



CANADA NICKEL
COMPANY



Stantec

Crawford Nickel Project Impact Statement

Chapter 1 Introduction



Prepared for:
Canada Nickel Company

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Acronyms and Abbreviations

Class EA	Class Environmental Assessment
ECCC	Environment and Climate Change Canada
IA	Impact Assessment
IAA	<i>Impact Assessment Act, 2019</i>
IAAC	Impact Assessment Agency of Canada
kV	kilovolt
MCM	Ministry of Citizenship and Multiculturalism
MECP	Ontario Ministry of the Environment, Climate and Parks
MINES	Ontario Ministry of Mines
MNR	Ontario Ministry of Natural Resources
Mt	million tonnes
MTO	Ontario Ministry of Transportation
SAR	Species at Risk
TIS Guidelines	Tailored Impact Statement Guidelines
tpd	tonnes per day

1 Introduction

Canada Nickel Company Incorporated (Canada Nickel) proposes to develop, operate, and decommission a new open pit nickel mine and processing facility approximately 42 kilometres (km) north of Timmins, Ontario along Highway 655.

This Impact Statement is intended to satisfy the federal impact assessment process under the *Impact Assessment Act, 2019* (IAA) and project-specific requirements contained in the Tailored Impact Statement Guidelines (TIS Guidelines) for the Project, dated March 31, 2023 (refer to Appendix A.1 of the Impact Statement). This Impact Statement has been prepared following consultation and engagement with agencies, Indigenous nations, and the public and has been prepared for submission to the Impact Assessment Agency of Canada (IAAC) to inform Phase 3 of the Impact Assessment (IA) process.

1.1 Project Overview

Canada Nickel proposes to develop, construct, operate, and progressively reclaim a new open pit nickel mine and processing facility, collectively known as the Crawford Nickel Project (the Project). The Open Pit and associated surface facilities are proposed to be placed on lands held by Canada Nickel. Based on the current Project design, the estimated maximum rate of ore extraction will be up to 240,000 tonnes per day (tpd) and an estimated average rate of 160,000 tpd over the life of mine (i.e., yearly average expressed daily based on a total of 1,715 million tonnes [Mt] of ore extracted over 30 years). The ore Processing Plant and associated service facilities will process run of mine ore, as well as ore from the Ore Stockpiles in the final years of the mine, to produce nickel concentrate, iron concentrate, and tailings at a rate of approximately 60,000 tpd at the start of mine life, ramping up to a maximum of 120,000 tpd. In addition to nickel and iron, other metals such as cobalt, chromium, palladium and platinum are expected to be recovered in concentrate streams.

The mine will operate continuously, with extracted ore processed in an onsite plant. Based on the proposed processing rate and current information regarding the ore body, the current life of the proposed Project is expected to be approximately 41 years. Mining would be completed at a faster pace than milling, thus mining of ore would occur for about 30 years, then milling alone for the last 11 years.

Waste material from the processing operation will be managed through a Tailings Management Facility (TMF), with most of the tailings deposited into the depleted pits, while mine contact water will be managed through a water management system that includes water treatment facilities prior to discharge to the environment.

The Project site is currently bisected by provincial Highway 655, a 500 kilovolt (kV) transmission line, and a 115 kV transmission line (both transmission lines owned and operated by Hydro One). A realignment of Highway 655 and the 500 kV transmission line will be required in order for the Project to proceed.

Further details regarding the Project components, activities, and phasing are provided in Chapter 3 (Project Description) of the Impact Statement.

1.2 Regulatory Framework

There are several federal and provincial regulatory requirements that may apply to the Project, including IA and other environmental permitting obligations.

1.2.1 Federal Requirements

1.2.1.1 Impact Assessment Act, 2019

Through issuance of the Notice of Impact Assessment Decision on January 5, 2023, IAAC decided that an IA would be required for the Project. Under the IAA, an IA is required for designated projects, which include one or more physical activities specified in the Physical Activities Regulations. Through issuance of the Notice of Commencement on March 31, 2023, IAAC confirmed that the Project is a designated project pursuant to section 18 of the Physical Activities Regulations, specifically:

- 18 The construction, operation, decommissioning and abandonment of one of the following:
 - (c) a new metal mine, other than a rare earth element mine, placer mine or uranium mine, with an ore production capacity of 5,000 tpd or more
 - (d) a new metal mill, other than a uranium mill, with an ore input capacity of 5,000 tpd or more

The federal IA process serves as a planning tool that considers a broad range of potential environmental, health, social, cultural, and economic effects of designated projects identified by regulation or designated by the Minister of Environment and Climate Change (the Minister). The Impact Statement is prepared by the Proponent for submission to IAAC for review by agencies, Indigenous nations, and the public, to inform IAAC's preparation of an Impact Assessment Report for submission to the Minister. At the end of the IA process, a decision is made by the Minister whether the potential adverse effects within federal jurisdiction, and the adverse direct or incidental effects, are in the public interest.

