Crawford Nickel Project – Summary of Issues

This document provides a high-level summary of issues submitted to the Impact Assessment Agency of Canada (the Agency) about the Crawford Nickel Project (the Project) during the comment period on the Initial Project Description submitted by Canada Nickel Company (the Proponent). The issues highlight the information needed to support the Agency's decision on whether an impact assessment is required under section 16 of the *Impact Assessment Act* and — if an assessment is required — to inform the tailoring of planning phase documents. Original submissions are posted on the Canadian Impact Assessment Registry (Reference Number #83857). Categories of issues are listed in alphabetical order.

The Detailed Project Description must contain the information from the Initial Project Description with new information integrated throughout the main body of the Project description as appropriate to respond to the issues raised. This will facilitate understanding by participants, including the public and Indigenous communities.

Accidents and Malfunctions

Need for information on measures to prepare for and prevent accidents and malfunctions and the release of hazardous materials, including spills, during all Project phases. Need for information on emergency response plans and procedures to respond to any accidents, malfunctions, and spills.

Heightened concerns from an Indigenous community about the potential for a tailings dam breach. Concern with adequacy of alternatives.

Need for mitigation measures to address potential accidents and malfunctions related to transportation and storage of dangerous goods. Nickel concentrate may be a dangerous good regulated under the *Transportation of Dangerous Goods Act*.

Need for information about plans for communication with local residents in cases of accidents and malfunctions, including translation into local Indigenous languages.

Acoustic Environment

Potential effects from increased noise levels and vibration from the Project on recreational activity, including camping. As one example, concern about whether noise and vibrations will be perceptible at Bigwater Campground.

Concern about effects from increased noise levels due to a higher frequency of flights at the Timmins municipal airport causing noise pollution in the region.

Concerns about the effects of noise from rail operations on wildlife and harvesting.

Need for further information on methods the Proponent will use to monitor noise emissions, and thresholds beyond which additional measures would be implemented to manage noise.

Alternative Means of the Project

Request for information on any alternative means for carrying out the Project that would minimize habitat loss and overprinting of tributaries of the North Driftwood and West Buskegau Rivers.

Need for information on alternative corridors for the new transmission line corridor, relocated Highway 655, rail spur, and relocated 500kV line, prior to stating the preferred alternatives.

Atmospheric Environment (e.g. air quality)

Potential changes to air quality, from fugitive emissions, point source emissions and fuel combustion. Of particular note is the potential for chrysotile (asbestos) to be present in dust as a result of its presence in bedrock.

Need for further information on changes to air quality, including baseline conditions, emissions estimates, dispersion modelling, human receptor locations, and cumulative impacts, for many parameters. Need to assess presence of chrysotile and the potential effects of chrysotile in dust.

Need for information on proposed mitigation measures to manage changes to air quality, including best management practices, and monitoring plans. Need to determine if extra measures are required to manage chrysotile in airborne dust.

To help inform tailored assessment requirements, (optionally) provide, in the Detailed Project Description, a more specific comparison of air emission sources for each phase of the Project, and planned mitigation. Pending the information provided, a tailored assessment could focus on some phases more than others.

Potential for effects on Indigenous peoples, if traditional practices continue where air quality changes occur. To help inform tailored assessment requirements, (optionally) define, in the Detailed Project Description, what is meant by the "project limit" where applicable ambient air quality criteria will be met. Confirm there will be no receptors within that boundary. Provide details about provincial oversight that will ensure compliance with air quality criteria at that boundary. Alternately, if traditional practices may be permitted within that boundary (for example, if it is an extra-large property boundary that extends well beyond the project area and an agreement is made to enable access), a tailored assessment would include effects on receptors within the boundary.

Concerns about impacts on the environment from wind dispersal of tailings.

Request to have input to a site dust management plan including any use of chemical suppressants.

Concerns about whether there is any potential for changes to air quality at Bigwater Campground.

Climate Change and Greenhouse Gas Emissions (GHGs)

Need for further information on how the Project will be carbon neutral.

Comment about the use of diesel-fired generation during the construction phase, closure phase (decommissioning phase), and emergencies, and the need to ensure nitrogen dioxide and other greenhouse gas emissions do not exceed regulatory guidelines.

