

# CANADA NICKEL COMPANY—CRAWFORD NICKEL PROJECT

#### **INITIAL PROJECT DESCRIPTION (IPD) MEETING**

IPD MEETING REPORT—Far Northeast Training Board (FNETB) & Keepers of the Circle

	MEETING INFORMATION			
DATE	May 10 <sup>th</sup> ,2022			
TIME	9:00 – 10:26 AM			
LOCATION	Microsoft Teams Meeting			
PARTICIPANTS	Number of people: 12         Julie Joncas - FNETB       Nancy Cote- FNETB         Arlene Hache – Keepers of the Circle       David Millar - FNETB         Alexandra Bridges – Keepers of the Circle       Haydan Fox - FNETB         Cherilyn Archibald – FNETB / TTN ETC       Britney Zacharuk - FNETB			
CANADA	<ul> <li>Pierre-Philippe Dupont, Vice President Sustainability</li> </ul>			
NICKEL	<ul> <li>Alexandra Armstrong, Community Relations &amp; Communications Coordinator</li> </ul>			
FACILITATION	<ul> <li>Anne Bélanger – Project Manager – Transfert Environment and Society</li> </ul>			
OBJECTIVES	<ul> <li>Present an overview of the new Impact Assessment Process</li> <li>Present the main elements of the Initial Project Description (IPD)</li> <li>Obtain feedback on the preliminary IPD from stakeholders</li> </ul>			
MEETING HOLDER	Canada Nickel Company			
AGENDA	<ol> <li>Welcome</li> <li>Meeting Agenda Approval</li> <li>The (new) Impact Assessment Process         <ol> <li>The (new) Impact Assessment Process</li> <li>What has changed?</li> <li>Where is Canada Nickel in the process?</li> </ol> </li> <li>Initial Project Description         <ol> <li>Project Information</li> <li>Stakeholder, Community, and Indigenous Engagement</li> <li>Existing Infrastructure and Activities</li> <li>Proposed Mine Facilities/Infrastructure</li> <li>Preliminary Decommissioning Approach</li> <li>Preliminary List of Activities</li> <li>Baseline Studies</li> </ol> </li> </ol>			

#### 4.9 Approvals

- 4.10 Potential Impacts of the Project
- 5. Questions and Feedback
- 6. Next steps
- 7. Varia
- 8. Meeting End

## MEETING HIGHLIGHTS

ISS	ISSUES AND CONCERNS			
~	FNETB	Visibility of on-site infrastructure from Highway 655		
<b>~</b>	Keepers of the Circle		Cumulative effects of existing mining projects on the local watershed	
~	Keepers of the Circle		Impacts of Canada Nickel's water discharge to the chosen river system(s)	
~	Keepers of		Closure Plan alternatives, anticipated rehabilitation plans and the project's legacy	
	the Circle		impacts on the local wildlife	
~	Keepers of		Choice of indicators and instruments for the GBA+, during the baseline studies and	
	the Circle		the Impact Assessment	

SUGGESTIONS	
✓ FNETB	Canada Nickel could participate in a high school job fair or local industries event

FOLLOW-UPS	
<ul> <li>Canada</li> <li>Nickel</li> </ul>	Share the Meeting Report and attached presentation

GENERAL COMMENTS			
<ul> <li>Keepers of</li> </ul>	Shared interest in Canada Nickel working to recycle or reuse its tailings as a tailing		
the Circle	management tool in the region		
<ul> <li>Keepers of</li> </ul>	Appreciation regarding the inclusion of a GBA+ into the federal Impact Assessment		
the Circle	Process		

#### 1. WELCOME

Ms. Alexandra Armstrong, Canada Nickel's Community Relations & Communications Coordinator, begins the meeting with a brief introduction of the team and the accompanying engagement consultants from TES.

Participants are invited to ask questions or share comments freely throughout the meeting, at their discretion. Q&A periods are also planned throughout the presentation. Ms. Armstrong mentions that the project is still in its early phase therefore the information presented is still preliminary and subject to changes and feedback. &A periods are also planned throughout the presentation

#### 2. MEETING AGENDA APPROVAL

The meeting agenda is approved.

#### 3. THE NEW IMPACT ASSESSMENT PROCESS

Ms. Armstrong presents an overview of the scope and schedule of the new federal Impact Assessment (IA) Process, managed by the Impact Assessment Agency of Canada (IAAC or Agency). She mentions that the new process relies heavily on Indigenous and public participation and will thus involve many phases of engagement and consultations with the community. For further details, please refer to the presentation available in the Appendix, slides 6 to 8.

