desire that the Proponent facilitate training opportunities for their community members to assist them in participating in the Project. Other common themes raised during engagement activities included the need for Crown consultation and accommodation in respect of the Project; the desire for Aboriginal inclusion policies or set aside policies; traditional use of land (though none specifically confirmed at the Project location); and potential interactions with the Aboriginal fishery in the Bay of Fundy.

Table 4.5 Summary of Key Issues Raised During Aboriginal Engagement Activities

Key Issues Raised During Aboriginal Engagement Activities
▪ Employment and contracting opportunities for First Nations people and firms as part of the Project.
▪ Training opportunities for First Nations people to assist them in participating in employment opportunities offered by the Project.

Table 4.5 Summary of Key Issues Raised During Aboriginal Engagement Activities

Key Issues Raised During Aboriginal Engagement Activities
▪ Aboriginal and treaty rights, and unextinguished land claims in New Brunswick.
▪ Need for the federal and provincial governments to consult with, and accommodate, First Nations people in respect of the Project.
▪ Concerns about potential interactions between the Project (particularly increased ship traffic) and the Aboriginal fishery (both the commercial fishery and the food fishery in the Bay of Fundy).
▪ Consideration of Aboriginal Inclusion Policies, set asides, and Impact-Benefit Agreements in respect of the Project.
▪ Concerns about heritage or archaeological resources, particularly spiritual sites or burial grounds.
▪ Historical use of land and resources for traditional purposes (hunting, fishing, trapping, gathering, spiritual, or subsistence).
▪ First Nations participation in the establishment of traditional and ecological knowledge regarding the Project.
▪ Decreased accessibility to lands affected by Project (although no current use identified).
▪ Consultation vs. information exchange/engagement.
▪ Benefits to Aboriginal communities.

4.3.2.3 Current Use of Land and Resources, and Traditional Ecological Knowledge

Based on the results of the Aboriginal engagement program and specifically as an outcome of interviews conducted with leadership, elders, and other key Aboriginal individuals, the current use of land and resources for traditional purposes by Aboriginal persons in the vicinity of the Project appears to be largely limited to fishing in the Bay of Fundy (though not specifically at the Project location). The main fishery, both for commercial and food purposes, appears to be lobster fishing in the Bay of Fundy, with a limited amount of scallop fishing in the Bay of Fundy. No commercial fishing activities are apparently conducted in the marine waters near the Project by Aboriginal fishermen (Jacques Whitford and ARC 2008).

There does not appear to be any current use of land or land-based resources in the vicinity of the Project, although this area may have been used by Aboriginal people in the past, possibly as far back as pre-contact times.

Further information will be provided in Chapter 18.

4.3.3 Public and Stakeholder Engagement

The public has shown considerable interest in the Project, and throughout the EIA/EA the Proponent has considered it essential to actively engage members of the public, including stakeholders, to ensure the proper scoping for a thorough EIA/EA.

The public and stakeholder consultation and engagement activities conducted to date regarding the EIA/EA are discussed briefly below.

4.3.3.1 Public Engagement Tools

A variety of tools were used for conducting the public consultation and engagement program. These tools included but were not limited to:

- Project information brochures;
- Project website;
- Toll-free information line;

- Direct mailings;
- Door-to-door consultation;
- Open houses;
- Stakeholder meetings and workshops; and
- Targeted consultation with specific individuals/groups.

The Project website, www.irvingoil.com/company/erock.asp, was continually updated with information, and various documents have been made available for download. When a Project-related document was released to the public, it is also made available on the Project website. Notices of public engagement events were also posted here, as are key Technical Studies carried out as background information for the EIA/EA. The website also contained a feedback option.

A toll-free information line was established to receive calls from the public and to respond to inquiries. Calls were logged and appropriate personnel were identified to respond to the caller when necessary.

4.3.3.1.1 Open Houses

Three informational open houses have been held to date to share information about the Project with the public at various stages of the EIA/EA. All open houses were held at the Saint John campus of the New Brunswick Community College (NBCC) located on Grandview Avenue, and followed the same general format. Booths, consisting of informational poster boards and handouts, were staffed by members of the Project team having expertise in the topic.