Decommissioning and Reclamation

Need for further information on decommissioning and reclamation plans at the mine site, including duration of monitoring, water, soil, and waste management.

Request for reassurance that funds are in place for closure costs and to understand how they are calculated.

Request for information on waste disposal sites on Crown land following decommissioning.

Effects of the Environment on the Project

Potential effects of climate change on the safety, resilience, and effectiveness of water and tailings management infrastructure, water-dependent decisions and water quality during all Project phases and post-closure (abandonment phase), including the effects of storms and extreme heat events. Need to provide a list of water management infrastructure and processes that are vulnerable to climate change.

Need for information on water-dependent mitigation measures related to the effects of the environment on the Project, including how climate change will be incorporated into the design of water and tailings management infrastructure.

Concern about impacts of extreme climate events on source water courses. Consider this in source water course selection and plan to adapt.

Fish and Fish Habitat

Potential effects on fish and fish habitat from the destruction of tributaries, diversion of watercourses, reduced flow in watercourses downstream of the mine, and use of waterbodies for mine waste disposal.

Need detailed mapping of each water feature, detailed fish habitat characterization, fish population baseline data, analysis of changes to the flow regime and fish dependency on flow, standard and site-specific mitigation, an assessment of alternatives for mine waste disposal, and a plan to offset effects.

To help inform tailored assessment requirements, (optionally) provide, in the Detailed Project Description, a more detailed map of affected water courses, an estimate of destroyed fish habitat in square meters, an estimate of the length of the zone of impact on flows, the currently known fish species distribution, and standard mitigation that will be implemented.

Need for information about the potential watercourse diversion route. To help inform tailored assessment requirements, confirm the diversion will be reconnected within the North Driftwood River watershed, or present plausible alternatives.

Potential for effects on Lake Sturgeon, suckers, and spawning areas from construction of pipeline and effluent discharge in Mattagami River. In addition, there are unconfirmed reports of Lake Sturgeon in the lower stretches of the North Driftwood River. Need for information on the current and historical distribution of Lake Sturgeon to support the assertion that impacts are not anticipated. Need for information on potential mitigation.

Concern about potential effects of blasting and seismic activity on waterbodies and aquatic life.

Concerns about potential effects on fish and fish habitat from deposition of fugitive dust, sedimentation downstream of the Project site, nitrogen released from explosives, and seepage and runoff from ore, mine rock, tailings, and overburden.

Concern about requirements for relocation of fish and the methodology to be used.

Potential effects on fish and fish from the construction and operation of water crossings (including Victoria Creek) along the highway and transmission realignment and new rail spur. To help inform tailored assessment requirements, provide, in the Detailed Project Description, information about potential water crossing locations, the currently known fish species distribution, and planned mitigation.

Human Health and Well-being (including of Indigenous peoples)

Potential effects on human health from Project emissions to the environment.

Need to evaluate potential effects from biophysical pathways of exposure such as:

- air emissions (including inhalation of chrysotile);
- changes to drinking and recreational water quality (including effluent discharge and seepage);
- changes to country food quality; and
- noise (including transportation routes).

This would inform a human health risk assessment which would inform the need for mitigation and follow-up. Use Health Canada's Environmental Assessment Guidance for: Air Quality, Noise, Drinking and Recreational Water, Country Foods and Human Health Risk Assessment.

Need to collect and provide robust information about Indigenous land use activities (approximate locations, frequency, duration) to identify sensitive receptor locations for the evaluation of effects from biophysical pathways of exposure and the human health risk assessment.

To help inform tailored assessment requirements, (optionally) provide, in the Detailed Project Description, maps or information about:

- the three seasonal-use properties and hunting blind already identified, including type of use (and whether Indigenous), whether they will remain available for use, and any source of water supply;
- the three alternative locations for effluent discharge and any nearby drinking or recreational

water uses;

- a narrative about whether there is any potential for water quality changes to be perceptible at the drinking water intake for the town of Smooth Rock Falls;
- any other known human receptors within an approximate zone of effect from the Project;
- distance to other sensitive receptors like hospitals and schools; and
- possible receptors of increased noise along transportation routes, including the new rail spur, existing Kidd rail line, and roads (if traffic volumes will change).

Concern raised about effluent discharge to Mattagami River upstream of the water intake structure for the town of Smooth Rock Falls.

