



Environment and
Climate Change Canada

Environnement et
Changement climatique Canada

Environmental Protection Operations Directorate
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ECCC File: 6300 000 039/001
NIRB File: 17XN011

May 4, 2018

Via email to: info@nirb.ca

Kellie Gillard
Manager, Project Monitoring
Nunavut Impact Review Board
P.O. Box 1360
Cambridge Bay, NU X0B 0C0

Dear Ms. Gillard:

RE: 17XN011 – Kitikmeot Inuit Association– Grays Bay Road and Port – Draft Scope and Environmental Impact Statement Guidelines

Environment and Climate Change Canada (ECCC) has conducted a preliminary review of the information submitted to the Nunavut Impact Review Board (NIRB) regarding the above-mentioned Draft Scope and Environmental Impact Statement Guidelines of the Grays Bay Road and Port Project (the Project). ECCC's review is based on our mandate, in the context of the *Canadian Environmental Protection Act*, the pollution prevention provisions of the *Fisheries Act*, the *Migratory Birds Convention Act*, and the *Species at Risk Act*.

Please find ECCC's recommendations in the following attached Appendices.

Should you require further information, please do not hesitate to contact Gabriel Bernard-Lacaille at (867) 669-4746 or Gabriel.Bernard-Lacaille@canada.ca.

Sincerely,



Susanne Forbrich
Regional Director

Attachment(s):

Appendix 1 Environment and Climate Change Canada's Draft Scope Recommendations
Appendix 2. Environment and Climate Change Canada's EIS Guidelines Recommendations

cc: ECCC Review Team
Georgina Williston, Head, Environmental Assessment North (NT and NU)

Canada

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Appendix 1. Environment and Climate Change Canada's Draft Scope Recommendations

Topic	Section and/or page number	Comment	Recommendation (if applicable)
Measures to avoid and mitigate adverse ecosystemic and socio-economic impacts, including contingency plans	Section 3; page 6	Revisions to existing text are suggested to expand the scope of contingency plans	ECCC recommends the following changes: "These plans shall take into account the appropriate temporal and spatial boundaries for credible worst case scenarios for each accident and malfunction type and are expected to draw upon relevant information from scientific sources, best practices as well as traditional and community knowledge..."

Appendix 2. Environment and Climate Change Canada's EIS Guidelines Recommendations

Topic	Section and/or page number	Comment	Recommendation (if applicable)
Erosion	7.3.2.1 Construction, a) <i>Port Facility:</i>	Revisions to existing text are suggested to expand the scope to address erosion.	ECCC Recommends the following changes: iv. Describe methodology to minimize and control and manage sedimentation and erosion in order to protect shoreline stability;
Dredged material	7.3.2.1 Construction, a) <i>Port Facility:</i>	Revisions to existing text are suggested to expand the scope regarding dredged material.	ECCC Recommends the following addition: Estimate volume and describe characteristics of dredged material;
Erosion	7.3.2.1 Construction, b) <i>Access/Transportation Infrastructure:</i>	Revisions to existing text are suggested to expand the scope to address erosion.	ECCC Recommends the following changes: iv. Describe methodology to minimize and control and manage sedimentation and erosion to protect the shoreline stability of the streams, rivers, and lakes in each watershed of the RSA;
Rock material sampling and analyses	7.3.2.1 Construction, c) <i>Borrow Pits and Quarries:</i>	Revisions to existing text are suggested to expand the scope to address rock material sampling and analyses.	ECCC Recommends the following changes: iii. Outline methods for the prediction and prevention of ML/ARD to be used or that which is currently used in the quarry site selection process. Include a description of rock material sampling and analyses.

Topic	Section and/or page number	Comment	Recommendation (if applicable)
Air Quality	9.1.1.2	Revisions to text are suggested to expand the scope to include acid deposition.	ECCC recommends that the following be added to the bulleted list: “discussion of the Project components and activities which may contribute to the potential for acidic input, and an evaluation of associated effects;”
Water quality baseline	9.1.7 Groundwater and Surface Water Quality <i>9.1.7.1 Baseline Information</i>	Revisions to existing text are suggested to expand the scope regarding water quality baseline.	ECCC Recommends the following changes: c) Describe the physical and chemical characteristics of groundwater and surface water in the LSA. Provide discussion on seasonal variations of water flow and quality. Discussion on chemical characteristics should include seasonal baseline levels of general water quality parameters and contaminants and should be compared to relevant water standards/guidelines with identification of those which are naturally elevated;
Summary statistics	9.1.7 Groundwater and Surface Water Quality <i>9.1.7.1 Baseline Information</i>	Revisions to existing text are suggested to expand the scope to include summary statistics.	ECCC Recommends the following changes: h) Provide the location and description of all on-site groundwater monitoring wells (e.g. well diameter, screen depth, intercepted aquifer unit, etc.). Include all baseline groundwater level data and provide tabular summary statistics;
Changes to water quality	9.1.7 Groundwater and Surface Water Quality <i>9.1.7.2 Impact Assessment</i>	Revisions to existing text are suggested to expand the scope to include changes to water quality.	ECCC Recommends the following changes: b) Provide predicted changes to water quality including increases in contaminants in groundwater and surface water as a result of the Project, specifically identifying any waterbodies used as drinking water sources, for recreational purposes, important local harvesting locations and the fish bearing status of identified waterbodies.

