NUNAVUT NUKKIKSAUTIIT CORPORATION

Detailed Responses to NIRB Screening Comments and Information Requests

Iqaluit Nukkiksautiit Project

August 2026

Prepared to accompany the revised Project Proposal, concordance table, figures and spatial files.

Purpose and Response Basis

Nunavut Nukkiksautiit Corporation (NNC) provides the following responses to the Nunavut Impact Review Board (NIRB) screening comments and information requests for the Iqaluit Nukkiksautiit Project (INP or the Project). The responses consolidate the information in the July 2026 concordance table, the draft NNC response document and the revised INP Project Proposal.

The revised Project Proposal is the controlling document for the NIRB screening record. Where a historical or preliminary supporting document contains a minor discrepancy, the descriptions, footprints, volumes, screening assumptions and commitments in the revised Project Proposal apply for screening purposes. Final construction-level details will continue to be refined through detailed engineering, contractor planning, Inuit engagement, Nunavut Water Board licensing, land-use permitting and other applicable regulatory processes.

The updated maps and supporting spatial files show the current screening envelope and the permanent and temporary Project components. Where a final component location or design has not been selected, the response identifies the screening-level assumptions and the process and timing for refinement.

Request	Topic	Screening response status	Primary Project Proposal reference
1	Project capacity	Addressed	Sections 1.0, 1.1.1 and 4.2; Tables 1, 3 and 8
2	Construction material sources	Addressed at screening level	Sections 4.5.3 and 4.5.4
3	Water use, flow and storage	Addressed	Sections 4.5.5.1 and 4.6.4; Tables 12 and 15
4	Access road	Addressed at screening level	Sections 2.1.2, 4.4.5 and 4.5.6; Figures 7 and 9
5	Transmission line	Addressed at screening level	Section 4.4.4; Figure 9; Table 11
6	Air transportation	Addressed at screening level	Section 4.5.6; Figure 7
7	Construction equipment	Addressed at screening level	Section 4.5.2
8	Blasting and explosives	Addressed at screening level	Section 4.5.4.3
9	Borrow, quarry and aggregate sources	Addressed at screening level; final source selection pending	Sections 4.5.4.1 to 4.5.4.3; Figure 7
10	Fuel storage and transport	Addressed at screening level	Sections 4.5.5.3 and 6.6; Tables 11 and 14
11	Waste streams	Addressed at screening level	Sections 4.5.5.2 and 6.7; Table 13
12	Wastewater, sewage and greywater	Addressed at screening level	Sections 6.7.3 and 4.5.5.2; Table 13
13	Camp and accommodations	Addressed at screening level	Sections 4.4.7, 4.5.7 and 6.6.1
14	Operations and maintenance infrastructure	Addressed at screening level	Sections 4.6.1 to 4.6.3
15	Mapping and Project layout	Addressed	Section 2.1.2; Figures 1 to 10 and spatial files
16	Dam safety	Addressed at screening level	Sections 4.4.1.1 and 6.5; Table 16
17	Management plans	Addressed	Section 9.0; Table 16

1. Project capacity MW

NIRB Comment / Information Request:

The revised NIRB application describes the Project as approximately 15 MW, while the supporting Project Proposal states that the Project is being presented for screening as a facility with installed generating capacity of up to 30 MW. Clarify whether the Project scope for screening is 15 MW, up to 30 MW, or another capacity, and update the application materials for consistency.

Rationale / Context:

Required for NIRB to properly assess the project proposal, ensure it is assessing the project that will be constructed and operated, and assess ecosystemic and socio-economic impacts. If additional phases are being considered, the application should include this information and the preferred option.

NNC Response / Action:

The Project scope for NIRB screening is an installed generating capacity of up to 30 MW. The 30 MW value represents the maximum installed-capacity screening envelope for the hydroelectric facility and associated infrastructure. Preliminary power and energy modelling includes both 15 MW and 30 MW operating cases. The 15 MW case is an operating scenario used to assess continuous or near-continuous generation under preliminary hydrologic assumptions; it is not a separate or smaller Project scope.

The online NIRB application, non-technical Project description and revised Project Proposal are to use the up-to-30 MW screening basis consistently. Generation will vary with inflow, reservoir storage, environmental flow requirements, maintenance, electricity demand and operating rules. The 30 MW installed capacity therefore should not be interpreted as continuous firm output under all hydrologic conditions.