Under section 2 of the IAA, the effects within federal jurisdiction are defined as:

- (a) change to the following components of the environment that are within the legislative authority of Parliament:
 - i) fish and fish habitat, as defined in subsection 2(1) of the *Fisheries Act*;
 - ii) aquatic species, as defined in subsection 2(1) of the *Species at Risk Act*;
 - iii) migratory birds, as defined in subsection 2(1) of the *Migratory Birds Convention Act, 1994*;
and
 - iv) any other component of the environment that is set out in Schedule 3;

- (b) change to the environment that would occur:
 - i) on federal lands;
 - ii) in a province other than the one where the physical activity or the designated project is being carried out; or
 - iii) outside Canada;
- (c) with respect to the Indigenous Peoples of Canada, an impact - occurring in Canada and resulting from any change to the environment - on:
 - i) physical and cultural heritage;
 - ii) the current use of lands and resources for traditional purposes; or
 - iii) any structure, site or thing that is of historical, archaeological, paleontological or architectural significance;
- (d) any change occurring in Canada to the health, social or economic conditions of the Indigenous Peoples of Canada; and
- (e) any change to a health, social or economic matter that is within the legislative authority of Parliament that is set out in Schedule 3 of the IAA.

Direct or incidental effects are defined as effects that are directly linked or necessarily incidental to a federal authority's exercise of a power or performance of a duty or function that would permit the carrying out, in whole or in part, of a physical activity or designated project, or to a federal authority's provision of financial assistance to a person for the purpose of enabling that activity or project to be carried out, in whole or in part.

The public interest determination by the Minister is based on the IA Report to be prepared by IAAC, which is based on the Impact Statement and other information obtained by IAAC during Phase 3 of the IA process, and must consider the factors set out in section 63 of the IAA, as follows:

- (a) the extent to which the designated project contributes to sustainability;
- (b) the extent to which the adverse effects within federal jurisdiction and the adverse direct or incidental effects that are indicated in the impact assessment report in respect of the designated project are significant;
- (c) the implementation of the mitigation measures that the Minister or the Governor in Council, as the case may be, considers appropriate;
- (d) the impact that the designated project may have on any Indigenous group and any adverse impact that the designated project may have on the rights of the Indigenous peoples¹ of Canada recognized and affirmed by section 35 of the *Constitution Act*, 1982; and

¹ Use of the term 'Indigenous Peoples' represents the "Aboriginal Peoples of Canada", which includes Indian, Inuit and Métis peoples as defined in subsection 35(2) of the *Constitution Act*, 1982, and 'rights of Indigenous peoples' is used to reflect the full scope of Aboriginal and Treaty rights recognized and affirmed by section 35 of the *Constitution Act*, 1982.

- (e) the extent to which the effects of the designated project hinder or contribute to the Government of Canada's ability to meet its environmental obligations and its commitments in respect of climate change.

The scope, direction, and requirements for the preparation of the Impact Statement are provided in the TIS Guidelines (Appendix A.1 of the Impact Statement), which were tailored by the Agency during the Planning Phase of the IA process. The tailoring was based on information provided in the Detailed Project Description (Canada Nickel 2022) and was informed and guided by consultation and engagement with Canada Nickel, Indigenous nations, federal authorities, provincial ministries, and the public.