#### 3.1 What has changed?

Ms. Armstrong mentions that the new process has a strong focus on participation, especially at the early planning phase of a project. Proponents like Canada Nickel will therefore discuss the preliminary design of their projects to gather as much feedback as possible, with the aim of improving project design, identifying a broad scope of issues, and planning appropriate mitigation measures. The process also strongly focuses on Indigenous participation and the assessment of social impacts, in addition to environmental impacts. No questions or comments are raised.

#### 3.2 Where is Canada Nickel in the process?

Ms. Armstrong mentions that Canada Nickel is currently at the beginning of the Planning Stage of the IA Process, namely engagement on a Draft Initial Project Description (IPD), the preliminary planning document for the Crawford Project. Once Canada Nickel has completed its engagement on the preliminary document, it will integrate the feedback received and submit the formal IPD to the Agency by mid-summer 2022. No questions or comments are raised.

#### 4. INITIAL PROJECT DESCRIPTION

Ms. Armstrong presents an overview of the Crawford Project's design. For further details, please refer to the presentation available in the Appendix, slides 10 to 43.

## 4.1 Project Information

Ms. Armstrong mentions that the project's design is that of an open pit nickel mine project, the same as what was shared during previous engagement activities. The major difference being that the mine's lifecycle is much longer than originally estimated, going from a 25-year mine life as described in the Preliminary Economic Assessment (2021) to a minimum 40-year mine life. No questions or comments are raised.

#### 4.2 Stakeholder, Community, and Indigenous Engagement

Ms. Armstrong provides an overview of the different engagement phases and activities that were initiated since the project was launched. She mentions that a significant amount of Indigenous and community engagement was undertaken. Of note, two parallel engagement processes are ongoing, an Indigenous process and a community process. Both aim to improve the IPD document through feedback before the final version is submitted to the Agency by mid-Summer.

Ms. Armstrong adds that Canada Nickel is also planning two virtual public information sessions, on May 13<sup>th</sup> and May 16<sup>th</sup>, for which the communications and marketing have recently begun.

To sum up Canada Nickel's engagement process, Ms. Armstrong shares the three key takeaways, namely that Indigenous and stakeholder communities will be heard, that the engagement processes are ongoing and flexible, and that Canada Nickel wants to know what the communities and individuals care about in terms of interests and expectations. For further details, please refer to the presentation. No questions or comments are raised.

#### 4.3 Existing Infrastructure and Activities

Regarding the existing infrastructure and activities, Ms. Armstrong mentions that the site is a greenfield site with regards to mining and advanced exploration, that has albeit been extensively logged. Canada Nickel has been undergoing several types of activities, including approximately 3 years of surface drilling. The company is currently looking to identify and locate local hunting blinds or evidence of human activity on the site, to inform the owners of the mining project. Letters are left when blinds are identified, to ensure communications with the local users.

In addition, the Crawford Project is undergoing different activities, including environmental baseline studies, engineering studies, permitting, etc. Importantly, Canada Nickel plans to have a finalized Feasibility Study by late Q4 2022. No questions or comments are raised.

## 4.4 Proposed Mine Facilities/Infrastructure

In terms of the project's design considerations and its facilities and infrastructure, Ms. Armstrong mentions from the start that the site layout has changed significantly since Canada Nickel last engaged with the community. The project's footprint is currently between 80 and 90 square kilometers. The layout involves efforts to minimize the project's footprint and encroachment on local waterbodies, notably the West Buskegau River. Ms. Armstrong notes that, during drilling and exploration activities, the project will maintain a 100 meters minimum distance with local waterbodies wherever possible, instead of the regulatory 30 meters.

Canada Nickel will also avoid the relocation of the 115 kV powerline that is located east of the project, while relocating the existing 500 kV powerline and building a new 230 kV powerlines. Both these powerlines will be

located to the west of the site, along the new location for Highway 655. Mr. Dupont adds that both powerlines and the Highway will form a corridor. For further details, please refer to the presentation.

Concerning the layout, Canada Nickel is planning three open pits, named the Main, East, and West Zones. Before accessing the ore, approximately 40 meters of overburden will need to be removed, composed of clay, sand, and gravel. Due to the structural quality of the ground, Canada Nickel will be unable to stack its tailings, overburden, or waste rock to the heights (50 to 70 meters) that are sometimes seen at other projects. The maximum height will therefore be around 10 meters. Regarding the footprint, it will grow progressively, over time. The early years' processing capacity will be of 42 500 tonnes per day before expanding to a maximum processing of 120 000 tonnes per day. The Main Zone will be mined first, followed subsequently by the East and West zones.