Information to be refined:

Final turbine and generator selection, unit configuration, operating limits, grid-interconnection requirements and operating rules will be confirmed during detailed design and licensing.

Project Proposal references: *Project Proposal: Plain Language Summary; Executive Summary; Sections 1.0, 1.1.1, 4.2.1 and 4.2.2; Tables 1, 3 and 8.*

2. Construction material sources

NIRB Comment / Information Request:

Confirm where dam components and other required construction materials would be sourced from and brought to site.

Rationale / Context:

Required for NIRB to properly assess the project proposal, ensure it is assessing the project that will be constructed and operated, and assess ecosystemic and socio-economic impacts. If additional phases are being considered, the application should include this information and the preferred option.

NNC Response / Action:

The main dam and associated civil works are expected to use locally sourced rock, earthfill, sand, gravel, riprap, concrete aggregate and engineered fill from approved Project quarry and borrow sources. Suitable material within the future reservoir inundation area will be used where practicable to reduce permanent disturbance outside the reservoir and shorten haul distances. Additional sources outside the reservoir may be required where material within the inundation area is insufficient or does not meet engineering specifications.

Major manufactured components, including turbines, generators, gates, transformers, electrical equipment, structural steel, penstock components, mechanical systems and specialized construction equipment, will be procured from qualified suppliers outside Nunavut. These components will generally be transported to Iqaluit by sealift, unloaded and staged at an approved port or marshalling area, and moved to the Project site using the all-season access road when available. Cementitious materials, specialized concrete additives, explosives and selected mechanical and electrical components will also be imported. Smaller urgent materials may be transported by air.

Information to be refined:

Final material sources, source-specific extraction quantities, supplier locations, annual sealift requirements and transport sequencing will be refined through geotechnical investigations, material testing, procurement and detailed construction logistics planning.

Project Proposal references: *Project Proposal: Sections 4.5.3, 4.5.4.1 and 4.5.4.2; Figure 7.*

3. Water use / flow / storage

NIRB Comment / Information Request:

Clarify the 2,393,279 m^3/day value listed as water consumption, as it appears to represent turbine flow rather than consumptive water use. Ensure construction water use, camp water use, reservoir storage, turbine/generation flow, instream flow releases, and downstream discharge are clearly separated.

Rationale / Context:

The portal under "Water Use" asks for Water Retrieval – Daily Amount in m^3.

NNC Response / Action:

The previously reported 2,393,279 m^3/day value represents the preliminary turbine flow for the 15 MW operating case, equivalent to approximately 27.7 m^3/s. It is non-consumptive operational flow and does not represent water consumed by construction, camp operations or power generation.

Construction water withdrawal, camp water use, reservoir storage, turbine flow, instream flow release and downstream discharge are separate hydrologic parameters. They are not added together to calculate a total daily water-use value because turbine discharge, instream flow and downstream discharge may describe overlapping pathways for the same water.

Water-use and flow categories

Category	Screening-level value	Management / interpretation
Construction withdrawal, including camp	50–150 m^3/day typical; short-duration peaks up to 500 m^3/day	Temporary withdrawal from approved surface-water source(s); final limits and monitoring through NWB licensing.
Camp use	8–15 m^3/day typical; 15–25 m^3/day peak	Included within the total construction withdrawal.
Reservoir storage	Total: approximately 1.391 billion m^3; live storage: approximately 1.092 billion m^3	Water retained and regulated within the watershed; not a daily consumptive withdrawal.
15 MW turbine flow	27.7 m^3/s; approximately 2,393,279 m^3/day	Water passes through the turbines and returns downstream.

Category	Screening-level value	Management / interpretation
Maximum plant flow	71.5 m^3/s	Maximum screening design flow for the up-to-30 MW configuration.
Instream flow release	Preliminary 1–4 m^3/s; summer planning target 4.0 m^3/s	Priority downstream release; final seasonal values subject to hydrologic, aquatic, IQ and regulatory review.
Downstream discharge	Variable: approximately 25–115 m^3/s when the spillway is active (July-to-November)	Combination of turbine, low-level outlet and spillway pathways varies with inflow, storage and operating conditions.

Information to be refined:

Final withdrawal sources and limits, reservoir filling sequence, operating rules, seasonal instream flow requirements, discharge criteria, compliance locations and monitoring will be established through engineering, aquatic studies, Inuit engagement and the Nunavut Water Board Type A Water Licence process.