4.3.3.1.1.1 Open House #1 – February 2007

The first open house was held on February 16 and 17, 2007 and focused on the EIA Registration/Project Description, which had been recently submitted to regulatory agencies. Project team members from both the Proponent and Jacques Whitford staffed the event and were available to answer questions from the more than 400 members of the public in attendance. To ensure that all issues were captured and could be responded to as appropriate, all Project team members present at the event recorded comments, questions, and concerns from members of the public. Attendees were also asked to complete a feedback form before leaving the event.

4.3.3.1.1.2 Open House #2 – December 2007

The second open house was held on December 7, 2007. This open house focused on providing information to the public regarding the draft Terms of Reference for the Project that were submitted to regulatory agencies and the public for review on November 26, 2007. Technical experts and Team Leaders from the Study Team were present at the event to answer questions relating to the proposed work plans, as described in the draft Terms of Reference. Approximately 150 people attended the event.

As with the first open house, Project Team members staffing the event from both the Proponent and Jacques Whitford recorded comments, questions, and issues from those in attendance, and participants were asked to complete a feedback form prior to leaving the event.

4.3.3.1.1.3 Open House #3 – November 2008

The third open house was held on November 27, 2008 and focused on presenting the results of baseline Technical Studies, sharing the more details on the proposed locations of the Project-related facilities, and to obtain input from the public on the potential corridors for the linear facilities for the Project. Approximately 200 members of the public attended the event. In addition to baseline Technical Studies, the Proponent presented updated Project information, including an updated Project schedule (Phased Approach) and visual representations of the Project's facilities from various viewpoints. Baseline Technical Studies presented at the open house included the following:

- Freshwater Aquatic Environment Technical Study;
- Terrestrial and Wetland Environment Technical Study;
- Marine Biophysical Environment Technical Study;
- Surface Water and Groundwater Resources Technical Study;
- Baseline Soil and Biota Sampling Technical Study;
- Baseline Public Health Assessment Technical Study (EOH+Plus 2008");
- Heritage and Archaeological Resources Technical Study; and
- Socio-Economic Environment Technical Study.

These technical studies were subsequently released to the public on the Eider Rock website. In addition to the above, a booth at the Open House was dedicated to the Linear Facilities Corridor Selection Study. Open House attendees were shown maps of the Linear Facilities Corridor Study Area and a list of the initial constraints to be used on the selection of a corridor. Feedback was sought from members of public, and especially those living within the Linear Facilities Corridor Study Area, as to their preferred location for linear facilities. This feedback was documented and included in the Linear Facilities Corridor Selection Technical Study (Jacques Whitford 2009).

4.3.3.1.1.4 Key Issues Raised at Open Houses

The majority of concerns recorded from people in attendance at the first open house in February 2007 focused on the EIA Registration/Project Description, can be categorized as representing one of a few general categories: environmental concerns, potential environmental effects on adjacent or nearby properties, and general residual concerns regarding development in general and specifically with past projects in the region (Jacques Whitford 2007b). The main environmental concerns included the Project's effects on local air quality, including concerns over potential health risks, and unpleasant odours; excessive light and noise associated with the Project; and degradation or depletion of the local water table and resultant environmental effects on private potable wells. All comments received were considered, and when necessary, the proposed scope of the EIA/EA was amended. Light emissions, as an example, were of concern to several members of the public. As a result of this public concern, the extent to which light emissions were to be modelled and assessed as part of the EIA/EA was increased.

At the second open house relating to the Terms of Reference in December 2007, comments from members of the public generally were with regard to neighbour issues, such as future land use and property value (Jacques Whitford 2008i). Several members of the public were also curious to learn the results of field investigations that had been conducted or were being conducted in support of the

EIA/EA. Other members of the public in attendance were students or trades people wanting more information about Project training and employment opportunities.