To help inform tailored assessment requirements, provide a list of predicted air emissions for all Project activities and for all Project phases.

Need the cumulative effects assessment on human health to include non-threshold substances such as fine particulate matter and nitrogen dioxide.

Need to consider potential impacts on country foods through sulphate runoff from mine components which can influence methylmercury bioavailability.

Need to validate health risk modelling assumptions with Indigenous peoples, such as country food consumption rates.

Concern expressed about the potential for bioaccumulation given that Indigenous peoples harvest large-bodied fish from the downstream environment. Request for baseline information and the plan to monitor fish and wildlife tissue for contaminants throughout the duration of the Project.

Potential effects on human health from accidents and malfunctions such as spills and accidental releases.

Concern that increased road and rail traffic could affect the health and safety of Indigenous peoples. Request for a transportation strategy to address volume and transport of dangerous goods.

Concern related to appropriate signage indicating proximity to active mine site for those accessing surrounding areas.

Concerns about the impact of COVID-19 outbreaks at the Project site on the limited medical capacity of the region, based on past outbreaks in Timmins that were affected by mining projects.

Comment that Métis men over the age of 50 are a high-risk group for dying of COVID-19. Concern about increased travel to the area. Request for information about vaccination and screening protocols.

Need for further information on potential environmental, economic, social and cultural project-related impacts on human health, using Health Canada's interim Health Impact Assessment guidance.

Comments on the need to engage directly with Indigenous communities to establish baseline health conditions.

Comment about stress from fear of accidents and malfunctions which can be alleviated through emergency preparedness plans.

Potential impacts of increased substance misuse, including opioids, in the labour force and associated impacts on vulnerable populations and health care services. Comment about links between migrant worker populations for large resource extraction projects and addictions. Comment that no-drug and no-alcohol policies lead to overindulgence during time off. To help inform tailored assessment requirements, (optionally) provide, in the Detailed Project Description, additional context about the opioid crisis currently being experienced in northern Ontario, any potential pathways of effects from the Project (negative or positive), and preliminary thinking about measures that could help manage effects. This could enable early discussion about complementary measures, if warranted.

Request for a workplace policy addressing racism towards Indigenous peoples and to develop cultural awareness. Request to incorporate land acknowledgements into the workplace culture.

Indigenous Participation Opportunities

Request from Indigenous communities to have a ceremony to acknowledge that mining is occurring on their traditional land.

Request for information on funding opportunities by the Proponent for Indigenous communities to participate in project activities.

Request for appropriately-funded Indigenous, community-specific Traditional Land and Resource Use studies and cumulative effects assessments, which should be validated by Indigenous communities, and should incorporate knowledge from community Elders.

Request for Proponent to work with Indigenous communities to improve recruitment and retention of Indigenous women in the industry.

Need to describe opportunities for Indigenous participation in the collection and validation of environmental baseline data.

Request for participation in environmental studies, assessments, and decisions, including:

- identifying area of potential significance for archaeological studies (e.g. the shoreline of the Mattagami River and any tributaries);
- collecting baseline and long-term monitoring of fish, including sturgeon and other game fish used as country food such as walleye, pike, and trout;
- assessing impacts to walleye spawning locations;
- planning for aquatic habitat offsetting measures that are focused on communities' interests;
- collecting and validating environmental baseline data such as water flows, water quality; air quality; and
- providing input to decisions about water crossing locations; effluent discharge locations; water management and waste management; water intake locations; dust management plan and any use of chemical suppressants.

Request to conduct an independent review of the plans for waste and tailings management.

Request to participate in provincial permitting applications (e.g. Environmental Compliance Approval, Permit to Take Water) and ongoing compliance monitoring.

Request to provide input to any site-specific Closure Plans, including decommissioning of ground water wells, water treatment ponds, and water management infrastructure on site.

Request to provide input to the final land use plans of the site, and to incorporate native species.

Request to participate in fish relocation activities.

Indigenous Engagement and Consultation

Engagement activities must be respectful of Indigenous protocols, including any existing Consultation and/or Engagement Protocols that Indigenous communities have shared with the Proponent.

Comments on the need for the Proponent to meaningfully address all concerns raised by Indigenous communities through the life of the Project.

