Summary of Issues – Strange Lake Rare Earth Mining Project

This document provides a high-level summary of issues that were submitted to the Impact Assessment Agency of Canada (the Agency) about the Strange Lake Rare Earth Mining Project (the Project) during the public comment period on the Summary of the Initial Project Description (IPD), submitted by Torngat Metals (the Proponent). The issues highlight information that will be considered by the Agency in forming its opinion on whether an impact assessment would be required. If the Agency is of the opinion that an impact assessment would be required, this information will also be considered, as applicable, in the development of planning phase documents where the proponent is willing to work collaboratively on the impact assessment. Original submissions from participants can be found online on the Canadian Impact Assessment Registry Internet Site for the Project (Reference Number 85969).

The Agency encourages the Proponent to provide a response to the Summary of Issues that details how it intends to address these issues, as part of its Detailed Project Description (DPD). The DPD should 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 Peoples, the public, federal authorities, provincial ministries and municipalities.

1. Project Description

Purpose of and need for the project

Concern about the project's purpose, and the possibility that the final products (rare earth oxides) will not contribute to the green energy transition. Importance of discussing alternatives to the project that could meet demand for rare earths.

Need for information to demonstrate in a concrete manner how the project will contribute to a responsible, traceable, fully independent and diverse supply chain of critical minerals, including transparent information on the supply and distribution chains.

Need to clarify the position the project intends to occupy in a market where demand for rare earth elements is diverse and, to a large extent, counter-productive to the collective efforts to combat the climate crisis and achieve international social justice, given the uses to which these minerals are put.

Nature of the project and Governance

Concern that this project is one of the first rare earth mines in Canada, and that there are few similar existing projects from which the proponent can learn from.

Concern about the potential impacts of the technology used for the extraction and processing of the rare earth mineral.

Concern about the name of the company, as the use of the word Torngat is considered disrespectful to the people of Nunatsiavut.

Mining plan

Need to clarify the possibility that Torngat Metals develops mineral deposits other than the B-Zone, either in Quebec or in Labrador.

Concern about the impacts created by the large amount of land to be mined to accumulate sufficient quantities of ore containing rare earth elements.

Need to clarify how the mining plan would be affected (effects on location and size of waste piles, tailings, use of pit, etc.) if the life of the mine was extended.

Need for information about changes to the project since the previous prefeasibility study that have reduced the environmental footprint of the mine by a factor of 10.

Need further details on the geology of the Strange Lake deposit, including the types of rocks and minerals that form the ore and waste.

Components and activities

Need for information on unknown elements such as location, processes and capacities of the high purity separation plant, location and dimensions of the tailings facility, method of transferring tailings from the plant to the tailings facility, and the freight zone at the Arnaud Junction industrial park, prior to completion of the impact assessment.

Need for information on the location of the landfill, waste rock piles, and tailings facility.

Need for information on alternative sites considered for the disposal of waste rock and tailings, with maps clearly identifying the locations of each of the alternatives considered.

Need more information on how and where waste including hazardous waste (e.g., fuels, lubricants, drilling fluids, radioactive waste, etc.) will be managed, including transportation and disposal, during operation and after mine closure.

Need more information on the thickener to be used for the ore concentration process at the mine site. Need for information on the fuel station at the mine site.

Need to include the wind turbines in the project impact assessment in order to better understand the potential impacts of this component.

Need for information on the type of geomembrane to be used, or any other contamination control device to be installed.

Road

Need more information on alternatives for the different transportation modes, including alternative road designs and routes, and the potential use of airships and the existing railway to Sept-Îles. Importance of demonstrating why these alternatives are not feasible or desirable from environmental, economic and technical point of view.

Importance of providing a comparison table and discussion of alternative means for the project.

Importance of considering alternatives to the proposed road, in light of the concerns and opposition voiced in the Nunatsiavut communities.

Need more information on the precise route, construction, use, maintenance, traffic, safety measures and monitoring of the road between the mine site and the port of Voisey's Bay, including how and when it is proposed to be used.

Concern about the use of the term "seasonal road" as it seems to be operational most of the year.

Need for information on how the proponent will adapt its road corridor to the three different land and vegetation types it will have to go through, including the materials and machinery that will be used for road construction.

Importance of optimizing the road design to limit the number of stream crossings or increase buffers for streams and waterways.