1.2.1.2 Factors to be Considered

The factors considered for the IA of the Project, in line with those required for a federal impact assessment of a designated project as outline in section 22(1) of the IAA, include the following:

- (a) the changes to the environment or to health, social or economic conditions and the positive and negative consequences of these changes that are likely to be caused by the carrying out of the designated project, including:
 - i) the effects of malfunctions or accidents that may occur in connection with the designated project;
 - ii) any cumulative effects that are likely to result from the designated project in combination with other physical activities that have been or will be carried out; and
 - iii) the result of any interaction between those effects;
- (b) mitigation measures that are technically and economically feasible and that would mitigate any adverse effects of the designated project;
- (c) the impact that the designated project may have on any Indigenous group and any adverse impact that the designated project may have on the rights of the Indigenous Peoples of Canada recognized and affirmed by section 35 of the *Constitution Act*, 1982;
- (d) the purpose of and need for the designated project;
- (e) alternative means of carrying out the designated project that are technically and economically feasible, including through the use of best available technologies, and the effects of those means;
- (f) any alternatives to the designated project that are technically and economically feasible and are directly related to the designated project;
- (g) Indigenous knowledge provided with respect to the designated project;
- (h) the extent to which the designated project contributes to sustainability;
- (i) the extent to which the effects of the designated project hinder or contribute to the Government of Canada's ability to meet its environmental obligations and its commitments in respect of climate change;
- (j) any change to the designated project that may be caused by the environment;

- (k) the requirements of the follow-up program in respect of the designated project;
- (l) considerations related to Indigenous cultures with respect to the designated project;
- (m) community knowledge provided with respect to the designated project;
- (n) comments received from the public;
- (o) comments from a jurisdiction that are received in the course of consultations conducted under section 21 of the IAA;
- (p) any relevant assessment referred to in sections 92, 93 or 95 of the IAA;
- (q) any assessment of the effects of the designated project that is conducted by or on behalf of an Indigenous governing body and that is provided with respect to the designated project;
- (r) any study or plan that is conducted or prepared by a jurisdiction—or an Indigenous governing body not referred to in paragraph (f) or (g) of the definition jurisdiction in section 2 of the IAA — that is in respect of a region related to the designated project and that has been provided with respect to the Project;
- (s) the intersection of sex and gender with other identity factors; and
- (t) any other matter relevant to the IA that the Agency requires to be taken into account.

1.2.1.3 Scope of the Factors to be Considered

The scope of the factors in paragraphs 22(1)(a) to (f), (h) to (l), (s) and (t) that are to be taken into account, including the extent of their relevance to the impact assessment, is determined by IAAC as outlined in the TIS Guidelines.

1.2.1.4 Guidelines

The TIS Guidelines for the Crawford Nickel Project issued March 31, 2023 identify the requirements to be addressed within the Impact Statement. The TIS Guidelines also provide guidance on how to address these requirements, including clarity on the information required to support the Impact Statement and the methods to be followed for baseline data collection, consultation and engagement, and conducting the assessment of potential positive and adverse effects, including cumulative effects, effects of potential accidents and malfunctions, effects of the environment on the Project, effects on Canada's ability to meet its environmental obligations, and the extent to which the Project contributes to sustainability.

Numerous documents exist, including policies, guidelines, technical guidance, operational frameworks, and fact sheets that were referenced and considered during the preparation of the Impact Statement. Many of these documents are part of, or are referenced in, the Practitioner's Guide to Federal Impact Assessments (IAAC n.d.), which is an evergreen document prepared by IAAC that is updated and revised from time to time.

Some of the key documents referenced to provide guidance during completion of the Impact Statement include, but not limited to, the following:

- TIS Guidelines (Appendix A.1 of the Impact Statement)
- Summary of Issues: Crawford Nickel Project (IAAC 2022)
- Guidance: “Need for,” “Purpose of,” “Alternatives to” and “Alternative means” (IAAC 2020a)
- Policy Context: “Need for,” “Purpose of,” “Alternatives to” and “Alternative means” (IAAC 2020c)
- Guidance: Describing Effects and Characterizing Extent of Significance (IAAC 2023b)
- Assessing Cumulative Environmental Effects under the *Canadian Environmental Assessment Act*, 2012 (Canadian Environmental Assessment Agency 2018)
- Guidance: Assessment of Potential Impacts on the Rights of Indigenous Peoples (IAAC 2020b)
- Policy Context: Assessment of Potential Impacts on the Rights of Indigenous Peoples (IAAC 2020d)
- Guidance: Gender-Based Analysis Plus in Impact Assessment (IAAC, 2021)
- Guidance: Considering the Extent to which a Project Contributes to Sustainability under the Impact Assessment Act (IAAC 2019b)
- Policy Context: Considering Environmental Obligations and Commitments in Respect of Climate Change under the Impact Assessment Act (IAAC 2020e)
- Guidance: Public Participation under the Impact Assessment Act (IAAC 2019c)
- Framework: Public Participation under the Impact Assessment Act (IAAC 2019a)

Additional policies and guidelines specific to technical disciplines and other aspects of IA were also consulted and referenced as appropriate throughout the Impact Statement and supporting documents.