Project Proposal references: *Project Proposal: Sections 4.3.7, 4.5.5.1 and 4.6.4.1; Tables 8, 12 and 15.*

4. Access road

NIRB Comment / Information Request:

Confirm the preferred/final route if known and provide current assumptions for key watercourse crossings and crossing types where available.

Rationale / Context:

If all three options are to be considered in the application, GIS information is required in the NIRB application, so all parties have the information online.

NNC Response / Action:

Three potential all-season access-road route options, each approximately 66 km long, are being carried forward for NIRB screening. No final or preferred route has been selected. The three route options are shown on Figure 9 and in the supporting spatial files.

For screening purposes, larger, fish-bearing or environmentally sensitive watercourses are expected to use clear-span bridges or open-bottom structures where practicable. Smaller or intermittent drainage features may use appropriately sized culverts. Crossing designs will consider fish passage where required, drainage, channel stability, permafrost, erosion and sediment control, seasonal flow, wildlife, archaeology, Inuit land use and constructability.

Information to be refined:

The final route, road micro-alignment, crossing inventory, crossing type and dimensions will be confirmed through geotechnical, hydrological and aquatic investigations, environmental fieldwork, Inuit engagement, detailed design and applicable regulatory review.

Project Proposal references: *Project Proposal: Sections 2.1.2, 4.4.5 and 4.5.6.1; Table 11; Figures 7 and 9.*

5. Transmission line

NIRB Comment / Information Request:

Provide current screening-level assumptions for the transmission line, including right-of-way width, structure type, approximate pole/tower height, foundation approach, access pads/work areas, and estimated construction footprint.

Rationale / Context:

If these details are not finalized, identify the assumptions being used for screening so the transmission line can be included in NIRB's assessment.

NNC Response / Action:

The current screening basis includes an approximately 66 km, 69 kV overhead transmission line that will be twinned with, and generally follow, the final selected all-season access-road alignment.

The screening assumptions are single-pole, three-phase wood-pole structures approximately 12–20 m high, typical spans of approximately 80–100 m and an average right-of-way width of approximately 20 m. Foundations may include directly embedded drilled poles, micropiles, rock anchors or a combination of foundation types. Guys and anchors may be used at corners, dead ends and anti-cascade structures. The line will include a shield wire and fibre-optic communications cable.

The 20 m right-of-way over approximately 66 km represents a corridor envelope of approximately 132 ha. Direct physical disturbance will be smaller and concentrated at pole foundations, guy anchors, localized access areas, pole-erection areas and conductor pulling and tensioning areas. Co-location with the road corridor will reduce the need for a separate linear disturbance corridor.

Information to be refined:

Final structure type, pole spacing, foundation design, access pads, temporary work areas, grounding, direct-disturbance footprint and restoration requirements will be confirmed through detailed electrical design and geotechnical investigation.

Project Proposal references: *Project Proposal: Sections 2.1.2 and 4.4.4; Table 11; Figure 9.*

6. Air transportation

NIRB Comment / Information Request:

Clarify whether Twin Otter access is proposed, whether any temporary fixed-wing landing strip may be required, the expected helicopter landing area/location, and anticipated flight frequency during construction and operations.

Rationale / Context:

If a decision about an airstrip is not yet clear, NIRB recommends scoping larger now and reducing activities later if appropriate.

NNC Response / Action:

No constructed temporary or permanent fixed-wing landing strip is included in the current Project scope. Twin Otter or similar fixed-wing aircraft may be used on a limited or emergency basis. Float-equipped aircraft may use McKeand Lake where the aircraft operator confirms that conditions are suitable and safe.

A designated helicopter landing area will be located near the principal camp and construction area. Temporary helicopter landing areas may also be used along the access road, transmission corridor and other remote work areas where safe and environmentally appropriate. During peak construction, helicopter activity may occur daily, with up to approximately three return flights per day. During operations, helicopter use is expected to be intermittent but could occur daily during inspections, major maintenance or emergencies. Fixed-wing activity is expected to be less frequent and driven by emergencies or specialized logistics.

Bulk fuel and major construction equipment are not expected to be routinely mobilized by air. Air transport will primarily support personnel, urgent replacement parts and small or time-sensitive equipment.

Information to be refined:

Final landing locations, aviation-fuel requirements, flight frequencies and operating procedures will be refined through construction and operations logistics planning and incorporated into applicable management procedures.