Need more information on frequency of road use. A monthly breakdown of the number of trips and the type of freight expected would be useful.

Need to clarify the ownership of the road, and how ownership may change over time, including after the project is over.

Marine shipping

Need more information on the agreements that are needed for the project to proceed, including public information about the status of the agreement between the proponent and Vale for the use of the Voisey's Bay port infrastructures.

Importance of providing complete and accurate marine shipping information including future buildings, wastewater discharge at the Sept-Îles port and other authorized discharges such as ballast water, grey water, black water, and washing water.

Importance of including in the project study area the marine shipping route, from the port of Voisey's Bay to the port of Sept-Îles.

Need more information on marine shipping of rare earth concentrate, including the number of ships estimated between Voisey's Bay and Sept-Îles, and on loading, unloading, and storage operations at Voisey's Bay and in Sept-Îles.

Need for information on the transportation and handling of the rare earth concentrate in Sept-Îles, including how containers and superbags will be emptied at the high purity separation plant.

High purity separation plant in Sept-Îles

Concern about the study area for the high purity separation plant, which does not include Uashat, Lac des Rapides, nor most of the territory of the city of Sept-Îles. The study area should also include berry picking areas.

Need for information on the concentration and separation processes at the high purity separation plant, including the products (e.g., agents, chemicals) used in those processes, and the potential for contamination from the residue (e.g., metal leaching, acid rock drainage).

Need further details on the method of disposal of the residue at the high purity separation plant, including the processes the residue will undergo prior to disposal, and the possible variability of the processes depending on the seasons.

Need further details on the management of dry tailings in Sept-Îles as well as the probability and consequences for leaching from tailings. Need for information on any other possible risks associated with dry tailings management.

Environmental management and reclamation

Importance of providing and sharing the remediation plan, including safety measures and monitoring, with the communities.

Need for information on native plants and seeds that will be used to restore the site, including details on how these plants will be dispersed and how it will be monitored. Importance of aiming to attain a natural landscape continuous with surrounding landscapes and to encourage the repopulation of a flourishing ecosystem.

Need more information on the bioremediation practices for contaminated soil and snow, including location, timing and methods.

Importance of developing transparent and conservative models for assessing environmental effects, such as air dispersion models, hydrological models, and hydrogeological models.

Need more information on the proponent's environmental management program.

Need for information on monitoring and follow-up measures that will be put in place during periods of inactivity, as the initial project description states that mining activities could occur between 9 and 12 months per year.

Importance that proposed mitigation measures are based in science and/or Indigenous knowledge, with detailed rationales for why proposed measures are adequate and would sufficiently limit potential negative impacts of the project. Concern about the use of 'expert knowledge' or 'industry best practices' to justify the selection of mitigation measures.

2. Air quality

Need for information on the ambient air quality for the new access road.

Need for information on potential effects on air quality (air contaminants and dispersion modelling associated with the construction and operation of the new access road). The dust and chemicals generated by the project could potentially have impact on moss, lichens and into different parts of the food chain important to First Nations and Inuit.

Need for details on the air quality management plan, including a dust management plan for different activities such as blasting, mining, transportation, and operations.

Need further details on mitigation measures to limit all potential airborne emissions and contaminants that could potentially impact the environment.

Need further details on dust suppression along the haul road, including water source to be used, dust suppression schedule, number and frequency of all trucks in circulation, vehicle cleaning stations, and type of dust suppressant.

Importance of monitoring air quality in Sept-Îles and notifying vulnerable populations when air quality is poor.

3. Surface water, drinking water and groundwater

Concern about the risks to water quality at the mine site and at the high purity separation plant in Sept-Îles.

Need for information on potential effects caused by acid rock drainage, metal leaching and radioactivity¹ on the land and local aquatic environment during mining operations and after closure, as well as monitoring plans associated to those effects.

Need for information on the monitoring that will be conducted on the water treatment system and at the mine site discharge point.

Need further details on the mobility and toxicity of rare earth elements, particularly niobium and yttrium. Importance of developing effluent treatment strategies based on best available technologies.

Concern about the Strange Lake deposit containing elements for which regulatory effluent limits have not yet been established.

Concern about fluoride which is likely a contaminant in ground and contact waters. The analytical detection limit for fluoride should be less than the Canadian Water Quality Guideline value for the protection of aquatic life.