Further, consideration was also provided to the plans developed by IAAC during Phase 1 of the IA process to guide development of the Impact Statement and the conduct of the IA process:

- Indigenous Engagement and Partnership Plan (March 31, 2023)
- Public Participation Plan: Crawford Nickel Project (March 31, 2023)
- Cooperation Plan: Crawford Nickel Project (March 31, 2023)
- Permitting Plan: Crawford Nickel Project (March 31, 2023)

The Strategic Assessment of Climate Change (Environment and Climate Change Canada [ECCC], 2020) is recognized as a strategic assessment conducted under section 95 of the IAA that applies to this Project. No other strategic assessments, and no regional assessments, apply to the Project.

1.2.2 Provincial

In Ontario, mining development projects are carried out by private sector proponents and are not subject to provincial Individual Environmental Assessment requirements, although certain ancillary activities associated with a mining development may be subject to one or more prescribed Class Environmental Assessment (Class EA) processes.

Based on the description of the Project, several Project components trigger the Class EA requirements for which Canada Nickel will be responsible, as outlined in Table 1.1.

Table 1.1 Class EA Project Triggers

Class EA Process / Category	Project Component or Activity	Responsible Party
Class EA for Provincial Transportation Facilities and Municipal Expressways (Ministry of Transportation [MTO] Class EA) <ul style="list-style-type: none"> Group B 	<ul style="list-style-type: none"> Realignment of the existing Highway 655 Interim works for Highway 655 (i.e., grade separation of Highway 655 from mine infrastructure) 	Canada Nickel (delegated from MTO)
Class EA for MNRF Resource Stewardship and Facility Development Projects <ul style="list-style-type: none"> Category B (tentative) 	<ul style="list-style-type: none"> <i>Public Lands Act</i> authorization for disposition of Crown land and resources <i>Public Lands Act</i> and/or <i>Lakes and Rivers Improvement Act</i> authorizations for work on shorelands (e.g., water crossings) <i>Crown Forest Sustainability Act</i> to remove forest resources <i>Aggregate Resources Act</i> for development of a new aggregate pit(s), if needed 	Canada Nickel (delegated from the Ministry of Natural Resources [MNR])
Class EA for Activities of the Ministry of Northern Development and Mines under the <i>Mining Act</i> <ul style="list-style-type: none"> Category B (tentative) 	<ul style="list-style-type: none"> Surface rights within Crown land reservations from waterbodies, as applicable 	Canada Nickel
Class EA for Transmission Facilities <ul style="list-style-type: none"> Screening 	<ul style="list-style-type: none"> Two transformer stations New transmission line internal to the site (if >2 km and <4 km and <500 kV) 	Canada Nickel

The Project is proposing to relocate approximately 20 km of the existing 500 kV transmission line running parallel to Highway 655 to facilitate expansion of the Open Pit and extraction of resources from beneath the existing highway. It is anticipated that this relocation will be subject to the Class EA for Transmission Facilities and will be undertaken by Hydro One.

With the exception of new transmission line internal to the site, the Project does not include a new transmission line as the Project will connect directly to a 230 kV transmission line constructed and operated by a third party as part of an independent transmission expansion project that is expected to promote stronger electricity reliability for northern communities and Indigenous nations. It is anticipated

that this new line, proposed by others, will be subject to the Class EA for Transmission Facilities and is not considered part or, or incidental to, the Project.

1.2.3 Other Environmental and Regulatory Requirements

In addition to the IA and Class EA requirements described above, key federal, provincial, and municipal permits and approvals potentially required for the Project are listed in Tables 1.2, Table 1.3 and Table 1.4.