Need for information on the Proponent's engagement with Indigenous communities to date, including any issues raised by Indigenous communities, and the Proponent's schedule for future engagement with Indigenous communities.

Request from certain Indigenous communities for increased engagement. Request to engage Apitipi Anicinapek Nation.

Comments on alternative methods of consultation the Proponent could use to engage with Indigenous communities who have not yet responded about the Project (e.g. offline engagement, inperson correspondence, direct phone calls and letters).

Request for Indigenous participation in site visits.

Request for plain language information on tailings management and other project components.

Indigenous Peoples' Current Use of Lands and Resources for Traditional Purposes

Potential for effects on hunting, trapping, fishing, gathering, and spiritual and cultural practices, including:

- loss of traditional lands (e.g. from large project footprint and overprinting waterbodies);
- loss of access to traditional lands (e.g. from potential changes to navigability);
- reduced resource availability (e.g. from habitat loss, habitat degradation, mortality and disturbance) on resources such as moose, geese, ducks, sturgeon, Black Ash, berries, medicinal plants;
- changes to the experience of access and use (e.g. from noise due to mining, trains and increased flights; and changes to visual landscape from tall mine components);
- changes to locations of practice due to perceived risks near mining; and
- loss of knowledge related to harvesting, spiritual, and cultural practices, which can reduce hunting and gathering efficacy.

Need for Indigenous knowledge and information about traditional land and resource use (e.g. use of water bodies; and presence of rare plants.)

Concerns about potential impacts on fishing, harvesting, and navigation due to potential changes to water quantity and quality of the Mattagami River, North Driftwood River, and the West Buskegau River resulting from dewatering or effluent discharge.

Need to consider traditional uses when selecting effluent discharge location, including freshwater stores, aquatic species, local occurrence of hunting and fishing.

Concern about contamination of traditional medicinal plants and berries.

Concerns about increased pressure on fish and wildlife harvesting in the area due to an influx of workers, and increased access into traditional hunting areas.

Concern related to appropriate signage indicating proximity to active mine site for those accessing surrounding areas.

Concerns about hunt camps and traplines, and the ability to hunt and trap available resources, due to construction of transportation corridors and cumulative effects with forestry.

Concern about impacts on the ability of future generations to hunt, fish, harvest, and gather due to the longevity of the effects of the Project.

Indigenous Peoples' Social and Economic Conditions

Need for further information on whether Indigenous peoples and/or businesses in proximity to the Project will receive prioritized employment or business opportunities.

Need for further information (e.g. description and quantification) on economic and employment opportunities for Indigenous communities (e.g. Indigenous hiring strategy, anticipated number and type of jobs, skill requirements for those jobs, barriers for career advancement, investment in training and skills enhancement to support career advancement).

Comments recommending that the Proponent engage with Indigenous Skills and Employment Training (ISET) service delivery providers throughout the Project.

Comment that the Skills and Partnership Fund (SPF) is a project-based program that funds partnerships to provide skills training. There may be opportunities in 2022-2023 to leverage training with Indigenous communities.

Comments expressing concern about the long-term economic viability of the Project and that anticipated benefits may not be realized if Project is halted, but environmental effects remain.

Need for further demographic information on Indigenous peoples in the region, including population details. Comment to add information about proximity to major highways or roads to help assess accessibility for employment. Provide a description of the demographics of Apitipi Anicinapek Nation using available information.

Suggestion to consider building an accommodation camp so that Indigenous employees would not have to commute from reserves.

Need for further information on the baseline social context, and associated potential effects of the Project on local Indigenous communities' social conditions.

Need for further information on mitigation measures to address social impacts of the Project (e.g. housing availability and costs, anticipated pressures on health and childcare services, women's shelters, mental health and addictions, increased crime rates and discrimination).

Potential for family traditions to be abandoned for employment. Comments on the need for flexibility in work schedules to enable the continued participation by community members in traditional and cultural activities (e.g. family hunts, large family gatherings).

Indigenous Peoples' Spiritual, Physical, and Cultural Heritage

Potential impacts to cultural heritage and archaeological resources near the project area.

Need for further information on the cultural heritage environment of the Project, including planned, ongoing, or completed archaeological assessments.

Need a cultural heritage report including potential effects on known built heritage resources and cultural heritage landscapes, and measures to avoid or mitigate effects. Need for further information on whether the Project could impact underwater archaeological resources.