Need for information on the material characterization and testing program for all materials that will be stockpiled at the mine site, and all materials used for construction (for the road and other infrastructures at the mine site). Importance of demonstrating that the release of contaminants will be mitigated.

Need further details on water supply, in particular on the quantity of water withdrawn, effects on natural water levels and tables, and on water use during operations of the processing plant at the mine site.

Need for information on the water treatment system at the mine site, its effectiveness, and the location of the final effluent discharge.

Need further details on the location(s) where process water will be withdrawn, both at the mine site and at the separation plant in Sept-Îles.

Need further details on mitigation measures for the foreseeable disturbance that effluent discharge into Lake Brisson will cause.

Describe specific considerations regarding the northern climate on the efficiency of wastewater treatment systems, for industrial and domestic wastewater at the mine site.

¹ For the present project, thorium and uranium and their progeny nuclides are the radionuclides associated with the rare earths to be mined.

Concern about the risk of contamination of Ikadlivik Creek and Mistibini Lake.

Concern about possible impacts to water quality in the George River. Importance of considering all potential downstream effects when analyzing the impacts on water resources, including the George River.

Concern about the excavation of sand and gravel from esker G-1, the potential for other materials to be stockpiled on esker G-1, and potential contamination of groundwater underneath the esker.

Importance of assessing the hydrological connectivity between Lake Brisson, other waterbodies located in proximity, and groundwater underneath esker G-1.

Concern and need for information about the risks of potential discharge from the high purity separation plant in Sept-Îles into the water and groundwater, including drinking water sources in Sept-Îles such as the Lac des Rapides.

Concern about seepage from the residue stockpile at the high purity separation plant in Sept-Îles, as it is a potential source of contamination to surface water, groundwater, fish and fish habitat.

Concern about the 2-km distance between the proposed high purity separation plant in Sept-Îles and a source of potable water.

Concern about leachate discharge to the Sept-Îles municipal sewer system and municipal aerated ponds.

Importance of characterizing the current water and sediment quality in the Bay of Sept-Îles. Concern about contaminants accumulating in sediments in the Bay of Sept-Îles, especially considering sediments are a nutrient base for phytoplankton and zooplankton.

Need more information on avoidance, mitigation and emergency measures to limit the water pollutants that could potentially affect the environment at the mine site.

Need further details on the water management plan for all project components, such as the design of retention or sedimentation basins, pipelines, pumping systems, ditches around waste rock and ore stockpiles and tailings area, road ditches, and drainage systems serving the airstrip at the mine site and the high purity separation plant site in Sept-Îles.

Need for information on the treatment of effluents at the mine site that may contain suspended solids, hydrocarbons, blasting products, contaminants from mine drainage, metal leaching and radioactive materials.

Need further details on the different treatment considered to treat contaminants in wastewater at the Strange Lake mine and Sept-Îles plant that are not covered under the Directive 019.

Need for information about the long-term management of residue generated by the high purity and separation plant, during closure and post-closure phases.

Need for information on the potential effects on trihalomethanes (THM) and haloacetic acids (HAAs) levels at Lac des Rapides, which is a source of drinking water for Uashat and Non-Indigenous peoples of Sept-Îles.

4. Wetlands and water bodies

Need for a description of all wetlands, watercourses, and water bodies present in the project area (mine site and Sept-Îles separation plant), or hydrologically connected to all components in the project area, that could be directly affected by project activities, including proposed alternatives.

Importance of considering the water bodies surrounding the high purity separation plant, and the watershed resources, from a sustainable development perspective and to find the best location for the plant.

Importance of considering all parties that may have a role to play in water resources management in Sept-Îles.

Need for information on stream properties and anticipated changes as a result of the potential effects on the water table, watersheds, average flows and water levels, and any other factors that may affect navigability. Need to clarify if the projected effects are permanent or temporary.

5. Terrestrial fauna, flora and birds, including species at risk

Concern about the threat the project poses for the protection of biodiversity, considering the proximity of the mine site and road to protected area and territorial reserve for protected area, and considering the potential marine shipping route through the future marine park between Anticosti Island and Mingan Archipelago National Park Reserve.

Need for species-specific impact assessments for all species at risk identified by the proponent that include a section on projections for the safeguarding and recovery of these species.

Concern about potential effects of project activities, including the construction and use of the access road, on small and large game, as well as migratory birds and species at risk.

Concern about the effects on biodiversity of the past and future projects around Lake Brisson and George River.