Table 1.2 Key Federal Environmental Permits and Approvals

Permit/Approval Type	Agency	Trigger(s)
Federal Permits/Approvals		
<i>Fisheries Act</i> <ul style="list-style-type: none"> Section 34(2) Section 34.4(1) Section 35(1) Section 36(3) 	Fisheries and Oceans Canada (DFO)	<ul style="list-style-type: none"> Activities that could result in death of fish or harmful alteration, disruption or destruction of fish habitat (TMF dam and buttresses, Overburden Stockpiles, and Ore Stockpiles, all of which cannot be constructed of deleterious substances; downstream flow impacts associated with TMF dams or buttresses, Overburden Stockpiles, and Ore Stockpiles; watercourse diversions; blasting; and water crossings).
<i>Fisheries Act</i> Metal and Diamond Mining Effluent Regulations Schedule 2 Listing	ECCC	<ul style="list-style-type: none"> TMF, waste rock pile(s), and ore stockpile(s) impacting waters that may be frequented by fish.
<i>Canadian Navigable Waters Act</i>	Transport Canada	<ul style="list-style-type: none"> Activities that alter navigable water or inhibit the ability for waterways to be navigable, including diversion and/or deposition of materials within a navigable water body and dewatering of a navigable water body (sections 5, 10, and 24 of the <i>Canadian Navigable Waters Act</i>).
<i>Species At Risk Act (SARA)</i>	ECCC	<ul style="list-style-type: none"> Specific approval may be required under SARA for Species at Risk (SAR) listed migratory birds. Individuals and residences of migratory birds listed under SARA as Endangered, Threatened, or Extirpated are protected on all land, regardless of ownership. For some SARA listed migratory birds, the residence prohibition (s.33) will protect nests and/or roost sites that are not active but are re-used in subsequent years. In these cases, a SARA permit will be required. Specific approval for other terrestrial species at risk is not likely required under SARA as no work is proposed on federal land. Additional approvals may apply should prohibitions come into force by order of the Governor in Council for individuals, residences and critical habitat on non-federal lands.

Permit/Approval Type	Agency	Trigger(s)
<i>Explosives Act</i>	Natural Resources Canada	<ul style="list-style-type: none"> Storage of explosives on site.

Table 1.3 Key Provincial Environmental Permits and Approvals

Permit/Approval/Regulatory Requirement	Agency	Trigger(s)
Permit to Take Water	Ministry of the Environment, Climate and Parks (MECP)	<ul style="list-style-type: none"> Water taking of 50,000 L or more per day (e.g., for Open Pit dewatering, construction dewatering, by-pass pumping, creek diversion, etc.).
Environmental Compliance Approval Air/Noise/Vibration	MECP	<ul style="list-style-type: none"> Discharge of air emissions, noise and vibration from components of site construction and operations (dust, crushing, blasting, wind entrainment of tailings).
Environmental Compliance Approval Industrial Sewage	MECP	<ul style="list-style-type: none"> Collection, treatment, transmission and discharge of effluent (pit water, TMF circuit, contact water, collection and treatment ponds).
Environmental Compliance Approval Domestic Sewage	MECP	<ul style="list-style-type: none"> Collection, treatment, transmission and discharge of blackwater and greywater.
Environmental Compliance Approval Waste	MECP	<ul style="list-style-type: none"> Construction, operations and closure of a demolition landfill.
<i>Endangered Species Act</i> Approvals	MECP	<ul style="list-style-type: none"> Activities that could harm SAR or alter their potential habitat.
<i>Lakes and Rivers Improvement Act</i>	MNR	<ul style="list-style-type: none"> Construction of an online dam in a lake or river.
Work Permit(s) - <i>Public Lands Act</i>	MNR	<ul style="list-style-type: none"> To undertake work on Crown lands (mine claim), work within 120 m of watercourse/waterbody setback. Road construction and culvert installations.
Disposition of Crown Resources - <i>Public Lands Act</i>	MNR	<ul style="list-style-type: none"> Disposition of Crown land, as required.
Aggregate Resource Permit or Licence	MNR	<ul style="list-style-type: none"> Extraction of consolidated material (quarry) or unconsolidated materials (pit), above or below the water table.
Forest Resource Licence	MNR	<ul style="list-style-type: none"> Clearing/disposition of forest resources.
Fish and Wildlife Conservation Act Authorizations	MNR	<ul style="list-style-type: none"> Fish and wildlife relocation and/or destruction of dams, dens and nests/eggs.
Various permits - <i>Public Transportation and Highway Improvement Act</i>	MTO	<ul style="list-style-type: none"> Highway 655 modifications (entrance permit, sign permit, encroachment permit, building and land use). Required permits depend upon final design and associated activities in realignment/overpass of Highway 655.
<i>Ontario Heritage Act</i> – Review letters for Technical Studies	Ministry of Citizenship and Multiculturalism	<ul style="list-style-type: none"> Any ground disturbing activities, including but not limited to construction, operations and

