

# CANADA NICKEL COMPANY—CRAWFORD NICKEL PROJECT INITIAL PROJECT DESCRIPTION (IPD) MEETING IPD MEETING REPORT—Northern College

MEETING INFORMATION		
DATE	May 16 <sup>th</sup> 2022	
TIME	1:00 – 2:20 PM	
LOCATION	Teams Meeting	
	Number of person present: 6	
PARTICIPANTS	<ul> <li>□ Audrey J. Penner, President &amp; CEO – Northern College</li> <li>□ Douglas Clark, Academic Deans, Responsible Mining and Mineral Exploration – Northern College</li> <li>□ Edris Maladian, Manager Applied Research – Northern College</li> </ul>	
CANADA	✓ Pierre-Philippe Dupont, Vice President Sustainability	
NICKEL	✓ Alexandra Armstrong, Community Relations & Communications Coordinator	
FACILITATION	✓ Isaac Gauthier – Facilitator – Transfert Environment and Society	
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         <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> <li>4.6 Preliminary Schedule</li> </ul> </li> <li>4.7 Preliminary List of Activities</li> </ol>	

4.8 Baseline Studies
4.9 Approvals
4.10 Potential Impacts of the Project
5. Questions and Feedback
6. Next steps
7. Varia
8. Meeting End

ME	MEETING HIGHLIGHTS			
ISS	ISSUES AND CONCERNS			
<b>✓</b>	Northern College		Project development and schedule with regards to the new IA process	
<b>√</b>	Northern College		Project's water discharge and contact water management	
<b>√</b>	Northern College		Project impacts on groundwater	
<b>√</b>	Northern College		Project labour requirements and workforce planning	
<b>√</b>	Northern College		Local training availability in relation to the project's labour requirements	
<b>√</b>	Northern College		Forest fire and climate change risks in the Impact Assessment	
CC	COMMITMENTS			
<b>√</b>	Canada Nickel		Share insights on business, sustainability for Northern College's Business Mining course	
SU	IGGESTIONS			
✓	Northern College		Multiple opportunities for partnerships between Northern College and Canada Nickel, regarding wastewater management software for mining, training improvement, applied research, employment laddering	
FC	LLOW-UPS			
<b>√</b>	Canada Nickel		Share the Meeting Report and attached presentation, for review and validation	
<b>√</b>	Canada Nickel		Share the workforce estimates document	

# Vorthern College Coll

#### 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. 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.

QUESTIONS AND	INTERVENTIONS	ANSWERS
Q&I1	A participant asks if Canada Nickel has had to adjust its project schedule because of the evolving nature of the IA Process.	Ms. Armstrong answers that Canada Nickel has been in constant communication with the Agency to mitigate the fact that Canada Nickel is undergoing a new process. She adds that Canada Nickel has been speaking approximately once a month with the Agency since November.  Mr. Gauthier adds that this is often the case with proponents that are currently undergoing the new process, as it still evolving.

### 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 km²) 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. 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 mentions that Northern College has significant expertise in wastewater management training, including in mineral wastewater management. They add that Northern College is also looking for opportunities for applied research for their students, and thus see an opportunity for a partnership with Canada Nickel. They add that the wastewater management training center is at the Kirkland Lake campus.	Ms. Armstrong thanks the participant for the suggestion. She mentions that Canada Nickel hired an environmental manager who has specific expertise in water engineering and management.
Q&13	A participant mentions that Northern College also has an environmental technician program, which is a fast-track training program that meets the	Ms. Armstrong acknowledges the participant's comment.  Regarding the project's water management
	provincial training requirements.	plans, Ms. Armstrong answers that neither

QUESTIONS AND	INTERVENTIONS	ANSWERS
	The participant adds that the College has also acquired wastewater simulation software for its training program. While the software isn't designed for mining, it could have a lot of potential for the region. Currently, the College is focusing a lot of its training on environmental protection in the mining sector.  The participant adds that any support from Canada Nickel would be helpful to improve their training and software.	the ore, the tailings or the waste rock are anticipated to be acid-generating, due to its low sulphide content. What little sulphides there are will be predominantly removed during the ore's processing, therefore Canada Nickel does not expect any acid drainage at the site. Suspended solids and explosives residue (ammonium nitrate) could be the most challenging parameter to deal with in the water. In terms of water management, she mentions that Canada Nickel's environmental manager is satisfied with the current results, because of the anticipated low impacts.  Ms. Armstrong thanks the participant for the suggestions.
Q & I 4	A participant adds that Northern College has also launched a technician training program for battery electric vehicle maintenance, with the goal of building local expertise in this crucial field. The participant adds that the College has also created a space for applied research to prototype different equipment, which will be a win-win situation for proponents and students.	Ms. Armstrong thanks the participant for the information.
Q & I 5	A participant asks if the mine's ore is accessible from the surface.  The participant further asks if there are any concerns regarding potential water runoff from the site.  The participant asks how much water does Canada Nickel expect to discharge.  A participant asks how Canada Nickel plans to protect ground water.	Ms. Armstrong answers that the ore is accessible from the surface, but there is a significant amount of overburden, approximately 40 meters over the deposit.  Ms. Armstrong mentions that all contact water (also known as runoff) will be collected at the site. In terms of the quality of the runoff, it will be treated in a proposed water treatment plant and initial studies have shown that the discharge will meet regulatory requirements without too much complication.