Need further details on the types and timing of wildlife and bird surveys to be carried out.

Need for updated data on existing populations to assess the impact of the project on species at risk, threatened or endangered.

Concern about telemetry data obtained during caribou population monitoring being used for the assessment of potential effects on caribou. Telemetry data from population monitoring may not be suitable for assessment of effects.

Need further details on the options considered for the management of radionuclides at the mine site and in Sept-Îles, such as filtering marshes or decontamination through ice removal. Should filtering marshes be ingested or incinerated, considerations to impacts on wildlife and on the environment.

Need for information on the avoidance, mitigation and monitoring measures to be implemented to reduce impacts on species at risk during all phases of the project.

Concern about the impacts on small game (Partridges, Ukalik, Wolves, Foxes, Wolverine, etc).

Concern about the limited scientific information available to assess the impacts of rare earth mining on the environment and wildlife.

6. George River Caribou Herd

Concern about potential direct and indirect impacts from project activities, including the mine site and road, on the George River Caribou herd, its migration routes, its calving grounds, behaviours, habitat, survival (potential increased in predation and collision with the road, stress related to noise from mining activities or aircraft), and recovery.

Importance of considering that the location of the mine is close to the calving grounds and post-calving grounds of the George River Caribou herd.

Importance of considering that the George River Caribou herd is in decline and in a precarious state, and that the project could put at risk the survival of the newborns and the recovery of the herd. Importance of considering COSEWIC's assessment and status report on the Caribou Eastern Migratory population, which includes the George River Caribou herd.

Concern about the potential for the project to destroy high-quality habitat for the caribou.

Importance of considering increased habitat fragmentation caused by the construction of new infrastructure (e.g., roads, airstrip, camps). This can have adverse impacts on terrestrial wildlife populations (e.g., caribou calving grounds).

Importance of considering that any impact from the project on the herd could increase the time needed for its recovery as well as increase the need for restrictive measures, including hunting restrictions and bans, to protect the herd. This has a direct impact on First Nations and Inuit land use.

Need for information on the potential for the project to increase the presence of moose in the region. Concern about the road creating access to favorable habitats for moose, which as an alternative prey phenomenon, can be detrimental to the caribou.

Concern about the potential for the project to increase human activity in the region, including outdoor tourism, which could impact the George River caribou herd. The road and the mine will create new access in the herd range.

Concern about caribou foraging on vegetation contaminated with trace metals or dust deposition, such as lichen with elevated radionuclides content.

Need more information on the cumulative effects of the project on the George River Caribou herd. Importance of considering the cumulative effects of the project with the other projects within the George River Caribou herd range.

Importance of recognizing that any impact from the project on caribou can be a major impact on First Nations and Inuit. Caribou is an important species to many First Nations and Inuit in the region. Impacts on caribou could lead to impacts on traditional activities, culture, community cohesion, identity, livelihoods, emotional well-being, practices and knowledge essential to First Nations and Inuit.

Importance of considering that the health of caribou and the protection of the indigenous territories on which it lives can only be secured if the ecosystems and waterways on which it depends are protected. Need for information on proposed measures, rehabilitation efforts, and alternatives to the project to prevent any form of impact and major disturbances on both the caribou and the George River territorial

reserve for protected area purposes. The proponent should use precaution, especially during calving times, to allow for the survival of the population. Importance of proposing mitigation measures that are supported by studies, as well as a review of the

Importance of proposing mitigation measures that are supported by studies, as well as a review of the successes and failures of the mitigation measures.

Importance of setting up protocols to monitor and protect caribou and their calves, using telemetry data already available.

Importance of using Indigenous knowledge and western science when assessing the impacts of the project on caribou.

Importance of protecting sensitive information from public disclosure in order to protect the herd.

Need further information on the timing of the project activities, especially during caribou calving period. Importance of ceasing operations during certain months and periods of the year to protect the calves, as any activity during the caribou calving period will have an impact on the herd (the Naskapi Nation of Kawawachikamach proposes from mid-May to August 1st) (Naskapi) Inuit Women's association and groups.

Importance of using updated information, figures and data in order to present the current situation of the George River Caribou herd. Historical knowledge and data on the state, range and habits of the population when it was at its peak also need to be considered.

Importance of expanding the geographic scope of the Regional Study Area to include the full historical and current range of the George River Caribou herd.

