

Summary of Issues - Moraine Power Generation Project

This document provides a high-level summary of issues submitted to the Impact Assessment Agency of Canada (the Agency) about the Moraine Power Generation Project (the Project) during the comment period on the Summary of the Initial Project Description (IPD), submitted by Moraine Initiatives Ltd. (the Proponent). The issues highlight information that support decision making by the Agency on whether an impact assessment is required under section 16 of the *Impact Assessment Act* and — if an assessment is required — inform the tailoring of planning phase documents. Original submissions are online, on the Canadian Impact Assessment Registry Internet site for the Project (Reference Number 84591).

The Proponent must provide the Agency with their response to the Summary of Issues that details how they intend to address the issues, and the Detailed Project Description. The Detailed Project Description must contain the information from the IPD with new information integrated throughout the main body of the document as appropriate to respond to the issues raised. This will facilitate understanding by assessment participants, including Indigenous groups and public groups, federal authorities, provincial ministries and municipalities.

Accidents and Malfunctions
Need for further information on potential accident and malfunction scenarios that could lead to environmental and human health effects, and the Proponent's capacity to mitigate and address potential effects.
Follow the <i>Canadian Environmental Protection Act, 1999</i> and regulations when developing the emergency preparedness plan.
Acoustic Environment
Recommend an assessment of potential project effects including the location of sensitive receptors (e.g., hospitals, schools, retirement complexes, assisted care homes) and traditional land use when identifying potential project-related acoustic impacts on human health. Recommend establishing sensitive receptor locations in consultation with Indigenous groups.
Clarify noise complaints and resolution procedures, noise attenuation plans, potential mitigation measures and follow-up and monitoring plans.
Alternative Means of Carrying out the Project
Clarify the availability of alternate carbon storage hubs for storage of carbon dioxide captured during project operations.
Alternatives to the Project
Recommend that renewable power generation (wind and solar) be considered as a preferable, reliable alternative to the Project as it would be better suited to meet Canada's goals for net-zero greenhouse gas emissions by 2050.
Atmospheric Environment
Concerns regarding the effects of the Project on air quality, including vehicular traffic, construction, operation, and decommissioning. Recommend using equipment with engines that meet Tier 4 emission standards to assist in mitigating air quality impacts of the Project.
Recommend including the location of sensitive receptors (e.g., hospitals, schools, retirement complexes, assisted care homes) and traditional land use when identifying potential project-related air quality impacts on human health and the potential health effects from short-term increases in contaminant concentrations in ambient air due to project activities.
Need for complete inventory of all potential air pollutants: nitrogen dioxide, sulphur dioxide, dust, particulate matter, carbon monoxide, ozone, volatile organic compounds, polycyclic

aromatic compounds, metals and other substances that may be released (including diesel exhaust emissions), predicted residual effects on air quality from project construction, operations, and maintenance, and an exclusion list of all air pollutants and the justifications for exclusion.
Confirm greenhouse gas emission estimates; the emissions intensity values are different between Table 7.3 and Table 23.1.
Climate Change and Greenhouse Gas Emissions
Concern that the capture rate of 94.32% described in the Initial Project Description does not reflect current technological capabilities of Carbon Capture, Utilization, and Storage units. Need for additional data to understand the predicted emissions reduction anticipated for the Project.
Need for additional information regarding the potential benefits of carbon offsetting and the share of emissions intended for storage and utilization.
Clarify the Project's greenhouse gas emissions (including during construction and decommissioning phases) and contribution to climate change with consideration of the <i>Strategic Assessment of Climate Change</i> and the Government of Canada's long-term goal to achieve net-zero emissions by 2050. Provide a description of the planned mitigation measures, technologies, and best practices to be applied, including measures being considered to reduce the Project's greenhouse gas emissions on an ongoing basis.
Clarification on reduction of emissions due to new technologies (i.e. carbon capture) and clarification that new technologies will not trigger additional project effects.
Describe the Project's resilience to future climate change, and where relevant, how it is considered in project design.
Cumulative Effects
Concerns regarding the Project's contribution to cumulative effects given the density of industrial development within the project area.
Concerns regarding the Project's contribution to cumulative effects to air quality, particularly as a result of project-related increases in traffic volumes, in combination with other industrial activities in the area.
Concerns regarding the Project's contribution to cumulative effects on traditional land use and the health and economic conditions of Indigenous peoples.
Economic and Social Conditions
Concern that the long-term environmental impacts and financial costs of the Project outweigh the short-term benefits.
Clarify the hiring strategy, including permanent employment anticipated, source and quantity of labour, how peak construction workforce will be staffed and how labour shortages and/or accessibility to trained labour were considered, as well as additional information on hiring local workers particularly from Indigenous groups.
Clarify the economic, social and ecological effects as well as employment opportunity effects on communities.
Need for baseline information regarding the local economy, demographics and an assessment of whether the available local labour force will be sufficient to support construction and operation of the Project.
Clarity on anticipated Federal financial support for the Project.
Federal Lands
Need for information about potential effects of the Project on reserve lands, as it relates to effects on current use of lands and resources for traditional purposes and impacts on the exercise of Aboriginal and/or Treaty rights, and associated mitigation measures.
Request a figure and description showing the location of all project components in relation to reserve lands in the proximity to the Project.