Comments on the identification of a potential burial ground in the north end of the project area.

Comment that waterways were important travel routes and the discovery of archaeological resources can be anticipated. Comments on previous archeological studies and artifact discovered in the project area, including near Flint Creek.

Request to review any studies used to assess the potential presence of physical or cultural heritage features.

Request for information from the Proponent on the findings from initial archaeological studies, including information about the methods used to assess First Nations and Métis artifacts.

Request for Indigenous peoples to be involved in archaeological studies (e.g. inclusion of elders, site visits, use of maps).

Comments on the need for the Proponent to include areas for Indigenous employees to engage in traditional practices on site (e.g. tobacco offerings, smudging area).

Indigenous Peoples' Exercise of Aboriginal and/or Treaty Rights

See sections on Current Use of Lands and Resources for Traditional Purposes, Human Health and Well-being; and Spiritual, Physical and Cultural Practices.

Request that the Detailed Project Description be clearer that all Indigenous peoples engaged by the proponent (e.g. First Nations, Métis, and Inuit) have constitutionally protected rights under section 35 of the *Constitution Act*, 1982.

Migratory Birds and their Habitat, Species at Risk and their Habitat, and other Flora and Fauna

Potential effects on migratory birds and their habitat, including habitat loss, habitat alteration or fragmentation, mortality, or disturbance due to site alteration, vegetation clearing, vehicle operation, accidents and spills, and increased noise levels and light pollution, during all Project phases.

To help inform tailored assessment requirements, (optionally) provide, in the Detailed Project Description:

- a list of migratory birds known to occur, and with the potential to occur, in areas to be affected by the Project, based on available information;
- a general estimate of the quantity and quality of migratory bird habitat that would be lost,
 and the extent to which it is limiting in the broader area; and

specific mitigation measures that would avoid mortality and disturbance, including a
justification for specific timing windows with pre-construction assessments for presence, and
anything that can be said about management of ambient light and accidents and spills.

Potential effects on species at risk and their habitat and species of importance to Indigenous peoples, from disturbance and habitat alteration or loss.

Need for the federal and provincial listing for each of the species of conservation concern that are mentioned in the Initial Project Description or in these comments.

Need to identify species of particular importance to Indigenous peoples, through collection of additional Indigenous knowledge and perspectives.

Need for baseline information on species at risk and species of importance to Indigenous people at the Project site, including seasonal and annual variation, distribution, and habitat use. Need for mitigation measures for potential effects, and an assessment of residual effects.

To help inform a tailored assessment, (optionally) provide, in the Detailed Project Description, further information on presence or absence of individuals, residences and important habitat, for species at risk identified through previous or future desktop studies and field observations. Important habitat could include federal Critical Habitat or provincial General Habitat and Regulated Habitat. Some examples of helpful information are provided throughout five rows below.

Potential effects on birds and bats of conservation concern that are relatively likely to occur in the region, including:

- Little Brown Myotis, Northern Myotis, and Tricolored Bat (including bat maternity roosts);
- Bald Eagle (including stick nests);
- Canada Warbler;
- Common Nighthawk;
- Olive-Sided Flycatcher;
- Yellow Rail;
- Whip-poor-will; and
- Evening Grosbeak.

To help inform tailored assessment requirements, (optionally) provide, in the Detailed Project Description:

- currently available information about species presence and important habitat presence, from your continued monitoring, engagement and desktop analyses; and
- a description about how potential effects to these species and their important habitat would typically be managed on private and provincial Crown land, including specific breeding bird timing windows with pre-construction assessments to verify likely absence, other mitigation measures for migratory birds and bats, and through any provisions in the Ontario Endangered Species Act or Species at Risk Act.

Potential effects on Barn Swallow, Bobolink, and Red-headed Woodpecker, if they are present. To help inform tailored assessment requirements, (optionally) provide, in the Detailed Project Description:

- specific information about the potential for presence and any known occurrences, including validation with local experts; and
- a description about how potential effects to these species and their important habitat would typically be managed on private and provincial Crown land, if the species are present.

Comment received that some species are unlikely to be present in the project area and may not require further study, including:

Blanding's Turtle;

- Peregrine Falcon;
- Bank Swallow;
- Monarch; and
- Yellow-banded Bumble Bee.

