

#### CANADA NICKEL COMPANY—CRAWFORD NICKEL PROJECT

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

IPD MEETING REPORT—Timmins Local Citizen's Committee (LCC) & Ministry of Northern Development, Mines, Natural Resources and Forestry (NDMNRF)

	MEETING INFORMATION		
DATE	June 1 <sup>st</sup> , 2022		
TIME	6:00-7:44 PM		
LOCATION	Zoom Meeting		
PARTICIPANTS	Number of people present: 13         Lino Morandin (LCC)         Michelle Perrier (NDMNRF)         William MacRae (LCC)         Isaac Shelley (NDMNRF)         Robin Timms (NDMNRF)	Peter Westhouse (LCC) Barry Allen (LCC) Lisa Keable (NDMNRF) Samantha O'Donnell (NDMNRF) Mark Joron (LCC)	
CANADA NICKEL	<ul> <li>Pierre-Philippe Dupont, Vice President Sustainability</li> <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 <i>Initial Project Description</i> (IPD)</li> <li>Obtain feedback on the preliminary IPD from stakeholders</li> </ul>		
HOLDER	Canada Nickel Company		
AGENDA	<ol> <li>Welcome</li> <li>Meeting Agenda Approval</li> <li>The (new) Impact Assessment Process         <ul> <li>3.1 What has changed?</li> <li>3.2 Where is Canada Nickel in the process?</li> </ul> </li> <li>Initial Project Description         <ul> <li>4.1 Project Information</li> <li>4.2 Stakeholder, Community, and Indigenous Engagement</li> <li>4.3 Existing Infrastructure and Activities</li> <li>4.4 Proposed Mine Facilities/Infrastructure</li> <li>4.5 Preliminary Decommissioning Approach</li> </ul> </li> </ol>		

	4.6 Preliminary Schedule
	4.7 Preliminary List of Activities
	4.8 Baseline Studies
	4.9 Approvals
	4.10 Potential Impacts of the Project
5.	Questions and Feedback
<mark>6.</mark>	Next steps
7.	Varia
<mark>8.</mark>	Meeting End

## **MEETING HIGHLIGHTS**

ISSUES AND CONCERNS		
✓ TLCC	Water discharge location and potential contaminants in the discharge	
✓ TLCC	Water discharge regulatory requirements	
🗸 TLCC	Likeliness of chemical or metal leaching from the tailings storage area	
✓ TLCC	Closure Plan and area rehabilitation	

FOLLOW-UPS	
✓ CNC	Share the Meeting Report and presentation to the participants
✓ CNC	Share detailed maps of the site's layout

#### 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.

She mentions that, since many of the participants have already received part of the information shared in the presentation, she will quickly go through some of the slides. 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.

# 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.

Mr. Dupont mentions that the main difference between the previous and the new federal process is that the latter is tailored to each project. In that sense, Indigenous and stakeholder feedback will directly affect what the project's issues will be and how Canada Nickel will need to assess these issues in the Impact Assessment (IA). He gives, as an example, different issues like noise or lights that may be of lesser concern to the community, due to the project's location. If the case, he mentions that it will be important for the community to inform Canada Nickel, so they can share this information with the Agency and adapt the project's design and the upcoming IA accordingly. 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.

QUESTIONS AND INTERVENTIONS		ANSWERS
Q&I1	A participant asks why the comments are anonymous and comments that it might be harder to do a follow up with the person if their identity is unknown.	Ms. Armstrong explains that the meeting reports are anonymous to encourage people to comment openly during meetings, since the reports are made available public on the website. She mentions that although there are no specific names, the name of the group within which the comment was made is provided. She also adds that if a specific follow up is to be made with one person, Canada Nickel takes internal note of it and directly answers that person afterward.

# 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 participants to share feedback on this crucial design issue.

QUESTIONS AND INTERVENTIONS		ANSWERS
Q & I 2	A participant asks if the project will be underground.	Ms. Armstrong answers that the project is an open pit mine and presents anew the preliminary layout.

# 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 3	A participant asks for details about the project's rehabilitation. They ask if the tailings area will be able to be revegetated with trees, especially since the area has a potential as a summer logging area. A participant mentions that a forested area could be advantageous for the community and industry in several decades.	Ms. Armstrong answers that the baseline studies aim to understand the area's environment before the project begins construction. This includes assessing local vegetation to ensure that the site is rehabilitated as close to the original site as possible. The idea is to rehabilitate the area so it can support regrowth after the project's closure. Mr. Dupont adds that, typically, the first step in rehabilitating the area is to limit water and wind erosion. Following that, the soil will be rehabilitated to maximize plant growth and bring the site back to what it was before. Currently, Canada Nickel does not have exact details on the decommissioning and closure plan. He mentions that technology has also significantly evolved over the years to support successful reclamation. While the site will not be the exact same, it could become a life sustaining environment.
Q & I 4	A participant asks how close the tailings storage area will be from the open pit, due to concerns about chemical or metal leaching. They mention that this concern stems from the fact that	Mr. Dupont answers that so far, the environmental geochemistry program has taken rock samples to do leaching and humidity testing. He mentions that the results are positive and do not raise concerns

QUESTIONS AND	INTERVENTIONS	ANSWERS
	Canada Nickel will be extracting low-	of chemical or metal leaching. The first
	grade ore from the pit.	sampling campaign took 50 samples and
		approximately 350 other samples will be
	A participant asks if any chemicals or	tested ion distinct phases.
	metals could leach out of the tailings	
	facility into the water discharge.	He further adds that one advantage of a low-
		grade deposit is the low amount of sulfides,
		usually responsible for acid mine drainage.
		Mr. Dupont answers that the preliminary estimates are of approximately 140 000 cubic metres per day. In terms of the standards in
		Ontario, they are restrictive for mining
	A participant asks, in the context of a potential discharge into the Mattagami River, how much water is to be expected and what are the regulatory standards.	projects, and are site specific. He mentions
		that those requirements will need to be met.
Q & I 5		He further explains that the main challenge with water is expected to be the presence of suspended solids, because of the amount of clay at the site. The suspended solids will need to settle before the water discharge is released, which is normally achieved with sedimentation ponds. He also explains that another challenge could be residue blasting products, such as ammonia and fuel.
Q & I 6	A participant asks if the water discharge in the Mattagami River would be below the Lower Sturgeon dam and power station.	<ul> <li>Mr. Dupont answers that no precise location has been determined yet, but the location will likely be the shortest straight-line distance from the site, which would be downstream of the Lower Sturgeon dam.</li> <li>He adds that a challenge of engaging during a project's planning stage is that not all questions can be fully answered. The</li> </ul>
		advantage though is that input can be
		integrated into a project's design.

# 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. No questions or comments are raised.

# 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.

QUESTIONS AND	INTERVENTIONS	ANSWERS
Q & I 7	A participant asks if the presentation will be made available and sent to the participants.	Ms. Armstrong answers that she will send the presentation and informs the participants that it is also already available on Canada Nickel's website.
Q&18	A participant asks if the project's site is on private or patented land.	Mr. Dupont answers that the majority is on patented land.
Q & I 9	A participant mentions that many of the participants are from the forestry sector, where maps are appreciated. They ask if other maps could be provided to allow a better understanding of the site's layout.	Ms. Armstrong answers that maps will be shared shortly.

## 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 7:44 PM.

# APPENDIX I PRESENTATION