Topic	Section and/or page number	Comment	Recommendation (if applicable)
Contaminant exposure	9.1.9 Aquatic Environment 9.1.9.2 Impact Assessment	Revisions to existing text are suggested to expand the scope to address contaminant exposure.	ECCC Recommends the following changes: I) Provide a quantitative assessment of the ecological risks to aquatic (freshwater and marine) VECs from the potential elevated contaminant exposure and loadings as a result of the Project;
Harmful substances	9.3 Human Health and Environmental Risk Assessment	Revisions to existing text are suggested to expand the scope to address potentially harmful substances.	ECCC Recommends the following changes: The Environmental Risk Assessment is to include: - Predicted sources, quantities and points of release from the project emissions and effluents containing hazardous and/or potentially harmful substances; - Selection process for COPCs; - Identification of pathways to terrestrial and aquatic ecological receptors (VECs); - Identification and characterization of terrestrial and aquatic ecological receptors; - Method used to convert hazardous and potentially harmful substance exposure and intake by the various ecological receptors from the various pathways into an exposure or dose (e.g., conversion factors); and - Criteria used to determine significance of impact (e.g., toxicity reference values,). The Proponent shall include a summary of proposed mitigation measures to prevent or reduce adverse health effects and environmental risks from the project.

Topic	Section and/or page number	Comment	Recommendation (if applicable)
Erosion and sediment control plan		The draft EIS guidelines require that some plans (Road Management Plan, Port Management Plan, Borrow Pits and Quarry Management Plan, Aquatic Effects Management Plan) describe erosion and/or sediment controls, but there is no dedicated plan for ESC.	ECCC recommends adding a plan for erosion and sediment control, which would prevent any potential project related impacts from sediment.
Risk Management and Emergency Response Plan	Section 10.4.1; page 72	Revisions to existing text are suggested to expand the scope of risk management and emergency response.	ECCC recommends the following addition: h) Discuss the constraints resulting from logistics and timeframes for prompt action. Consider the potential distance to an accident or emergency site and possible weather conditions which might cause considerable delays or obstacles. Discuss measures that will be put in place to manage these constraints; including any considerations for having a contract arrangement with a third party oil spill response organization.
Risk Management and Emergency Response Plan	Section 10.4.1; page 72	Revisions to existing text are suggested to expand the scope of risk management and emergency response.	ECCC recommends the following addition: i) Describe the roles of relevant government agencies, Inuit organizations and local communities in the development and application of the plans (if applicable); Describe the reliance on, organization and integration of the Incident Command System (ICS) framework to manage significant environmental emergency events.

Topic	Section and/or page number	Comment	Recommendation (if applicable)
Spill Contingency Plan	Section 10.4.3; page 73	Revisions to existing text are suggested to expand the scope of the Spill Contingency Plan.	ECCC recommends the following addition: i) Provide a description of the training provided to employees to respond to a spill;" including a spill response exercising regime "
Spill Contingency Plan	Section 10.4.3; page 73	Revisions to existing text are suggested to expand the scope of the Spill Contingency Plan.	ECCC recommends the following addition: o) Provide details on a spill response waste management plan including associated on-site storage capacity and off-site disposal.
ARD/ML sampling methodology and analyses	10.4.9 Borrow Pits and Quarry Management Plan	Revisions to existing text are suggested to expand the scope regarding ARD/ML sampling methodology and analyses.	ECCC Recommends the following changes: d) Describe sampling methodology and analyses, and provide results of ARD/ML potential testing for quarried materials and pit walls and discuss associated mitigation measures;
Monitoring study details	10.4.13 Aquatic Effects Management Plan	Revisions to existing text are suggested to expand the scope regarding monitoring study details.	ECCC Recommends the following changes: e) Describe the design of the monitoring study and field and laboratory methodology. Provide information on indicators to be measured, sampling frequency and methods, timing, QA/QC, statistical analyses , spatial extent and Universal Transverse Mercator (UTM) coordinates for each aquatic sampling location;