To help inform tailored assessment requirements, consider rationale for whether to undertake further studies, based on available information and all comments received, and validate with other commenters as appropriate. Provide rationale in the Detailed Project Description. For Bank Swallow, provide information about appropriate aggregate and soft stockpile face management practices that can be used to prevent future establishment.

Potential for effects on Woodland Caribou, critical habitat, and recovery goals for the Kesagami caribou range. Specifically, potential for increases to range-scale "disturbance" levels, as well as potential for effects within the range on "existing habitat", "biophysical attributes" currently present, connectivity between important habitat types, and predator/prey access to "undisturbed" habitat. Potential need to offset effects to habitat that can't otherwise be mitigated.

Note: In the Kesagami Range, all habitat (disturbed or not) is critical habitat. Acknowledging the low potential for caribou presence in the local project area at present time, additional information could help clarify the scope of potential effects and narrow down the required information and studies. To help inform tailored assessment requirements, (optionally) provide, in the Detailed Project Description:

- a clear map showing where the Project overlaps the Kesagami caribou range;
- a description of the potential occurrence of caribou Project near the Project site including highway, transmission lines, rail spur, and potential 10 km pipeline. Summarize available information from provincial data sets about the Kesagami caribou population as well as local Indigenous and community knowledge. If caribou are considered locally absent, provide rationale and your level of certainty;
- information on the presence of critical habitat in any areas that could potentially be affected by the Project, using definitions in the <u>Amended Recovery Strategy</u>. Explicitly address whether the biophysical attributes of caribou critical habitat occur within and around the mine site and linear Project components, taking into account Appendix H of the <u>Amended</u> <u>Recovery Strategy</u>; and
- a description, with general rationale, of the potential for effects on caribou, critical habitat, and caribou recovery efforts within the Kesagami Range over the short, medium, and long-term including the post-mine closure landscape. Compare to how the area might contribute to recovery efforts in the absence of the Project.

Potential effects on Black Ash, which is widespread, common, but in decline due to an invasive beetle. To help inform tailored assessment requirements, (optionally) provide, in the Detailed Project Description, more specific information including:

- a description of the extent to which Black Ash may be present and impacted (including a desktop analysis of relevant eco-sites, if warranted); and
- a description about how potential effects to Black Ash would typically be managed, including provisions in the Ontario *Endangered Species Act*.

Potential effects of metals in fugitive dust on vegetation and wildlife. Need for information on mitigation measures, follow-up program measures to manage uncertainty, and monitoring plans to prevent adverse effects of metal exposure in fugitive dust.

Potential effects of habitat loss beyond the direct Project footprint, for species identified as important to Indigenous people such as moose, geese, deer, hare, and beaver.

Potential effects to the existing northern flyway for geese and ducks.

Potential effects on moose and moose habitat from construction and relocation of Highway 655, transmission lines, and rail line, and operation of new rail line. Potential changes to wolf locations and behaviour as a result of the Project, and subsequent impacts on moose.

Concerns about effects on wildlife from vehicular traffic on roads, including reptiles, amphibians, birds, and mammals. Concerns about wildlife migration and wildlife corridors, and the need for measures to enable safe crossing of service roads.

Request for information on measures that would be put in place to prevent loss of life for mammals attempting to return to previously occupied habitat that is no longer safe and suitable.

Request for additional information on provincially rare plant species identified in the project area, and measures to preserve or protect them.

Request for information on mitigation measures that would be used to control invasive or noxious species in the project area or along access points.

Concern raised that there is heightened value to this land and the services it provides as it is a greenfield site near a conservation area.

Navigation and Navigable Waters

Potential effects on navigable waters and navigation by Indigenous peoples. Need to provide information about the navigability of waterways, the traditional use of waterways for navigation, potential effects on navigation, and proposed mitigation measures. To help inform tailored assessment requirements, (optionally) provide, in the Detailed Project Description:

- information about all water crossings and works involving navigable waterways, including the highway relocation, rail spur, pipeline alternatives, and mine site;
- identification of water bodies that are obviously navigable or obviously not navigable (with supporting rationale) and which bodies still require a determination of navigability; and
- identification of project activities that could possibly affect navigation.