The attendees of the third open house were largely interested in the new information on the Project being provided, particularly the specific location of Project facilities and the visual representations of the Project. General interest in the baseline technical studies presented was expressed, and a strong desire was expressed by some members for more information being made available in the near future (in particular, the EIA report itself). Several attendees provided comments on the linear facilities corridor selection process, and provided helpful information in relation to constraints to be used for the corridor selection (in particular, the need to avoid encroachment of residential areas and to avoid bisecting private properties).

Overall, a summary of key issues and concerns raised by the public during the open houses is provided in Table 4.6.

Table 4.6 Summary of Key Issues and Concerns Raised by the Public During Open Houses

Valued Environmental Component (VEC)	Key Issues and Concerns Raised by the Public During Open Houses
Atmospheric Environment	▪ How will air quality be affected? ▪ Will there be a smell? ▪ What will the carbon dioxide emissions be? ▪ How will the new refinery contribute to climate change? ▪ How much noise will the new refinery make, and from how far away will it be heard? ▪ How much light will be created by the new refinery?
Water Resources	▪ Will local groundwater be affected? ▪ What will the water source be for the new refinery?
Public Health and Safety	▪ Will the new refinery contribute to poor health in the area? ▪ Will increased marine tanker traffic pose a safety risk? ▪ How will security concerns be addressed? ▪ Will the new facilities pose a threat due to terrorism?
Freshwater Environment	▪ What will the water supply be for the new refinery? ▪ Will a watercourse in the area be dammed off? ▪ Will there be environmental effects caused by run-off of surface water?
Terrestrial Environment	▪ There is a large, migratory moose population in the Project study area. ▪ What type of habitat modeling is being conducted?
Wetland Environment	▪ What compensation will there be for loss of wetlands?
Marine Environment	▪ Will the Project pose an increased risk to Right Whales in the Bay of Fundy? ▪ Will the increased tanker traffic pose a risk to marine mammals? ▪ What size of marine tankers will be used? ▪ What the marine terminal facility look like? ▪ By how much will the tanker traffic increase? Can the Saint John Harbour accommodate the increase?
Commercial Fisheries	▪ What implications might the Project have on fishermen fishing out of Mispec?
Labour and Economy	▪ The Project will be great for the local economy. ▪ Who will be hired and when? ▪ What types of jobs will be available? ▪ The Project will bring people back to New Brunswick.
Community Services and Infrastructure	▪ Are there enough seats in the colleges and universities to train all of the workers?
Land Use	▪ Will the proposed Project components be visible from neighbouring residences? ▪ Will the activities of local sporting and fishing clubs be affected? ▪ Linear facilities should avoid bisecting private properties, and should be located as far as possible from residences.
Current Use of Land and Resources for Traditional Purposes by Aboriginal Persons	▪ Why are discussions with First Nations being conducted? ▪ Are there known areas within the study area where there is current use of land or resources for traditional purposes by Aboriginal persons?
Heritage and Archaeological Resources	▪ How will the study of archaeology resources be conducted?

Table 4.6 Summary of Key Issues and Concerns Raised by the Public During Open Houses

Valued Environmental Component (VEC)	Key Issues and Concerns Raised by the Public During Open Houses
Land-based Transportation	▪ Where will a new rail spur be located?
Effects of the Environment on the Project	▪ Is the possibility of an earthquake assessed?

4.3.3.1.2 Workshops

Two technical workshops have been held to date. The first was held on May 26, 2007 and focused on early work plans for the Air Quality and Human Health and Ecological Risk Assessment (HHERA) studies undertaken as components of the EIA/EA of the Project. The second was held on January 12, 2008 in relation to the draft Terms of Reference. Both workshops were hosted by Jacques Whitford.