7. Fish and fish habitat, including species at risk

Concern about effects on fish and fish habitat, including in relation to Atlantic salmon, Arctic char, brook trout and other species that spawn in the George River.

Need further details on the timing, and frequency of project activities, including all activities that are likely to have an effect on fish and fish habitat.

Importance of taking into account all fish species when conducting biological inventories, characterization of fish habitat and its use, and identification and analysis of impacts of the various activities on fish and fish habitat.

Importance of considering all marine mammal species and marine species at risk, and their potential presence at the ports and along the proposed marine shipping route.

Importance of considering how increased habitat fragmentation caused by the construction of new infrastructure (e.g., roads, airstrip, camps) can have adverse impacts on aquatic populations (e.g., fragmentation of fish spawning).

Concern about the release of suspended matter and sediments in watershed systems which can alter the physical, chemical, and biological composition of the watersheds of the aquatic life inhabiting it, including spawning sites and fish habitat.

Need further details on aquatic invasive species and potential measures to prevent the introduction of aquatic invasive species into water bodies that are not connected to the project area.

Need further details on mitigation and monitoring measures to mitigate the effects of the project on fish and fish habitat.

Need further details on management of recreational fishing by construction workers along the proposed access road.

Importance of considering that the fishing areas potentially impacted by the road are rich in char, especially the lkadlivik brook, and that the char population is in decline.

8. Human health and well-being

Concern about the limited scientific information available to assess the impacts of rare earth mining on human health.

Concern and need for information about the potential short-term and long-term effects on human health from exposure to rare earth elements, radionuclides, heavy metals, and other contaminants, through accumulation in the food chain (potential ingestion of contaminated berries) and other types of exposures, like air or water.

Need for information on potential human health impacts resulting from change in drinking or recreational water quality.

Concern about health risks for mine workers.

Importance of considering recent health data for the Sept-Îles population.

Importance of considering the baseline level of radon-222 and thorium or radon-220 in residences or receptors in proximity of the high purity separation plant in Sept-Îles.

Importance of providing maps showing the locations of permanent, temporary and seasonal human receptors (including Indigenous people) and the distance from project components that could affect them.

Importance of considering the potential cumulative effects on human health from the project, nearby facilities, and other foreseeable projects in the region.

9. Social and economic conditions

Concern about and need for information on the potential impacts on the social environment.

Importance of clarifying whether the project will help the economy of the local communities near the mine site, the road and the high purity separation plant in Sept-Îles.

Need for information on employment income to assess the impact of the project on the local/regional labour market and economy, as well as the availability of local workforce. Importance of considering that a portion of the local community employment workforce may be diverted to the project.

Need to provide an estimate of potential employment for the construction of the access road.

Need for information on employee wages, benefits, and working conditions compared to local, regional, provincial, national, and industry averages.

Concern about the effects of marine shipping on coastal communities, including on commercial fishing, social and ceremonial fishery, socio-economic conditions, well-being, practice of cultural activities, and food security.

Concern about the potential negative effects of the project on ecotourism and outfitting activities due to impacts of the project on the environment and wildlife, including effects on the George River tourist camps and the Pyramid Mountain Camp.

Importance of considering developing health and social monitoring programs.

Concern about the disagreement and conflict the high purity separation plant could cause within the local population of Sept-Îles.

Concern about the value of homes in Sept-Îles that may be affected by the presence of radioactive particles.

Importance of using a gender-based analysis plus (GBA Plus) approach throughout Project lifecycle, engagement, consultation, mitigation, and to create baseline conditions.

10. Seismic activity

Need for information on seismic risk at the mine site and at the high purity separation plant in Sept-Îles, along with the code or standard that will be used in the seismic engineering of the structures and buildings.

11. Indigenous People health, social or economic conditions

Need more information on the potential social, economic and health impacts of the project on First Nations and Inuit.

Importance of applying gender-based analysis plus to the land use, indigenous rights, human health, quality of life and psychosocial impacts study to properly consider the project's potential impacts on Indigenous women, girls and 2SLGBTQI+² people.

Need for information on the potential economic opportunities for First Nations and Inuit.

Importance of considering how the project could improve local socio-economic development conditions for some First Nations and Inuit communities.

Concern about the project's limited potential benefits to current and future generations in Labrador, including that the project may only create a limited number of jobs.

Need for details on the project's impact on Indigenous employment. Importance of considering that the project can increase employment opportunities and wages for First Nations and Inuit.

