

NioBay - James Bay Niobium Project FAQ

Common Questions asked as of September 2025:

About NioBay:

1. What is NioBay?

- a. *NioBay is a Quebec-based company that is working to develop critical and strategic minerals in Canada. These minerals are crucial for a more sustainable energy transition and to minimize the carbon footprint of transportation and other sectors.*

2. What is NioBay doing?

- a. *NioBay is studying the geology of the James Bay region to understand the natural niobium resource in the area. Our work is focused on collecting information about the rocks and the land so that we can clearly understand what is there. Exploration gives us and the community a better picture of the resources and the type of relationship we can build to mutually benefit from this.*

3. How far along are you exactly?

- a. *Right now, NioBay is still in the exploration and study phase. In partnership with Moose Cree First Nation, we updated our Protection Agreement in late 2021 to reflect this work and to include a full environmental baseline study. Those studies began in fall 2021, with some being led directly by the Moose Cree Lands and Resources team and others by independent consultants. Alongside this, NioBay is advancing its drilling program, and the results will feed into a Prefeasibility Study, an early planning step that helps us better understand the resource and its potential before any further decisions are made.*

About the Moose Cree:

1. Do you have an agreement with Moose Cree?

- a. *Yes. NioBay and the Moose Cree First Nation have a Protection Agreement in place. This agreement ensures open and transparent communication, involvement in permitting and environmental monitoring, and the creation of job opportunities for Moose Cree members. It also covers the community's costs so that participation does not create a burden. Going forward, NioBay will continue to work closely with Moose Cree leadership and members to ensure their interests are fully respected. If the project advances beyond exploration, a new, long-term agreement would be developed together, and any next steps would only move forward with the community's consent.*

2. What are NioBay's obligations to other indigenous communities?

- a. *NioBay is committed to working respectfully with all Indigenous communities whose rights are connected to the project area. This means engaging early, listening to concerns, and working together to reduce potential impacts while*

also creating opportunities to share in the benefits the project could bring. As the project advances and becomes more defined, NioBay will continue these conversations to make sure that the rights and interests of each community are fully understood and respected.

3. **What are the employment opportunities with the exploration and environmental baseline work you are proposing?**
 - a. *The exploration and environmental baseline work will create short-term job opportunities in the community. On the exploration side, this includes positions such as drillers, driller's helpers, and core cutting and handling, during a 16–20 week program. NioBay will contract a drilling company but will encourage and prioritize the hiring of Moose Cree members, as well as local contractors who have already worked with the Nation. For the environmental baseline studies, we will work directly with Moose Cree Lands and Resources to define the scope of work, the staffing needs, and the best way to carry out the data collection.*

About Niobium

1. **What is Niobium?**
 - a. *Niobium is a rare, critical mineral that strengthens steel and enables new battery technologies. It is classified as a critical mineral in Canada, the United States, and the European Union.*
2. **What is it used for?**
 - a. *Niobium transforms materials. When added to steel, it makes cars lighter and bridges stronger, reducing both costs and emissions. It is also at the center of next-generation batteries, improving energy density, enabling fast charging, and supporting the shift toward solid-state designs. From infrastructure to clean energy to advanced electronics, niobium is becoming essential.*
3. **Why do we need it now?**
 - a. *The world is moving quickly toward decarbonization, demanding lighter vehicles, efficient energy systems, and safe, high-capacity batteries. Niobium is a key part of that transition. With global supply concentrated in just a few producers, secure and responsible sources like NioBay are more important than ever to meet this growing need and to stop relying on oil and gas.*

About the Environment:

1. **Which measures will NioBay take to protect the environment?**
 - a. *NioBay is committed to using the cleanest and best practices during exploration. This includes using biodegradable drilling additives, absorbent pads and drip pans to prevent spills, recovering and properly disposing of drill mud, recycling and reusing drilling water, and removing all material and equipment once work is complete. We also plan to clean up old debris left behind from the 1960s.*
2. **How will NioBay ensure these environmental procedures are actually followed?**