4.3.3.1.2.1 Air Quality and Human Health and Ecological Risk Assessment Workshop – May 2007

Stakeholders with a particular technical interest in air quality issues, human health issues, or the air quality and HHERA studies conducted in support the EIA/EA of the Project were invited to the Air Quality and Human Health and Ecological Risk Assessment (HHERA) workshop in May 2007. A total of 13 stakeholder groups were invited to attend this workshop, including the Saint John Citizens' Coalition for Clean Air, the New Brunswick Lung Association, the Conservation Council of New Brunswick, the Refinery Community Liaison Committee, the Canaport LNG Community Environmental Liaison Committee, several residents from the Red Head Area, academia (University of New Brunswick Saint John and NBCC Saint John), and others.

Study Team leads and experts were present to present technical information and work plans for the Air Quality and HHERA studies to the stakeholders present, to obtain feedback from stakeholders on these work plans, and to assist stakeholders in understanding the results of the study once it is finalized.

4.3.3.1.2.2 Terms of Reference Workshop – January 2008

The Terms of Reference Workshop held in January 2008 was intended to provide additional and specific details on the planned work to be conducted as part of the EIA/EA for the Project, and was to supplement the information provided to the public at the second open house held in December 2007 (Jacques Whitford 2008i). This second workshop provided detailed work plans on the methodologies for completing the EIA/EA of the Project to meet the requirements of the Final Guidelines, as well as the requirements of the EA Track Report and Scoping Document issued by the federal Responsible Authorities for the EA under *CEAA*.

The Terms of Reference Workshop was led by Jacques Whitford, as authors of the Terms of Reference, with participation from the Proponent and government representatives. Study Team leaders and experts from Jacques Whitford were present at the workshop to present their work plans and to answer questions from those in attendance. The full-day, plenary session consisted of presentations by Jacques Whitford, and questions and answers. Questions and comments about the Project as a whole were also answered and recorded.

The workshop was open to the public (by registration). In addition to the Study Team, several members of the public, environmental non-governmental organizations (ENGOs), federal and provincial civil servants, and Irving Oil representatives attended the workshop. Approximately 50 individuals

attended the workshop, in addition to Jacques Whitford and Irving Oil staff present. Several environmental non-governmental organizations (ENGOs) and several federal and provincial government agencies were also represented.

4.3.3.1.2.2.1 Follow-up Activities from January 2008 Terms of Reference Workshop

Follow up activities from the workshop included:

- The preparation of a detailed response to the comments and questions raised at the workshop as well as those received through written submissions on the Terms of Reference;
- Notification of workshop participants via email about the publication of the second summary report on public and stakeholder engagement activities (including responses to comments on Terms of Reference), as well as mailing a copy of the summary report to participants that did not have an email address;
- Posting of the second summary report on public and stakeholder engagement activities on the Eider Rock website; and
- Preparation of the final Terms of Reference, posting them on the website, and notifying workshop participants regarding the publication of the final Terms of Reference.

4.3.3.1.2.3 Key Issues Raised from Workshops

The major topics of discussion at the Air Quality and HHERA Workshop in May 2007 included an overview of the Project, the atmospheric environment study, the ecological risk assessment, the human health risk assessment, and the baseline health status assessment. Topics not directly related to air quality or human health and ecological risk assessment were also discussed. Questions, comments, and concerns were recorded for response or for inclusion into the work plans for these studies, as appropriate. Comments and questions at the Air Quality and HHERA Workshop were generally concerning the proposed work plans for the studies.

At the Terms of Reference Workshop in January 2008, the comments and questions asked by those in attendance were mainly about: the environmental assessment process in general; neighbour issues such as lighting, noise, and health and environmental concerns; air quality studies and modelling; and commercial fisheries (Jacques Whitford 2008i).

4.3.3.1.3 Key Stakeholder Engagement

Meetings have been held with a wide variety of stakeholders and community members concerning the Project. The goal of these meetings, a list of which is shown in Table 4.7, was to share information about the Project and to collect comments, questions and concerns from those in attendance.