Ms. Armstrong mentions that the tailings management facility will be the largest area (29 km<sup>2</sup>) of the site. While the tailings from the main zone will be stored in the surface facility, the tailings from the East and West zone will be stored in the mined out main zone pit. While the tailings have a large footprint, Canada Nickel sees advantages in this design, as it reduces the height of the tailings and thus the risks of dam failure. In addition, a larger tailing footprint will encourage greater carbon sequestration by exposing more tailings surface to the atmospheric conditions.

Ms. Armstrong mentions that Canada Nickel does not plan to build a work camp, due to the proximity of nearby communities. The site will also exclude an explosives manufacturing site, even though explosives will be stored on-site. A processing plant is also planned for the site. In terms of energy, the project will require a large amount of power, due to the heavy automation planned for the mining site. It is for this reason that a new 230 kV line is to be built from the nearby Porcupine Substation. While current large haul trucks are not yet fully electrified, Canada Nickel expects that this technology may be made available in the coming years, which will put added pressure on the project's energy requirements.

Regarding water management, Ms. Armstrong mentions that it is a topic for which Canada Nickel is particularly looking for feedback. While Canada Nickel has identified the Mattagami River for technical and financial considerations in the upcoming Feasibility Study as its intended water discharge location, this design decision is not yet concluded. The company is currently considering four water discharge locations, namely the Mattagami River, the North Driftwood River, the West Buskegau River or a potential combination of those locations. Regarding the project's water usage, Ms. Armstrong mentions that dewatering of the open pit, collection of runoffs, and recycling through the process will provide sufficient water for the processing system. It is anticipated that the site will collect more water than is needed for the system and will therefore have to discharge beyond the site's footprint – noting that water that leaves site will meet regulatory requirements prior to discharge to the environment. Thus, Canada Nickel will have to identify a location for its discharge.

Regarding the Mattagami River, it offers significant advantages, due to its size and flow and therefore capacity to accept additional water from the discharge. The project currently has minimal impact in that watershed since the river is located approximately 10 km from the site and therefor would require a pipeline for transport of discharge. These impacts will have to be included in the IA, though it is anticipated the total water flow added to the system will be less than 1%.

While the West Buskegau River is closer to the project, there has been an effort to avoid the river system in site design. The river also has an uneven and limited seasonal flow. Thus, a large amount of water discharged into the West Buskegau could have a significant impact, equivalent to approximately 30 % of the system's natural flow. A similar issue would occur in the North Driftwood River, as its flow is lower and inconsistent. Since the

project currently encroaches on the North Driftwood, which itself feeds the site with water, the impacts would be held within an approximate closed loop.

Ms.	Armstrong	invites the	participant	ts to share	feedback o	n this crucia	I design issue
1013.	Annstrong	invites the	participan			ii tiiis ci ucia	i ucsigii issue.

QUESTIONS AND	INTERVENTIONS	ANSWERS
Q&I1	A participant asks how close the new road will be from the mine's infrastructures and if they will be visible from the road.	Mr. Dupont explains that there will be a buffer of about 200 meters on each side of the road but that the stockpiles will likely be visible. He adds that the site layout is still being tweaked.
Q & I 2	A participant asks if the cumulative effects of nearby mining projects and their tailing discharges into the Mattagami River will be assessed.	Ms. Armstrong answers that Canada Nickel will not discharge any of its tailings, but rather its excess water from the site. She mentions that a hydrology assessment will be undertaken, as part of the project's baseline studies. This will evaluate the current water flow and quality of nearby rivers, which will thus consider surrounding projects and their cumulative effect. She adds that Canada Nickel will also undergo environmental monitoring during construction and operations. Mr. Dupont adds that there is a whole section in the Impact Assessment that concerns cumulative effects.
Q & I 3	The participant asks if excess water will be treated before being discharged and if there will be any residual chemicals in the water.	Mr. Dupont answers that even though the site is large, the issue of water treatment and management is rather straightforward. It requires important infrastructure, but, essentially, the water is pumped from the tailings and is used in the mill, which forms a closed loop. He mentions that the main source of water discharge will be the pit dewatering, as it will collect runoff and natural precipitation, otherwise referred to as contact water. He further explains that the contact water will be collected and likely treated to meet regulatory requirements. An upside of the Crawford site is that the ore and waste rock