Importance of considering equity, diversity and inclusion practices to increase economic participation of local indigenous communities.

Need for information on efforts and strategy that will be made to prioritize, recruit, and train Indigenous people. Importance to clearly articulate Indigenous hiring and training policies at all stages of the project. Note that training and technical knowledge acquired through the project may benefit community development.

Need for more information about the fly-in/fly-out schedule, and details of considerations of how this can have an adverse impact on Indigenous workers and their families.

² It is the acronym used by the Government of Canada to refer to the Canadian community. 2S: at the front,

recognizes Two-Spirit people as the first 2SLGBTQI+ communities; L: Lesbian; G: Gay; B: Bisexual; T:

Transgender; Q: Queer; I: Intersex, considers sex characteristics beyond sexual orientation, gender identity and gender expression; +: is inclusive of people who identify as part of sexual and gender diverse communities, who use additional terminologies.

Concern about waste disposal management in the communities. The influx of economic and financial benefits into communities can lead to over-consumption of goods and materials generating issues with waste disposal management.

Importance of considering socio-economic development assessments and planning as well as community-specific project developments to identify coherent entrepreneurship and business development opportunities that can benefit First Nations and Inuit communities.

Importance of adopting a harassment policy that includes training to make workers and employees aware of the repercussions of colonization, history and resource exploitation on Indigenous communities and social structures, in order to reduce racism towards Indigenous people working for the project.

Concern about the potential impact of the project on subsistence economy, country foods (aquatic and terrestrial), human health (mental and physical) and food security of First Nations and Inuit.

Concern about the lack of scientific studies related to the impacts of rare earth extractions on the food chain and its impact on the health of First Nations and Inuit.

Need for information on potential effects of contaminants emitted by the project, including in the water bodies, watersheds and soils, and in the case of spill event. These could impact water quality, the health of aquatic and terrestrial wildlife and have potential health impacts associated with their accumulation in country foods and on water consumption of First Nations and Inuit.

Need for information on monitoring plans to ensure that air, water, soil and country foods are safe for members of the First Nations and Inuit communities.

Concern about the social and economic impacts the project can have for Labrador Inuit, considering the high cost of food in the communities and the current housing crisis.

Importance of considering how the project can create tensions and divisions between different stakeholders and concerned groups and between community members who are for and against the project.

Need more information on the mitigation measures to address the psychosocial and mental health effects that are triggered by the start of the impact assessment process of the project. The project can create expectations but also concerns, stress, anxiety, emotional distress, and differing community perceptions. Mining operations can also increase stress and anxiety because of their potential impact to indigenous livelihood.

Need more information on the methodology and timing for the comprehensive study on the potential impacts of the project on Indigenous health, social and economic conditions.

12. Cumulative effects

Importance of considering cumulative impacts on all valued components.

Importance of considering the following projects for the cumulative effects assessment for the high purity separation plant in Sept-Îles: Kwyjibo mining project, Aluminerie Alouette and its expansion, Iron Ore Company installations including the mine tailing facility, the railway and port of Sept-Îles, Minerai de fer Québec concentrate installations, Mine Arnaud and the other future projects in the area. Where any of these projects are not considered in the cumulative effects assessment, a strong rationale is to be provided.

Importance of considering the following projects in the cumulative effects assessment for the mine site and the road: the Crater Lake mining project, the Joyce Lake mining project, the Ashram mining project, the abandoned mines not yet rehabilitated, and the Voisey Bay mine. Where any of these projects are not considered in the cumulative effects assessment, a strong rationale is to be provided.

13. Accidents and malfunctions

Need for information on potential accident scenarios that could lead to the release of contaminants into the surrounding environment, cause environmental degradation and potentially contaminate the food chain.

Need for information on measures to be taken to avoid spills or accidents at the fuel station.

Need for information on the response plans to accidents and malfunctions that could lead to the release of contaminants in the water or land around the mine site and the road (hydrocarbons and fuels, radioactive material, and other contaminants), and importance of considering the possibility of spills at temperature around -50°C.

Need for information on the communication channels that will be set up to notify the authorities in the event of groundwater contamination.

Need for information about the potential impacts of marine shipping accidents and spills involving the transport of radioactive materials.

Concern about road safety in Labrador, considering the harsh weather conditions in the region, such as wind and storms. Importance of considering local and Indigenous Knowledge when constructing and operating the road.