### **QUESTIONS AND INTERVENTIONS**

**ANSWERS** 

The participant comments that proponents often try to add clay liners at mining site to improve water management, which likely won't be a problem for Canada Nickel.

Ms. Armstrong answers that the discharge will be approximately 140 000 cubic meters per day, but these are very preliminary numbers.

Mr. Dupont answers that Canada Nickel will probably study contaminant transportation depending on the water quality modeling results, where the project's impacts on local ground water will be modelled and assessed. He adds that because of the heavy presence of clay at the site acting as an impervious barrier, ground water contamination is of low concern. He mentions that it is also expected that the pit will capture most of the site's contact water. He further reiterates that, regarding the project's impact to the local watershed, Canada Nickel is confident that it will successfully manage the project's impacts.

Mr. Dupont acknowledges the participant's comment and adds that clay is very abundant at the site. This is a challenge for material storage since clay is a poor foundation for high piles of waste rock or tailings.

# 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. No questions or comments are raised.

# 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.

QUESTIONS AND	INTERVENTIONS	ANSWERS
Q&16	A participant asks how will forest fire risks and the larger issue of climate change factor into the project's Impact Assessment.  The participant comments that forest fires are occurring earlier in the season throughout Northern Ontario.	Ms. Armstrong mentions that climate change and its risks will be included in the Impact Assessment, as it is an important focus of the new federal Impact Assessment process.
Q & I 7	A participant asks Canada Nickel's labour estimates for the project.  The participant thanks Ms. Armstrong for the information and adds that Northern College is looking to find innovative ways to ensure employment laddering for workers that are currently on the market.	Ms. Armstrong mentions that she currently only has preliminary numbers and that better estimates will be available at a later date. Currently, the project is looking at 1100 workers at peak construction, with an average of 900. During operations, between 450 and 600 workers are expected.  Ms. Armstrong adds that Canada Nickel is also preparing a document that identifies the different types of expected jobs for the project, with rough estimates on the number of workers per job type. She mentions that her objective would be to partner with Northern College and other training institutes to share this document and align the different

QUESTIONS AND	INTERVENTIONS	ANSWERS
QUESTIONS AND	A participant asks if Canada Nickel has spoken with the Far Northeast Training Board (FNETB).	jobs and the necessary training and education.  Ms. Armstrong answers that Canada Nickel has indeed met with the FNETB to hold a similar meeting, and that Ms. Armstrong is a member of the Board's working group for predicting upcoming demand for the mining industry's workforce.  Ms. Armstrong acknowledges the participants comment and explains that it is exactly why Canada Nickel is looking to plan its labour requirements, to allow potential workers to plan ahead. She adds that, unfortunately,
Q & I 8	The participant comments that mining projects are attractive to workers, and rather than obtaining further training and education, many workers could look to apply on entry-level jobs at the sites.  A participant comments that there are existing and active initiatives for talent recruitment and retention in the region. They also recognize that it will be a significant advantage for Canada Nickel to plan its labour needs with local training institutions and high schools.	demand for workers is high, so there are real challenges. She further mentions that she will share the preliminary labour planning document she was referencing.  Mr. Dupont mentions that, regarding the mining projects attracting workers before the complete a certain level of education, he agrees that it is a potential issue that should be discussed at the Employment and Training Committee. He adds that working with Indigenous communities, Canada Nickel should have access to an important pool of workers. He mentions that a balance will need to be found.
		Ms. Armstrong adds that regarding high schools, Canada Nickel is not interested in directly approaching these students, while being open to assist existing initiatives, for example job fairs.
Q&19	A participant thanks Canada Nickel for their letter of support for a three-year mining technician training program, which has been successful. They mention that Northern College is working to establish this program.	Ms. Armstrong congratulates the participant on their success.

# 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 10	A participant mentions that Northern College is building a course called Business Mining, with a focus on Impact and Benefit Agreements (IBA) and sustainability. They ask if Canada Nickel would be willing to connect with Northern College to share their expertise.  The participant mentions that they will put Ms. Armstrong in contact with the person in charge.	Ms. Armstrong agrees with the proposal and invites the relevant person to reach out to her.

#### 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 11	A participant asks if Canada Nickel is looking to do its research and development (R&D) internally or with institutional partners.  The participant mentions that Northern College is also working with universities regarding mining innovation, namely McGill and Sherbrooke universities, in Quebec.	Ms. Armstrong mentions that Canada Nickel is working with Kingston Process Metallurgy, in partnership with Queen's University, for matters regarding carbon capture and enhanced sequestration at the site. A few students at the university level are also working with Canada Nickel in terms of research and project development, for example, on the mineral processing flowsheet.
	The participant thanks Ms. Armstrong for the suggestion and mentions that they will reach out to her.	Ms. Armstrong thanks the participant for the information and invites them to reach out for future collaborations and partnerships.
Q & I 12	A participant mentions that, with regards to environmental management, a college-level technician program could be worked out with local Indigenous communities and industrial partners like Canada Nickel to improve labour force development in the region.  They mention that Canada Nickel has so far provided a letter of support for the initiative, and Northern College will be looking to do more.	Ms. Armstrong expresses her interest in the participant's suggestion.

# 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 2:20.

# APPENDIX I PRESENTATION