- a. Environmental protection measures are written directly into our drilling contracts. A senior NioBay geologist will monitor operations, and Moose Cree First Nation will have its own independent environmental monitor on site. This includes regular sampling of drill mud, water, and South Bluff Creek. NioBay will cover all monitoring and analysis costs. In 2020, consultants from CanNorth reviewed the Moose Cree monitoring program and confirmed there were no environmental impacts from drilling. The same rigorous conditions are in place for future work.*
- 3. How safe is the rock that will be drilled and potentially mined?**
 - a. The James Bay niobium resource is hosted in a carbonatite rock that is clean, safe, non-radioactive, and non-acid generating, as confirmed by both CanNorth (2020) and Arcadis (2018). Similar carbonatite rock is even quarried near Sudbury and sold as natural fertilizer. The only other niobium mine outside Brazil, located in Chicoutimi, Québec, has operated for over 45 years next to farms without any health or environmental problems.*
- 4. Will the James Bay Niobium Project expose nearby communities to dangerous levels of radiation?**
 - a. We understand that radiation can be a real concern, and it's something we take very seriously. Independent testing conducted by Arcadis in 2018 shows that the natural radioactivity in the James Bay niobium resource is well below the safety limits set out in Canada's guidelines for Naturally Occurring Radioactive Materials (NORM). The study concludes that these levels will not affect the safety of the air, water, or people in nearby communities.*
- 5. Could waste rock, tailings, or water runoff contaminate the environment with radioactive elements?**
 - a. This risk is extremely low. Waste rock and mill rejects contain uranium and thorium at levels close to natural soils and rocks, well below Canadian safety thresholds. Pyrochlore, the main mineral, locks uranium and thorium tightly in its structure, preventing them from leaching. Monitoring will be in place, but no special treatment is expected beyond normal water quality safeguards*
- 6. Is there a risk that working at the James Bay niobium resource could harm the health of employees?**
 - a. No. The study shows that radiation levels in the resource are very low and do not pose a health risk to workers. The only area where extra care is needed is underground, where radon gas can build up, but this is the same for all underground operations, and it is fully managed through standard ventilation systems. Regular monitoring will also be in place to make sure working conditions remain safe*

About the Asset:

- 1. Where is the James Bay exploration site?**
 - a. The site is located about 45 km south of Moose Factory, outside of the French River watershed, and about 8 km east of it.*

2. What kind of exploration work is being carried out?

- a. *The program involves about 30 drill holes, totaling roughly 15,000 meters. All drill holes are located at least 50 meters from South Bluff Creek. The program is 100% helicopter-supported, meaning no heavy machinery or new road access is required. Some drill holes are also used for geotechnical and environmental monitoring.*

3. How will the site be accessed and how long will drilling last?

- a. *Access is by helicopter only, with one drill rig in place at the start of the season and a second added later. A temporary camp is set up on Ontario Northland property, west of the site, to minimize fuel use and environmental impact. The drilling program typically runs 16–20 weeks.*

4. What is a Preliminary Economic Assessment (PEA) and what does it mean for James Bay?

- a. *A PEA is an early study that looks at whether a resource could be economically viable. NioBay completed a PEA in 2020, but this does not mean a mine will be built. Many steps still follow, including environmental baseline studies, prefeasibility and feasibility studies, detailed engineering, and most importantly, community consultation and consent.*

5. Why did the PEA consider different mining options?

- a. *The PEA examined three scenarios: open pit, combined open pit/underground, and underground only, to better understand costs and potential returns. While the open pit scenario looked strongest economically, ongoing drilling aims to confirm the extent of deeper high-grade zones that could support an underground option. Ultimately, the choice will depend not only on economics, but also on environmental protection, cultural and spiritual considerations, closure planning, and, above all, social acceptability by the communities.*

About the Mine Development:

1. What happens after exploration?

- a. *If exploration results are positive, and only with the consent of Moose Cree First Nation (MCFN), NioBay would consider moving the project forward. The next steps would include prefeasibility and feasibility studies, as well as extensive environmental assessments and continued consultation with MCFN and other Indigenous communities.*

2. Will there be an agreement with Moose Cree and other Indigenous communities?

- a. *Yes. NioBay and MCFN would work together to negotiate a comprehensive agreement that supports community participation throughout construction, operation, and closure. This would include training, employment, business opportunities, environmental protection and monitoring, and equity participation. Other Indigenous communities whose rights are connected to the project area would also be consulted and accommodated.*

3. How many jobs could be created?

- a. *A mine of this type could employ roughly 100–150 people at the mine site, 80–120 at the mill, and 50–75 in services such as environmental monitoring. Exact numbers would be determined during the feasibility stage. NioBay is committed to prioritizing training and hiring opportunities for MCFN members.*

4. What kind of partnerships and commitments would NioBay make?

- a. *NioBay sees partnership with MCFN as essential. This includes supporting a liaison officer if requested, prioritizing MCFN contractors and workers, offering on-site and off-site training, ensuring cultural and treaty education for all employees, and supporting initiatives such as cultural camps or family benefits agreements. Qualified MCFN members would be considered for roles in all departments, including administration and management.*

5. How will ore be processed and transported?

- a. *Ore would be processed on site into a niobium concentrate, which would then be shipped in large bags to a converter (location to be determined) to produce ferro-niobium, the saleable product. Concentrate would be transported by truck to Moosonee, then by rail to Cochrane. NioBay is open to discussing the development of an all-season road with MCFN, which could also serve community needs.*

6. How will the mine be managed and closed?

- a. *Mining stopes would be refilled with a mix of cement and waste rock to ensure long-term stability. The project will include strict environmental monitoring, recycling of most process water, and treatment of water to meet high quality standards. Closure planning will be part of the feasibility studies, and environmental monitors from MCFN will play a direct role.*

7. What are the long-term benefits of a partnership?

- a. *If developed, the James Bay Niobium Project could operate for at least 20 years, creating opportunities for Moose Cree members to train and work as engineers, geologists, electricians, mechanics, environmental specialists, and managers. Other benefits, for youth, elders, and families, would be defined together with the community to meet any needs for the community.*