Need more information on truck load capacities and radioactive levels of the rare earth concentrate, and measures to adapt transport according to the different weather conditions.

Need for more information on the probability and consequences of a tailings dam failure.

14. Climate change and greenhouse gas emissions (GHG)

Concern and need for information on the stability of stockpiles (e.g., waste rock, tailings) and water management infrastructure, given the presence of permafrost in the project's region and risk of permafrost thaw.

Importance of considering the impacts of the project on permafrost thaw.

Importance of considering the impacts of permafrost changes on groundwater contaminant dispersion, and on watershed and fluvial geomorphology.

Need additional information on permafrost conditions at the mine site, including a map of currently frozen and thawed areas.

Need for information on the project's resilience to climate change and how this has been considered in the project design, including in the development of safety and response plans for accidents along the road, and water management and residue storage in Sept-Îles. Climate change can increase the likelihood and the severity of harsh weather conditions in the region which in turn can impact road conditions and increase the probability of accidents.

Need further details on how the environmental follow-up/monitoring and restoration programs will be developed to achieve carbon neutrality by 2050. Importance of considering that the project may destroy greenhouse gas sinks and reservoirs.

Importance of considering the cumulative effects and climate change when assessing impacts on Arctic char.

15. Radioactivity

Importance of considering all risks to human health and safety (workers and nearby residents) associated with the extraction, transportation, and concentration of radioactive materials and their release in the environment at the mine site, during transportation, and at the high purity separation plant in Sept-Îles.

Concern about the presence and potential leakage of highly toxic and bioaccumulating heavy metals (mercury, cadmium, lead, arsenic and chromium) and radionuclides at the Sept-Îles plant and at the mine site.

Concern about the presence of radioactive elements in the concentrate being shipped to Sept-Îles and the final tailings/residue at high purity separation plant in Sept-Îles. Concern about the security of the long-term disposal of material containing radionuclides.

Importance of considering the potential processing of radioactive materials and rare earth ore from other mines than Strange Lake at the Sept-Îles plant.

Need for information on the superbags, particularly their re-use, chemical composition, and their fate after use.

Importance of considering the current radiation exposure of the populations of Sept-Îles, Uashat, Maniutenam and surrounding areas. Concern about the radiation the populations of Sept-Îles and Uashat would be exposed to, and the effects of radioactivity on the health of residents.

Need to clarify the use of the term "natural radioactivity", which could mislead the public, as "natural" doesn't mean "harmless".

Explain the decrease in thorium and uranium concentration (ppm) between the ore concentrate produced at the mine site and the final residue of the high purity separation plant in Sept-Îles.

Need for information to confirm secular equilibrium of all processes for thorium-232 and uranium-238, and all of their progeny.

Need to clarify the method used to determine the specific activity of each radionuclide.

Need for information on the management and storage of separated radionuclides and radon gas, and on the monitoring of radon release and radioactivity emission levels during operation of the mine.

Need more information on the risks of radioactive elements leaching into the environment, and mitigation measures to avoid those risks. Importance of discussing this topic with First Nations and Inuit.

16. Indigenous People rights and current use of lands for traditional purposes

Need to take into account, respect and protect the rights and interests of First Nations and Inuit potentially impacted by the project during the consultation exercise, the project planning and the project development. Need for information on how existing agreements, including the James Bay and Northern Quebec Agreement, the Northeastern Quebec Agreement and the Labrador Inuit Lands Claims Agreement will be respected. Consultation, involvement and support offered to each First Nation and Inuit should reflect the importance of those protected rights.

Importance of conducting a thorough analysis of the potential impacts of all activities of the project on the rights and interests of First Nations and Inuit, including cultural activities, hunting, fishing, trapping, and harvesting rights (e.g. caribou hunting, displacement of fishing locations and harvesting of arctic char, salmon, etc.). This analysis must consider the right to use and manage their territory, harvest, and share country food between community members and Elders, and the maintenance of a healthy environment for future generations.

Concerns about the potential of the project to have negative and irreversible impacts on terrestrial wildlife (caribou, geese, ducks, partridges, etc.) and fish (Brook trout, arctic char, Atlantic salmon, etc.) habitats, spawning, and migration, that could result in permanent or temporary habitat lost, displacement and health impact. This can have effects to First Nations and Inuit rights.