QUESTIONS AND	INTERVENTIONS	ANSWERS
		is not acid-generating due to the low amounts of sulphide, which therefore does not generate sulfuric acid, as is often the
		case with gold mines.
		Ms. Armstrong mentions that the main water parameters of concern will most probably be suspended solids and blasting residue.
		Mr. Dupont answers that there are significant gold deposits around Timmins and Cochrane, but the geology for Canada Nickel's deposit is different. The mine rock for Crawford is called serpentine, which is different from the other operations in the area, noting that the region consists of several different types of deposits and rock formations. He adds that there is no gold at the Crawford deposits.
Q & I 4	A participant asks what makes the geology different in the area, compared to the neighbouring mining sites.	He further mentions that Canada Nickel acquired 18 other properties in the area all based on their similar geotechnical signatures to Crawford. He adds that there are other similar deposits in Quebec (for example Royal Nickel's Dumont Project where Canada Nickel President Mark Selby and Mr. Dupont both worked prior to Crawford) and in Western Canada. He adds that because of the deposit's geology, it has a natural ability to sequester carbon and act as a carbon sink.
		It is this specific geological signature that has low sulphides and therefore is non-acid generating, which makes water management less challenging.

## 4.5 Preliminary Decommissioning Approach

Ms. Armstrong mentions that Canada Nickel's decommissioning approach is not the project's final Closure Plan. Here again, the participant's feedback will be used to improve and refine the decommissioning approach and ultimately, the Closure Plan. Overall, it is mentioned that the actual objective is to rehabilitate the open pit into a lake. She adds that Canada Nickel will be able to undertake this approach due to non-acid bearing nature of its mine rock, ore, and tailings. For further details, please refer to the presentation.

QUESTIONS AND	INTERVENTIONS	ANSWERS
Q & I 5	A participant mentions that the idea of recycling Canada Nickel's tailings, which they had discussed in previous engagement meetings, is interesting and they ask if there are more details on this topic.	Ms. Armstrong answers that there are no new details on this topic this early in the project's planning, which is part of the challenge in doing engagement so early in the process. She adds that recycling the tailings is advantageous to everyone, and potential avenues to achieve that goal will be considered. She further adds that since the tailings are basic (non-acidic), they could be used to neutralize acidic tailing from neighbouring mining sites.
		Mr. Dupont also explains that a mine's closure is now planned early on in a project's development. This new approach allows proponent's time to adapt closure plans but makes it challenging to talk about in details at early stages.
Q & I 6	A participant asks if other alternatives than allowing the pit to flood will be assessed for the Closure Plan, or if it is the only feasible way to do it.	Mr. Dupont answers that the only other option would be to completely backfill the pit, which would be a significant cost due to the project's size and likely affect the project's economics. To illustrate a comparison, the Crawford Project will be approximately twice the size of the Detour Project.
		He adds that, while the pits will be used as a tailings disposal facility for the east and west zone pits, they will likely not be filled completely.

QUESTIONS AND	INTERVENTIONS	ANSWERS
Q & I 7	A participant asks if the Closure Plan includes revegetation of the tailings storage area.	Mr. Dupont answers that normally the slopes are graded and then revegetated with indigenous plants. The idea is to come as close as possible to the initial state of the impacted land. He adds that some testing occurred on other projects, and it is anticipated that revegetation can be done without using fertilizer. It is important to ensure the stability of the tailings - the fact that Crawford's tailings management facility will have a maximum height of 10 meters is helpful to accomplish good stability.
Q & I 8	A participant asks if the animals could eventually go to the flooded pit and drink the lake's water.	Mr. Dupont mentions that Canada Nickel's intention is to revegetate and repopulate the pit lake as necessary to ensure it can serve as a successful habitat, and as a safe source of water for wildlife. This process has been done successfully before, with general research from the industry into the topic ongoing.

## 4.6 Preliminary Schedule

Regarding the schedule, Ms. Armstrong mentions that the project's schedule has changed significantly since previous presentations, due to the mine's extended lifetime of a minimum of 40 years. For further details, please refer to the presentation. No questions or comments are raised.

## 4.7 Preliminary List of Activities

Ms. Armstrong provides a quick overview of the project's list of activities during the construction, operations, and closure phases. A few of the highlights concern the relocation of Highway 655, the relocation and construction of the 500 kV and 230 kV powerlines, the open pit development, etc. For further details, please refer to the presentation. No questions or comments are raised.

## 4.8 Baseline Studies

Ms. Armstrong shares details on the ongoing and upcoming baseline studies, including field studies. The list of baseline studies includes air quality, noise/light/vibrations, cultural heritage and archeology, geochemistry, hydrogeology, hydrology, social, economic & health context for the concerned communities, flora and vegetation, and land and aquatic wildlife. For further details, please refer to the presentation.

