

Executive Summary

Investigative Studies for the Iqaluit Nukkiksautiit Project (INP)

Nunavut Water Board – Water Licence Application - *English*

Nunavut Nukkiksautiit Corporation (NNC) hereby submits this application to the Nunavut Water Board for a Water Licence to support investigative studies associated with the proposed Iqaluit Nukkiksautiit Project (INP) near Iqaluit, Nunavut. The proposed activities consist of temporary water extraction to support a field camp and geotechnical drilling program.

The undertaking involves geotechnical drilling and associated field investigations required to advance feasibility-level studies for the proposed hydroelectric development. Activities will include temporary camp establishment, water withdrawal, drilling operations, waste management, and site reclamation following completion of the program. No permanent infrastructure will be constructed as part of this licence.

Water will be withdrawn from up to seven surface water sources within the Project area using a temporary pump and submersible hose system. The maximum anticipated water use is 165 m³ per day, consisting of approximately 160 m³ per day for drilling activities and 5 m³ per day for domestic camp purposes. Water withdrawals will be temporary and intermittent, limited to licensed volumes, and distributed among available sources. No watercourse diversions, flow alterations, or modifications to the bed or banks of water bodies are proposed, and no water will be returned to source.

Waste generated during the program will include domestic sewage, greywater, drill cuttings, minor quantities of hazardous materials (e.g., used oils), and non-combustible drilling wastes. Sewage will be managed using ventilated pit-style outhouses with geomembrane liners. Greywater from camp activities will be treated through dual sand filtration zones and a settling trench. Drill cuttings, estimated at less than 160 m³ per day during active drilling, will be contained within natural depression sumps at each drill site and backfilled upon completion. Hazardous materials (anticipated to be less than 100 litres) and other solid wastes will be securely stored and transported to approved facilities for disposal. At no time will untreated wastewater or contaminants be discharged to surface waters.

The proposed water withdrawals may result in temporary and localized reductions in water levels at extraction points. However, given the moderate maximum daily withdrawal rate, short duration of activities (June to October 2026), and absence of permanent works, no measurable long-term effects on water quantity, water quality, aquatic habitat, or drainage basin hydrology are anticipated. The Project is not expected to adversely affect other water users. No existing licensed users, domestic users, or rights holders have been identified that would be negatively impacted by the proposed undertaking.

Field activities are proposed to commence in June 2026 and conclude in October 2026, with demobilization and site clean-up occurring immediately following completion of drilling operations.