Table 4.7 Summary of Key Stakeholder Meetings

Date of Meeting	Stakeholders or Group
March 14, 2007	Irving Oil Refinery Community Liaison Committee.
March 15, 2007	Watershed and Water Interest Groups: ▪ Hammond River Angling Association; ▪ Little River Reservoir Association; ▪ Balls Lake Fishing Club; ▪ Ducks Unlimited; ▪ Beaver Lake Sporting Club; ▪ Saint John River Society; and ▪ Atlantic Salmon Federation.
March 16, 2007	Public Health Unit, New Brunswick Department of Health.
March 19, 2007	The Lung Association of New Brunswick.
March 22, 2007	ACAP Saint John (Board meeting).
March 27, 2007	Saint John Citizens' Coalition for Clean Air.
March 28, 2007	Business and Private Sector Groups: ▪ Uptown Saint John; ▪ Enterprise Saint John; ▪ Atlantica Centre for Energy; ▪ Saint John Board of Trade; ▪ New Brunswick Environment Industry Association; ▪ Saint John Airport; and ▪ Vision 2015 Committee.
March 28, 2007	Saint John Naturalists' Club Inc.
April 24, 2007	Local Mayors in Attendance: ▪ City of Saint John (Deputy Mayor); ▪ Town of Quispamsis; ▪ Town of Rothesay; and ▪ Town of Hampton. Invited but did not attend: ▪ City of Saint John (Mayor); ▪ Town of Grand Bay-Westfield; and ▪ Village of St. Martins.
Early January 2008	Discussion with the Irving Oil Refinery Community Liaison Committee redrafting the draft Terms of Reference, recent Open House, and planned Terms of Reference workshop.

Additionally, although not reported herein, issues-specific meetings with stakeholders were conducted for the purpose of gathering information on existing conditions with respect to various VECs to be assessed in the EIA/EA. These included, but were not limited to, interviews and meetings with:

- Local business groups, to obtain information about existing labour and economic conditions, as well as housing and accommodations;
- Public health and social services organizations (including several NGOs), to gather information on existing emergency, health, education, recreation, and outreach programs;
- Commercial fishermen, including the Fundy North Fishermens' Association (FNFA) and several Mispec-based fishermen, to obtain information about existing commercial fisheries conditions and potential concerns;
- Regulatory agencies and transportation agencies (*e.g.,* Transport Canada, Saint John Airport Authority, Saint John Port Authority), to assess existing conditions on local capacities of the airport and port facilities, and to obtain information on existing vessel traffic to the Port;
- Discussions with marine mammal stakeholders regarding potential environmental effects on whales and other marine mammals; and

- Various other stakeholders and groups in Saint John.

Where relevant, the issues and concerns identified by each of these groups are reported in Chapters 7 to 22 inclusive. It should be noted that attempts were also made to engage other environmental stakeholders such as the Conservation Council of New Brunswick and the World Wildlife Fund, but they declined such requests for meetings.

4.3.3.1.4 Red Head Resident Engagement

Neighbours to the Project may have unique concerns and questions regarding the Project. For this reason, the Proponent has initiated targeted consultation with Red Head residents.

Information packages are sent to Red Head area residents at key stages of the Project development and at times when new information needs to be shared. For the purposes of the Project, this includes approximately 1,300 homes located: in Harbourview and Debly subdivisions; in Anthonys Cove; along Red Head Road to Cape Spencer, including all side roads in between; along Grandview Avenue; along Old Black River Road; and along all roads in the area of Old Black River Road. A summary of the information provided to Red Head Residents to date is provided in Table 4.8.