Permit/Approval/Regulatory Requirement	Agency	Trigger(s)
(e.g., archaeological assessments, cultural heritage assessment)		closure of facility, as well as transfer of any provincially owned properties out of provincial control (disposal or disposition).
Closure Plan	Ministry of Mines	<ul style="list-style-type: none"> A Closure Plan and associated financial assurance per Ontario Regulation 35/24 are required prior to initiating construction and operations of an advanced exploration or production phase mining Project.
Permit under Ontario Regulation 165/06	Mattagami Region Conservation Authority	<ul style="list-style-type: none"> Development within a Regulated Area.

Table 1.4 Key Municipal Environmental Permits and Approvals

Permit/Approval Type	Agency	Trigger(s)
Municipal Permits (as required)	City of Timmins	<ul style="list-style-type: none"> For construction of infrastructure occurring within the City of Timmins.

1.3 Impact Statement Organization

The Impact Statement has been structured into chapters and supporting technical reports that follow an organization that is generally similar to the structure of the TIS Guidelines to facilitate the review of the Impact Statement and participation in the process, as follows:

- Chapter 1: Introduction – provides an introduction to the Impact Statement as part of the IA process and outlines the regulatory requirements for the Project.
- Chapter 2: Proponent Information – identifies Canada Nickel as the Proponent and provides information regarding the company, its corporate and management structure, and sustainability policies.
- Chapter 3: Project Description – describes the Project components, activities, phases, and workforce requirements.
- Chapter 4: Project Purpose and Need – describes the need for and purpose of the Project, including a summary of the positive environmental, social, and economic benefits of the Project and to Indigenous peoples.
- Chapter 5: Alternatives Assessment – provides an assessment of the ‘alternatives to’ and ‘alternative means’ of carrying out the Project.
- Chapter 6: Public Participation and Views – describes consultation efforts with the public, federal and provincial agencies, municipalities, and other stakeholders and identifies the issues raised during consultation.
- Chapter 7: Description of Engagement with Indigenous Peoples – describes engagement efforts with the various Indigenous nations, including First Nations and Métis communities, summarizes the Indigenous knowledge considered in the Impact Statement, identifies the issues and

responses raised during engagement, and identifies planned collaboration with Indigenous nations following submission of the Impact Statement.

- Chapter 8: Assessment Methodology – describes the methodology for conducting the assessment of potential positive and adverse effects from the Project, including cumulative effects.
- Chapter 9: Description of Existing Environment – describes the baseline conditions for the environmental, health, social, and economic conditions related to the Project.
- Chapter 10: Assessment of Potential Effects on Geology and Geological Hazards - describes and assesses the potential environmental effects of the Project on geology and geohazards.
- Chapter 11: Assessment of Potential Effects on Soil - describes and assesses the potential environmental effects of the Project on soil.
- Chapter 12: Assessment of Potential Effects on Atmospheric Environment - describes and assesses the potential environmental effects of the Project on ambient air quality and light.
- Chapter 13: Assessment of Potential Effects on Acoustic Environment - describes and assesses the potential environmental effects of the Project on noise and vibration.
- Chapter 14: Assessment of Potential Effects on Groundwater - describes and assesses the potential environmental effects of the Project on groundwater quality and quantity.
- Chapter 15: Assessment of Potential Effects on Surface Water - describes and assesses the potential environmental effects of the Project on surface water quantity and quality, including geochemistry.
- Chapter 16: Assessment of Potential Effects on Vegetation, Riparian and Wetland Environments - describes and assesses the potential environmental effects of the Project on vegetation, riparian areas, and wetlands, including plant Species at Risk (SAR).
- Chapter 17: Assessment of Potential Effects on Fish and Fish Habitat - describes and assesses the potential environmental effects of the Project on fish and fish habitat, including aquatic SAR.
- Chapter 18: Assessment of Potential Effects on Birds and Bird Habitats - describes and assesses the potential environmental effects of the Project on birds, migratory birds, and their habitat, including bird SAR.
- Chapter 19: Assessment of Potential Effects on Wildlife and Wildlife Habitat - describes and assesses the potential environmental effects of the Project on terrestrial wildlife and wildlife habitat, including wildlife SAR.
- Chapter 20: Assessment of Potential Effects on Climate Change - describes and assesses the potential environmental effects of the Project on climate change.
- Chapter 21: Assessment of Potential Effects on Health - describes and assesses the potential environmental effects of the Project on human health.
- Chapter 22: Assessment of Potential Effects on Social Conditions - describes and assesses the potential environmental effects of the Project on social conditions.