Fish and Fish Habitat
Concerns regarding effects on fish and fish habitat through water quality and quantity on water bodies (i.e. Athabasca River) due to project activities (i.e. herbicide usage).
Concerns regarding project effects on fish and fish habitat, including from changes in flows, waterbody or wetland crossings, groundwater draw down, cumulative effects and entrainment of fish in the outlet. Request information on fish habitat that will be disturbed and mitigation measures that will be implemented to address effects (i.e. offsetting measures).
Clarity on how effects of noise created from project activities will affect fish and fish habitat.
Clarity on proposed watercourse crossing locations, mitigation measures and potential for residual effects, harmful alteration or fish habitat destruction as a result of water course crossings.
Follow-up and Monitoring Programs
Clarity on reclamation protocols.
Clarity on the types and amounts of chemicals being used during construction and operations of the Project and information on the standards being implemented for use, including accident and malfunction mitigation and monitoring.
Human Health and Well-Being
Need for identification and locations of existing and potential future human receptors, including sensitive receptors.
Clarity if identity factors (e.g. age, gender, family status, occupation) result in some human health receptors being affected differently by project-related changes.
Need for additional information regarding potential effects, residual effects and mitigation measures of the Project on health, social, and economic conditions.
Recommendation that Health Canada's <i>Guidance for Evaluating Human Health Impacts in Environmental Assessment</i> be used when assessing project effects to human health.
Indigenous and Stakeholder Consultation and Engagement
Need for meaningful consultation with Indigenous groups throughout the life of the Project, including with respect to project design, pre-disturbance assessments, environmental monitoring, and adaptive management.
Clarify how the Project will advance reconciliation with Indigenous groups.
Need for continued engagement with potentially affected Indigenous groups regarding access to traditional lands, and how current land use will be affected by project activities.
Need for funding and capacity support for Indigenous groups to support consultation and engagement activities.
Indigenous Peoples' Current Use of Lands and Resources for Traditional Purposes
Clarify potential and perceived project effects to current land use, including wildlife and vegetation, corresponding potential effects to traditional food sources and food security of Indigenous peoples, and how these effects will be addressed.
Need for additional information on the area of crown land that the Project will occupy.
Concerns regarding potential project-related changes to Indigenous groups, including cultural and traditional practices, food security, Indigenous health, cultural and spiritual practices, medicinal, ceremonial and other traditional purposes.
Need for additional information on impacts to traditional land use including impacts to teaching locations, hunting and gathering areas and impacts to the function of wetlands due to project activities.
Indigenous Peoples' Health and Well-being
Need for information on how the potential effects of the Project will impact Indigenous peoples health and well-being, including potential impacts to drinking water, country foods, and increased contaminants.

Need for more information on waste and disposal procedures, specifically on the usage of chemicals and the generation of amine waste, and identification of adverse effects to Indigenous groups.
Clarify potential surface water and groundwater quality changes from the Project, including consideration on how Indigenous Peoples consume water, and the potential effects on human health.
Indigenous Peoples' Rights
Clarity on the assessment of impacts to rights and its incorporation into project effects assessment and potential mitigation measures.
Need for meaningful engagement with Indigenous groups to facilitate a common understanding of Section 35 rights.
Need for additional information regarding the cumulative impacts of multiple projects in the region on the exercise of Aboriginal and/or Treaty rights.
Indigenous Peoples' Social and Economic Conditions
Clarity on the intent to support diversity and inclusion through the Proponent's hiring and training strategies; need for a better understanding of the target percentage for hiring Indigenous people and if Indigenous people who live near the Project will receive priority employment and training opportunities.
Need for additional information regarding baseline health, social, and economic conditions and associated potential project effects on local Indigenous peoples.
Indigenous Peoples' Spiritual, Physical, and Cultural Heritage
Clarity on the potential effects to physical and cultural heritage, including sites of archaeological and paleontological significance to Indigenous peoples, due to the construction and operation of the Project and information on notification processes to Indigenous groups if artifacts are recovered.
Migratory Birds and their Habitat
Potential for effects to migratory birds during all project phases, and corresponding obligations stemming from the <i>Migratory Birds Convention Act</i> , 1994 and its regulations.
Need for information on potential impacts, monitoring, avoidance, and mitigation measures of linear project features on migratory birds.
Navigation
Clarity required on whether any project component (including incidental activities) may impact a navigable waterway and if so, more information required on potential impacts to navigable waterways and any potential mitigation measures.
Species at Risk, Terrestrial Wildlife, and their Habitat
Concerns regarding potential adverse project effects on species at risk and wildlife as a result of construction activities and operation of project components.
Need for additional information regarding species at risk (including COSEWIC species) and critical habitat that may interact with the Project, potential effects to species at risk, and mitigation measures to be implemented.
Need for information on baseline and pre-construction/pre-clearing surveys that will be conducted to identify any hibernaculum and maternal roosting sites.
Vulnerable Population Groups (Gender Based Analysis Plus)
Consider Gender-Based Analysis Plus throughout the project lifecycle, engagement, consultation, mitigation, and to create baseline conditions. Include potential gender-based violence risks.
Need for a detailed description of the Proponent's corporate diversity strategy and how it is relevant to Gender-Based Analysis Plus and employment and labour issues regarding the Project.

Clarify how inclusion will be tracked and how gaps in representation will be addressed with respect to engagement.
Water – Groundwater and Surface Water
Need information on the possible project-related changes to water availability, local weather and water bodies in consideration of climate change.
Potential effects to water quality and corresponding obligations stemming from the <i>Fisheries Act</i> and its regulations.
Need for additional information regarding project-related effects to groundwater and surface water quality and quantity as a result of project activities and proposed mitigation measures.
Wetlands
Need for additional information regarding potential direct and indirect effects of the Project on wetland functions (e.g. biological, social, hydrological).
Need for additional rationale to support the conclusion that the Project will not adversely affect wetlands, and information regarding proposed measures to mitigate effects to wetlands.
Other
Need for clarification regarding the length and orientation of the pipelines, transmission lines and associated project infrastructure, timelines for construction, and approvals required.
Clarity regarding the use of existing roads (i.e. Highway 43) and exits that will be used for the Project activities and if new road infrastructure will be required.