Ms. Armstrong adds that in terms of species of concern, no woodland caribou were identified within the project's area, despite being the in extreme south of the caribou range. She further mentions that the baseline

studies will continue in 2022. Finally, she adds that Indigenous communities will have their own process regarding many of the baseline studies, notably archeology and traditional land use. No questions or comments are raised.

#### 4.9 Approvals

Ms. Armstrong presents the list of preliminary and potential federal and provincial approvals. For further details, please refer to the complete list. No questions or comments are raised.

## 4.10 Potential impacts of the Project

Ms. Armstrong provides a detailed overview of the project's potential impacts and proposed preliminary mitigation measures. For specific details, please refer to the presentation.

She adds that per the new IA Process, the Agency, and by extension, Canada Nickel, is looking for feedback on potential impact topics that are of lesser relevance to the project and its eventual IA, due in part to its location and design. She cites, as examples: noise, ambient light, and vibrations as potential impacts of this type. Regarding carbon capture, she mentions that Canada Nickel is aiming for net-zero and with the project's current design, she believes that there is a strong chance of success. She adds that the project may even be able to sell carbon credits.

Regarding the project's social and public health impacts to Indigenous and local communities, Ms. Armstrong mentions that Canada Nickel will focus on the use of a local workforce, which will likely have impacts on the host communities, including in terms of housing, traffic, access to social and health services, education, changes of economic statuses, etc. She commits that Canada Nickel will look to work with the communities to identify impacts and appropriate mitigation measures. As an example, she cites a previous meeting where participants identified an increase in traffic as a potentially significant impact. The participants further suggested that Canada Nickel uses shuttles to transport its workers to the mine site, to reduce such an impact. She concludes by saying that each potential project impact will be assessed in the engagement process, the IA and through the project's different committees, for example the Community Contributions and Procurement Committee.

QUESTIONS AND INTERVENTIONS		ANSWERS
Q & I 9	A participant asks if Canada Nickel would like to do a presentation at a high school, so students are informed about potential careers and jobs in the region.	Ms. Armstrong answers that it is sensitive to have a mining company do such a presentation independently. She suggests that she can participate outside of Canada Nickel's scope, as a mining engineer, and present the industry and potential jobs at large, or as a Canada Nickel representative at a wider industry event with other organizations.

QUESTIONS AND	INTERVENTIONS	ANSWERS
		Mr. Dupont adds that participation in job fairs could be possible if multiple other industries are present.
Q & I 10	The participant asks to confirm that if a regional event was prepared with other industries, Canada Nickel would participate.	Ms. Armstrong answers that they would be interested in participating.
Q&I11	A participant thanks Canada Nickel for the presentation and the opportunity to better understand the project. They add that they have an interest in collaborating with the planning of Canada Nickel's workforce.	Ms. Armstrong thanks the participant and mentions that the work done with the FNETB is appreciated and helps plan Canada Nickel's future workforce needs.
Q & I 12	A participant asks about Canada Nickel's plan with regards to the Gender-Based Analysis (GBA+) and gathering information for the baseline studies on the subject.	Ms. Armstrong answers that the GBA+ process is integrated into the Impact Assessment Agency's guidelines, and it will therefore be part of the socio-economic and independent Indigenous studies to come.
Q & I 13	The participant further asks if Canada Nickel has a specific plan to address and measure impacts per the GBA+ and if certain instruments have been selected, other than the demographic survey.	Mr. Dupont answers that the new federal Impact Assessment process now requires a GBA+. He adds that he does not know yet which tools the consultants will use for the socio-economic study.
Q & I 14	The participant emphasizes their interest towards the integration of the GBA+ into the Impact Assessment and mentions it would be interesting to see Canada Nickel go beyond the demographics and consider a wide range of groups and demographics.	Ms. Armstrong mentions that there has been an effort made to reach out to groups that aren't usually contacted by mining projects to obtain their feedback, though it can be difficult to obtain a response from those groups as the relevance of the outreach made by Canada Nickel is sometimes questioned.

## 5. QUESTIONS AND FEEDBACK

Ms. Armstrong opens the floor to the participants by asking them if there are any impacts that seem to be of lesser relevance to the project, per its initial design.

#### 6. NEXT STEPS

Ms. Armstrong presents the next steps in terms of Canada Nickel's Indigenous and stakeholder engagement process. For further details, please refer to slide 46 of the presentation.

7. VARIA

No varia are proposed.

## 8. MEETING END

The meeting ends at 10:26

# APPENDIX I PRESENTATION