Importance of taking into account that the construction and operation of the road in Labrador can have adverse effects on First Nations and Inuit traditional territories and livelihood both in Labrador and in Quebec. The road could impact multiple ponds and rivers, including the rivers that flow in the Voisey's Bay area. It would impact important fishing areas for First Nations and Inuit, including the Ikadlivik Brook. These impacts should be considered for the construction and operation phases, and in case of accidental spills.

Need for information on potential change to indigenous seasonal land use trails and travel routes.

Concerns about the cumulative impacts of the project, including the construction and operation of the road and infrastructures, on the rights of First Nations and Inuit, including traditional and harvesting activities and land use as it could lead to an accelerated development in the region.

Importance of considering the social, historical, cultural and economic context of each community in the assessment of the potential impacts of the project on First Nations and Inuit Rights.

Importance of considering the historical and current mining context, including the abandoned mining sites not yet rehabilitated, when assessing the cumulative effects of this project on First Nations and Inuit.

Importance of considering the impacts of climate change in the cumulative impacts of the project on First Nations and Inuit. Amongst other things, it has become harder to hunt and fish and community members have to go further inland to practice their traditional activities.

Need more information on the methodology used by the proponent to assess the value to the land used by First Nations and Inuit that might be potentially impacted by the project.

Need more information on the mitigation measures to be put in place to limit the impact of the project on First Nations and Inuit, including the prevention strategies, monitoring procedures, enforcement and follow-up measures. Importance of including information on the mitigation measures to limit and avoid impacts on First Nations and Inuit after mine closure.

Importance of conducting an updated land use study and archaeological assessments to better understand the past and present use of the site that could be impacted, including near Lake Brisson. Need more information on the methodology to be used for those studies and the moment they will be conducted.

Importance of considering Indigenous traditional practices when determining the navigability of a waterway.

17. Indigenous People physical and cultural heritage, structure, site or thing that is of historical, archaeological, paleontological or architectural significance

Importance of considering the George River not only as a habitat to some keystone species of fish, but also as a historically and culturally significant place for First Nation and Inuit. Burial grounds and archaeological artifacts can be found along the George River and its shorelines.

Need more information on the archaeological work planned near the mine site and the road and on the archaeological sites discovered by the proponent.

Concern about the potential changes to the location and access to historical camp sites, to ancestral and historical travel routes and on landscape. Importance of considering mitigation measures for those aspects.

18. Public and Indigenous Engagement and Consultation

Need for the proponent to meet and discuss with First Nations and Inuit the appropriate way to consult each community. The proponent is invited to consult the comments shared by First Nations and Inuit on the <u>Canadian Impact Assessment Registry</u> regarding how they want to be consulted.

Importance of consulting and engaging, early and in a thorough and comprehensive manner during all stages of the impact assessment, with First Nations and Inuit potentially impacted by the project. Communications must be open, honest and continuous throughout the process. Importance of reviewing and discussing information on First Nations and Inuit with the concerned communities before they are published.

Importance for the proponent to commit to obtaining the explicit consent of First Nations and Inuit that are potentially impacted and consider the social acceptability of the project by First Nations and Inuit, before developing its project.

Importance of sharing and communicating in both official languages and in local Indigenous languages so that First Nations and Inuit, including Elders, can fully understand and participate in all stages of the project.

Importance of diminishing the major barriers preventing Indigenous women and other marginalized identities from getting involved in impact assessments by providing, amongst other things, in-person engagements, childcare available at engagements, adequate time to review long technical documents, and adequate consideration of Indigenous knowledge.

Importance of consulting First Nations and Inuit on fieldwork assessments and inventories, given their knowledge of the area, the environment and the wildlife.

Need more information on the proponent's plan to involve and work with community environmental monitoring working groups.

Importance of considering existing data, such as land use study, as well as new data, including Indigenous Knowledge, to better understand the potential impacts of the project on First Nations and Inuit rights including current use, as well as physical and cultural heritage, and to develop mitigation measures.

Importance of considering Indigenous Knowledge for all aspects of the project, including the construction and operation of the road.

Need to clearly define the methodology used to collect, protect, and respect Indigenous knowledge.

Importance of considering OCAP principles (ownership, control, access, possession) when integrating or adopting Indigenous knowledge.

Importance of engaging with the public earlier in the impact assessment.

Concern about the social acceptability of the Project in Sept-Îles.