- Chapter 23: Assessment of Potential Effects on Economic Conditions - describes and assesses the potential environmental effects of the Project on economic conditions.
- Chapter 24: Summary of Residual Effects – provides a summary of the residual effects as determined through Chapters 10 through 23 and 25 through 28.
- Chapters 25 through 28: Assessment of Potential Effects on Indigenous Interests - describes and assesses the potential environmental effects of the Project on Indigenous interests, organized by Indigenous nation, including the Indigenous physical and cultural heritage, current use of land and resources for traditional purposes, Indigenous governance, health, social, and economic conditions, and the exercise of Indigenous and treaty rights of specific Indigenous nations.
 - Chapter 25: Assessment of Potential Effects on Apitipi Anicinapek Nation Interests
 - Chapter 26: Assessment of Potential Effects on Taykwa Tagamou Nation Interests
 - Chapter 27: Assessment of Potential Effects on Flying Post First Nation, Matachewan First Nation and Mattagami First Nation Interests
 - Chapter 28: Assessment of Potential Effects on Métis Nation of Ontario - Region 3 Interests
- Chapter 29: Cumulative Effects Assessment - describes and assesses the potential cumulative effects of the Project in combination with other past, existing, and certain and reasonably foreseeable future projects and physical activities.
- Chapter 30: Assessment of Potential Effects of the Environment on the Project - describes and assesses how environmental conditions, such as natural hazards and external events, could affect the Project.
- Chapter 31: Assessment of Potential Effects of Accidents and Malfunctions - describes and assesses the potential environmental effects of various accident and malfunction scenarios.
- Chapter 32: Assessment of Potential Effects on Canada's Ability to Meet Environmental Obligations and Climate Change Commitments - describes and assesses the potential effects of the Project on Canada's ability to meet environmental obligations and climate change commitments.
- Chapter 33: Extent to Which Project Contributes to Sustainability – provides an analysis of the extent to which a project contributes to sustainability, including consideration of the interconnectedness of human-ecological systems, well-being of future generations, reduction of adverse effects, and the application of the precautionary principle.
- Chapter 34: Follow-up Programs – outlines the proposed follow-up programs to verify the accuracy of predicted effects and to evaluate the effectiveness of mitigation measures for the implementation of adaptive management.
- Chapter 35: Summary and Conclusion – provides a summary of the Impact Statement and conclusions regarding the assessment.

The Impact Statement also includes several appendices to support the assessment and conclusions, including baseline reports, technical data reports, and preliminary or conceptual plans for the Project, which are all appropriately referenced in the above-described chapters.

An Impact Statement Summary has also been prepared as a stand-alone document, both in English and French, to provide a concise plain language description of the Project, any potential environmental, health, social, cultural, and economic effects, potential adverse impacts on Indigenous nations, proposed mitigation measures, residual effects, and any proposed follow-up programs.

1.4 Concordance with TIS Guidelines

In order to facilitate the review of the Impact Statement, a table of concordance is provided in Appendix A.2 of the Impact Statement indicating where each requirement of the TIS Guidelines is addressed in the Impact Statement.