Comment with suggestion to engage Transport Canada on all requirements under the *Canadian Navigable Waters Act* to avoid project delays.

Need for the Project

Comment in support of critical mineral projects going ahead.

Comments in support of the Project, citing the opportunity to share wealth with impacted communities while also mitigating effects.

Project Activities and Design

Concerns about the large Project footprint and requests to minimize it to the extent possible.

Concerns over the physical stability and dimensions of the Tailings Storage Facility. Request for more information on its design and efforts to minimize its size.

Request for additional information on design of stockpiles and effectiveness of water management infrastructure to prevent release of contaminants, including location of the run of mine ore stockpile.

Need information about the alternatives for effluent discharge locations that are under consideration.

Need for information on locations of any proposed sources of aggregate on site (using maps), and provide information to demonstrate that operation is considered in the effects assessment.

Request for the power supply to the site to use as much existing infrastructure as possible. Need for information on whether the 230 kV transmission line will use new or existing right of way, and the extent to which existing right of way would be expanded. Need information on land ownership, and responsibility for operating and maintaining (including vegetation management) the 230 kV line. Provide any updates to information available about the provincial assessment requirements.

Need for information on the expected frequency of rail traffic as a result of the Project and a comparison to existing conditions along existing rail lines.

Need for further information on transport of ore concentrate from the Project site, including potential destinations, care and control, alternatives to transport by rail, and potential impacts of ore concentrate transport on rail traffic, and transportation costs.

Request for information on "special management / hazardous materials" and how they will be stored and transported.

Need for further information on potential effects on air navigation from tall (90 m) waste rock stockpiles, and mitigation measures, including associated regulatory requirements.

Need legal descriptions of the land that will be used for all project components including the mine site and any linear features such as the highway, transmission lines, and rail spur.

Need to provide any updates to available information about the provincial assessment requirements for the highway relocation, 500 kV transmission line relocation, and new 230 kV transmission line, including who will do what and when. Provide information about actions the Proponent can take to support cooperation between jurisdictions.

Request for information on any proposed collaboration with other projects/industries in the area with regard to infrastructure usage.

Public and Stakeholder Engagement

Need for Proponent to provide public notices of Project activities and documentation to additional surrounding communities in order to determine their interest in the Project.

Request to engage the township of Black River - Matheson.

Social and Economic Conditions

Potential positive economic effects through employment and tax revenues.

Need for further information on projected baseline economic conditions in the region, and any incremental effects from the Project. Include projections of baseline labour availability.

Need for sensitivity analyses on important economic variables including nickel market conditions to better understand Project feasibility and the likelihood that it will be implemented as described.

Concerns about labour shortages and the potential to need temporary foreign workers. To help inform tailored assessment requirements, (optionally) provide, in the Detailed Project Description, alternative means under consideration (if any) for acquiring and accommodating a sufficient workforce. This would inform the social effects assessment.

Need for further information on employment related to the Project, including:

- information on how workers will be hired locally, from within Canada, or internationally;
- the number of and types of jobs the Project will create (direct, induced) in different project phases;
- estimated salaries and compensation for those jobs with comparison to other provincial and local employers;
- whether assistance would be provided during any temporary lay-offs;
- local employment barriers and availability of childcare for workers; and
- any training and skills development programs to develop local job candidates.

Need for further information on tax revenues generated by carrying out the Project during all Project phases.

Need for information on the Project's costs, and if they would include procurement from local sources

Need for details on any commitments to maximize positive socio-economic outcomes for local communities.

Comments about potential for positive impacts on diversity and inclusion of underrepresented groups in the labour force.

Potential social impacts of an influx of workers to the area on housing access and affordability, community safety, childcare access, health care access, social services and infrastructure, especially pertaining to vulnerable populations. Need for prevention and mitigation measures. Suggestion to engage early with service providers on the need to increase capacity.

Potential for adverse social effects from the use of temporary foreign workers, if necessary, particularly on vulnerable populations.

Comments on need to include the Township of Black River-Matheson in the benefits of the Project, including on committees organized by the Proponent, future strategic partnerships, procurement and development, employment, training and education, and other opportunities.

Need for further information on any potential impacts to the existing economic activity and business in the region (such as tourism), beyond the Project footprint, including mitigation for negative impacts. To help tailor assessment requirements, (optionally) provide, in the Detailed Project Description, readily available information about tourism operator locations in an approximate zone of effect around the Project footprint, such as commercial Bear Management Areas.