Table 4.8 Information Provided to Red Head Residents

Date	Summary
October 2006	A letter was sent the day following Irving Oil's announcement that it was exploring the possibility of building a second oil refinery in Saint John. This letter reiterated this announcement to Red Head residents, and communicated to them that Irving Oil will continue to provide information. The toll-free Project information telephone number was also included with this letter.
November 2006	A letter was sent providing an update to Red Head residents on the status of Project Eider Rock, and that a Red Head liaison team had been established to work with the community, keep them informed and answer questions, where possible.
January 2007	Project Eider Rock was submitted to the provincial government for Registration under the EIA Regulation and filed with the federal government under *CEAA* on this date. A letter was sent to Red Head residents informing them of this, updating Project information and briefly outlining the expected regulatory process. Included with the letter was an information package that contained the media release about the filing, and a summary of the EIA Registration/Project Description document. An invitation to the first open house was also included.
February 2007	A letter was sent inviting residents to attend the first open house on February 16 and 17, 2007 at the NBCC in Saint John.
March 2007	An information package was sent as a follow-up to the open house. Included was a list of commonly asked questions from the open house and a copy of the environmental permitting posters from the open house. These posters explained the expected permitting process for Project Eider Rock, both at the provincial government and federal government levels.
April 2007	An information package was sent to provide an updated map of the Project Eider Rock Study Area, which had changed since the Project was registered. This information package also informed the residents of the release of the Draft EIA Guidelines from the New Brunswick Department of the Environment, and the availability of these for viewing both online and at several locations in Red Head and the greater Saint John area.
May 2007	A letter was sent advising residents of drilling that would occur in the area to test for soil conditions in the area behind Proud Road and Old Black River Road, and behind Red Head Road, just before the Mispec Bridge.
August 2007	A letter was sent advising residents of upcoming environmental field surveys and studies that would be occurring in the Red Head and surrounding areas.
November 2007	A letter was sent advising residents of the upcoming open house to be held in December with a focus on the draft Terms of Reference for the Project. Information about providing comments and feedback on the Terms of Reference was also included.
December 2007	A letter was sent to residents as a follow up to the Terms of Reference Open House and a notification of, and invitation to attend, the Terms of Reference Workshop scheduled for January.

Table 4.8 Information Provided to Red Head Residents

Date	Summary
March 2008	An information package about the Proponent's Memorandum of Understanding with BP to work together on the Project was sent to residents. Included with the letter were the press announcement and a fact sheet.
November 2008	A letter was sent advising residents of, and inviting them to, the upcoming open house to be held November 27 with a focus on sharing the results of baseline Technical Studies, providing updated Project information, and seeking feedback on the Linear Facilities Corridor Route Selection Study.
December 2008	A letter and a Project information brochure was sent to residents as a follow-up to the open house, and to advise residents that baseline Technical Studies could be downloaded from the Project website.

In addition to the correspondence described above, the Proponent has initiated a door-to-door consultation program with Red Head residents, specifically to address property and land use concerns. Representatives from the Proponent have visited homes to speak as required with residents, and to ensure they have had the opportunity to have questions answered and to raise their concerns.

4.3.4 Overall Summary of Issues and Concerns

Throughout the public, stakeholder, and First Nations engagement programs, there were several issues that were brought forth that resulted in changes to the work plans. A summary of these key comments and response or action taken to address the comment is provided in Table 4.9.

Table 4.9 Summary of Key Comments and Issues Received and Response/Action Taken

Key Comment or Issue Raised	Response and/or Action Taken
The area to be modelled and assessed as part of the air quality study should be expanded. The 50 km x 30 km area, centered on the Project location, does not seem to be large enough to encompass all Project-related emissions.	The air quality modelling boundaries have been extended to 70 km x 45 km to accommodate this concern. The boundaries of the air quality study area would have been expanded beyond these distances only if the modelling results had shown that it was necessary.
Light emissions were expressed as a concern of several individuals. The distance that light from the Project will be visible, and how bright the light will be.	Light studies were conducted to determine the light emission from the Project, and the views of the Project from several vantage points. Lighting was included in the visual impact study and is included in the Land Use VEC of this EIA report.
Not all potential air contaminants have regulatory limits, and some regulatory limits are not stringent enough.	The order of preference will be to use New Brunswick standards and Canada-Wide Standards first. If standards or objectives for a particular compound of concern do not exist from these jurisdictions, standards or objectives in other jurisdictions may be used, if they are appropriate for the application.
Concern has been expressed about any potential health risks to neighbours of the Project and to residents in the Saint John area as a whole.	A Baseline Public Health Assessment Technical Study was completed to determine pre-Project health conditions in Saint John. The Human Health and Risk Assessment will evaluate the most sensitive and highly exposed individuals to ensure a conservative estimate of any potential health risk is determined.
Data collected to support the EIA/EA of the Project should be released to the public. Baseline and technical studies should be released to the public, preferably before the release of the EIA Report.	Under current plan, baseline and technical studies will be released to the public prior to or in concert with the release of the EIA Report. Data gathered to support the EIA/EA is contained within the baseline and technical studies.