1.5 References

- Canadian Environmental Assessment Agency. 2018. Assessing Cumulative Environmental Effects under the Canadian Environmental Assessment Act, 2012. <https://www.canada.ca/en/impact-assessment-agency/services/policy-guidance/assessing-cumulative-environmental-effects-under-canadian-environmental-assessment-act-2012.html>.
- Canada Nickel (Canada Nickel Company Incorporated). 2022. Detailed Project Description Crawford Nickel Project. Available at: <https://iaac-aeic.gc.ca/050/documents/p83857/145854E.pdf>.
- ECCC (Environment and Climate Change Canada). 2020. Strategic Assessment of Climate Change. <https://www.strategicasessmentclimatechange.ca/16736/widgets/65686/documents/40846>.
- IAAC (Impact Assessment Agency of Canada). 2019a. Framework: Public Participation under the Impact Assessment Act. <https://iaac-aeic.gc.ca/050/evaluations/document/147105?culture=en-CA>.
- IAAC. 2019b. Guidance: Considering the Extent to which a Project Contributes to Sustainability under the Impact Assessment Act. <https://www.canada.ca/en/impact-assessment-agency/services/policy-guidance/practitioners-guide-impact-assessment-act/guidance-considering-extent-project-contributes-sustainability.html>.
- IAAC. 2019c. Guidance: Public Participation under the Impact Assessment Act. <https://www.canada.ca/en/impact-assessment-agency/services/policy-guidance/practitioners-guide-impact-assessment-act/guidance-public-participation-impact.html>.
- IAAC. 2020a. Guidance: “Need for”, “Purpose of”, “Alternatives to” and “Alternative means”. <https://www.canada.ca/en/impact-assessment-agency/services/policy-guidance/practitioners-guide-impact-assessment-act/guidance-need-for-purpose-of-alternatives-to-and-alternative-means.html>.

- IAAC. 2020b. Guidance: Assessment of Potential Impacts on the Rights of Indigenous Peoples. <https://www.canada.ca/en/impact-assessment-agency/services/policy-guidance/practitioners-guide-impact-assessment-act/guidance-assessment-potential-impacts-rights-indigenous-peoples.html>.
- IAAC. 2020c. Policy Context: “Need for”, “Purpose of”, “Alternatives to” and “Alternative means”. <https://www.canada.ca/en/impact-assessment-agency/services/policy-guidance/practitioners-guide-impact-assessment-act/need-for-purpose-of-alternatives-to-and-alternative-means.html>.
- IAAC. 2020d. Policy Context: Assessment of Potential Impacts on the Rights of Indigenous Peoples. <https://www.canada.ca/en/impact-assessment-agency/services/policy-guidance/practitioners-guide-impact-assessment-act/assessment-potential-impacts-rights-indigenous-peoples.html>.
- IAAC. 2020e. Policy Context: Considering Environmental Obligations and Commitments in Respect of Climate Change under the Impact Assessment Act. <https://www.canada.ca/en/impact-assessment-agency/services/policy-guidance/practitioners-guide-impact-assessment-act/considering-environmental-obligations.html>.
- IAAC. 2021. Guidance: Gender-Based Analysis Plus in Impact Assessment. <https://www.canada.ca/content/dam/iaac-acei/documents/policy-guidance/gender-based-analysis-plus/guidance-gender-based-analysis-plus-impact-assessment.pdf>.
- IAAC. 2022. Summary of Issues: Crawford Nickel Project. Issued September 20, 2022. <https://iaac-aeic.gc.ca/050/documents/p83857/145202E.pdf>.
- IAAC. 2023a. Cooperation Plan: Crawford Nickel Project. Issued March 31, 2023. <https://iaac-aeic.gc.ca/050/evaluations/document/147338>.
- IAAC. 2023b. Guidance: Describing Effects and Characterizing Extent of Significance. <https://www.canada.ca/en/impact-assessment-agency/services/policy-guidance/practitioners-guide-impact-assessment-act/guidance-describing-effects-characterizing-extent-significance.html#toc12>.
- IAAC. 2023c. Indigenous Engagement and Partnership Plan. Issued March 31, 2023. <https://iaac-aeic.gc.ca/050/evaluations/document/147339>.
- IAAC. 2023d. Policy Framework for Assessing Cumulative Effects under the Impact Assessment Act. <https://www.canada.ca/en/impact-assessment-agency/services/policy-guidance/practitioners-guide-impact-assessment-act/policy-framework-assessing-cumulative-effects-under-impact-assessment-act.html>.
- IAAC. 2023e. Permitting Plan: Crawford Nickel Project. Issued March 31, 2023. <https://iaac-aeic.gc.ca/050/evaluations/document/147340>.
- IAAC. 2023f. Public Participation Plan: Crawford Nickel Project. Issued March 31, 2023. <https://iaac-aeic.gc.ca/050/evaluations/document/147341>.