Concern about the recreational experience for campers and seasonal businesses such as Bigwater Campground. Need to provide information about the extent of noise, vibrations, air quality and water quality changes at Bigwater Campground (if any) and any similar receptors identified. Encouraged to engage the business owner(s) and interested seasonal campers on the analysis.

Sustainability

Comment about the Project's contributions to sustainability, including whether the ore concentrate would be further processed in Canada, and products manufactured in Canada, and if not, whether global transportation costs might counter the benefits.

Vulnerable Population Groups (Gender-Based Analysis Plus)

Need for further information on data collection methodology and potential impacts on the health and safety of women, children, Elders and other vulnerable groups, taking into account how they may be affected differently.

Comment to ensure that women, youth, Elders, and 2SLGBTQQIA+ people will be included in engagement.

Need for further information on labour market conditions for underrepresented populations and more information on how the mine could improve their labour market outcomes.

Need for further information on how employment access barriers, disparities in the labour force, and income disparities for women will be addressed. Concerns about sexual harassment of female employees.

Comment that youth need access to jobs, training and formal long-term education.

Water

Potential effects of seepage and runoff from ore, mine rock, tailings, and overburden on ground water quality and surface water quality.

Need to predict acid rock drainage and metal-leaching potential. Need for geochemical studies and drainage predictions from tailings, waste rock, ore, low-grade ore, overburden, and aggregate. Need tailings and waste rock management plans.

Need for baseline information on groundwater, including upgradient and downgradient groundwater quality, groundwater levels, hydraulic conductivities, flow directions and velocities in both the bedrock and overburden, for the entire site and at individual mine facilities, to predict where contaminants might surface in water courses. Need ongoing monitoring during operations.

Need a receiving environment water quality model to help identify mitigation needs.

Need for more information on water management facilities and drainage works for all phases of the Project, including how and where seepage and mine contact water will be collected, monitored, and treated as necessary.

Request for additional information about how tailings storage facilities will be isolated from surface and groundwater sources, on land and in open pits, during operations and after closure.

Concern with the proximity of tailings to waterbodies and potential contamination from any tailings seepage (e.g. mercury, cyanide).

Need for additional information about ore stockpile design, including measures to prevent environmental contamination from drainage and runoff, such as a liner.

Need for a site-wide stormwater control study.

Concern about water storage capacity in the water storage ponds and whether it will be necessary to discharge untreated contact water to the environment at any point.

Need to develop receiver-based effluent discharge criteria, taking into account the physical, chemical, and biological conditions of the receiving waterbody, the receiver's assimilative capacity, mixing zone requirements, the identification of contaminants of concern, and potential impacts to other water uses.

Comment with request for the most conservative water quality criterion to be applied for the protection of aquatic life at the point of effluent discharge, with no mixing zone.

Need to incorporate Indigenous knowledge into selection of the effluent discharge location.

Need additional information on source of water supply at seasonal-use properties near the proposed tailings management facility, and potential water quality effects.

Concerns raised about potential effects of effluent discharge in the Mattagami River.

Concerns about any changes to water levels and how they might affect fish, amphibians, emergent plants, and forests.

Comment about water used for dust control, and whether it would be sourced from the natural environment or recycled from site.

Concerns about increased risk of mercury mobilization in selected source-water intake locations. Need to incorporate Indigenous knowledge when identifying potential water sources.

Concern about water-crossings being potential inputs of contamination.

Need to provide information about planned sediment control and the potential residual effects of sedimentation downstream of Project activities.

Need for further information on how the release of nitrogen into the aquatic environment from the use of explosives will be minimized.

Concerns about whether there is any potential for changes to water quality at Bigwater Campground. Need to characterize temporal variability and trends in baseline surface water quality and quantity in areas that might be affected by the Project.

Wetlands

Potential direct and indirect effects on wetlands and wetland functions during all Project phases.

Need for information on avoidance and mitigation measures for potential effects to wetlands and wetland functions. Need supporting information to show that mitigation for surface and groundwater effects, and accidents and malfunctions, will mitigate potential indirect effects on wetlands and wetland functions. Need for information on potential residual effects during all Project phases.