Table 4.9 Summary of Key Comments and Issues Received and Response/Action Taken

Key Comment or Issue Raised	Response and/or Action Taken
Several individuals expressed concern that future projects are being planned to accompany the Project, but that these projects are not being announced to avoid the EIA/EA process. If a petrochemical plant or other industrial facility is planned for the Red Head area, this should be announced now.	The current focus of development in the Red Head area is on Eider Rock, and that discussion of other future projects in the area that may or may not be considered by the Proponent or others at some undefined time in the future is not possible at this time. The Proponent has bought approximately 4,000 acres of land. The two main reasons this has been purchased are for green space (buffer space) and for possible future development, including Eider Rock. Irving Oil is focused on Eider Rock at the present time, but if additional projects were planned in the future, that information would be shared with the public, and they would have to be assessed under the EIA process like any other project.
There have been reports of salmon in the Mispec River and its tributaries.	It had long been thought that the Inner Bay of Fundy (iBoF) Atlantic salmon population was extirpated in the Mispec River system. Because of public concern about the possible presence of salmon in this river, a field program was initiated to confirm salmon presence. Atlantic salmon were found in this river system.
If the construction and/or operation of the marine terminal will require dredging, there is a possibility that fish habitat will be affected? Any dredging activity planned, whether during construction or in the future, should be included in the EIA/EA.	At this time, it is expected that there will be the need for some limited dredging during construction (side casting), but navigational dredging is not likely to be required. Any potential environmental effects associated with this dredging have been assessed and are included in this EIA report.
Damages to, and loss of, lobster fishing gear is a concern to local lobster fishermen. Gear loss can occur when vessels stream in areas where traps are set and become entangled with marker buoys and lines, disconnecting the marker buoy from the trap.	Lobster fishing gear loss was assessed and is included in the EIA report in Chapter 23.

4.4 Selection of Valued Environmental Components

Based on the requirements of the Final Guidelines and the Environmental Assessment Track Report, and in response to the issues and comments received from the public, stakeholders, First Nations, and regulatory agencies, 15 VECs have been selected for conducting the environmental effects assessment of the Project. The following VECs were selected for this EIA/EA:

- Atmospheric Environment (found in Chapter 7);
- Water Resources (found in Chapter 8);
- Health and Safety (found in Chapter 9);
- Freshwater Aquatic Environment (found in Chapter 10);
- Terrestrial Environment (found in Chapter 11);
- Wetland Environment (found in Chapter 12);
- Marine Environment (found in Chapter 13);
- Commercial Fisheries (found in Chapter 14);
- Labour and Economy (found in Chapter 15);
- Community Services and Infrastructure (found in Chapter 16);
- Land Use (found in Chapter 17);

- Current Use of Land and Resources for Traditional Purposes by Aboriginal Persons (found in Chapter 18);
- Heritage and Archaeological Resources (found in Chapter 19);
- Land-Based Transportation (found in Chapter 20); and
- Marine Vessel Traffic and Navigation (found in Chapter 21).

Additionally, the Effects of the Environment on the Project (Chapter 22) have also been selected for assessment in consideration of the nature and location of the Project, the changing global climate, and the potential expenditures that could result from an adverse effect of the environment on the Project.

Finally, in recognition of public concern and the importance of a defensible and comprehensive assessment of accidents, malfunctions, and unplanned events that could occur during the various phases of the Project, a separate chapter on Potential Accidents, Malfunctions, and Unplanned Events (Chapter 23) has been prepared which considers the potential environmental effects of each applicable accident, malfunction or unplanned event on all VECs listed above.