Project Proposal references: *Project Proposal: Sections 1.1.1, 2.1.2 and 4.5.6; Table 1; Figure 7.*

7. Construction equipment

NIRB Comment / Information Request:

Provide estimates for major equipment types, approximate quantities, expected duration of use, purpose, and general mobilization approach, including whether major equipment would be sourced from Iqaluit, brought by sealift, transported by temporary winter access, or mobilized by air where applicable.

Rationale / Context:

Required for NIRB to properly assess the project proposal and ecosystemic and socio-economic impacts.

NNC Response / Action:

The planning-level estimate identifies an approximate peak fleet of 105 major production and service units, excluding much of the light-vehicle, small-tool and minor support-equipment inventory. Major equipment will generally be delivered to Iqaluit by annual sealift and transported to the Project site by lowboy, step-deck or flatbed trailer once suitable road access is available. Standard vehicles and selected support services may be sourced in Iqaluit. Temporary winter access may support limited early mobilization where authorized. Routine air mobilization of major equipment is not anticipated.

Screening-level major equipment summary

Equipment group	Approximate quantity	Purpose / expected use period	Mobilization
Hydraulic excavators	14	Excavation, drainage, foundations, road, quarry, dam and reclamation earthworks; multi-season use during active civil works.	Sealift and road.
Track dozers	8	Grading, embankment construction, quarry and stockpile work; primarily road, quarry and civil phases.	Sealift and road.
Articulated dump trucks	26	Haul rock, aggregate, fill and excavated material; intensive use during road, quarry and civil works.	Sealift and road.
Rigid quarry haul trucks	4	Quarry production and bulk rock haulage; quarry and aggregate-production phases.	Sealift and road.

Equipment group	Approximate quantity	Purpose / expected use period	Mobilization
Wheel loaders	10	Aggregate handling, stockpiles, batch plant and general material handling; throughout active construction.	Sealift and road.
Graders and rollers	8	Road shaping, compaction and maintenance; road construction and maintenance phases.	Sealift and road.
Blast drills / grout drills	4 / 2	Quarry blasting, rock excavation, foundation treatment and grouting; intermittent during quarry and foundation phases.	Sealift and road.
Mobile and large cranes	4 mobile; 2 large mobile/crawler	Structural erection, heavy lifts and mechanical/electrical installation; civil and installation phases.	Sealift in components and road; assembled in Iqaluit or onsite.
Crushers and screens	3 crushers; 2 screens	Produce road aggregate, concrete aggregate and processed fill; quarry and aggregate-production phases.	Sealift and road.
Concrete equipment	Batch plant; 4 mixers; 2 pumps	Concrete production and placement for dam, powerhouse and hydraulic structures; active concrete works.	Sealift and road.
Pipelayers / sidebooms	4	Penstock handling and installation; penstock phase.	Sealift and road.
Fuel, service and mechanical units	8	Mobile refuelling, maintenance and repair; throughout active construction.	Sealift, road and local sourcing were available.

Information to be refined:

Final equipment sizes, quantities, start and finish dates, shift arrangements and contractor fleet composition will be confirmed through the construction schedule and contractor work plans. The current schedule anticipates mobilization and construction from approximately summer 2028 or early 2029 to summer 2031, subject to approvals and final sequencing.

Project Proposal references: *Project Proposal: Sections 3.0 and 4.5.2; Tables 7 and 11.*

8. Blasting / explosives

NIRB Comment / Information Request:

Provide details on proposed blasting locations, timing/frequency, explosive types or blasting agents, estimated quantities, storage/transport methods, setbacks from waterbodies or sensitive areas, and blasting-specific mitigation. If not finalized, identify current assumptions and when final blasting information would be provided.

Rationale / Context:

Information required for screening and impact assessment.

NNC Response / Action:

Blasting may be required at hard-rock quarries, localized rock cuts along the access-road alignment, the dam key trench and foundation, powerhouse foundation, spillway and intake excavations and portions of the penstock alignment.

The current screening estimate includes up to approximately 5 million m^3 of blasted rock and approximately 1,750–2,500 tonnes of blasting agent over the construction period, subject to confirmation through detailed design. Potential blasting agents may include bulk emulsion, ammonium nitrate/fuel oil products, packaged explosives, boosters and approved initiation systems.

Blasting will occur intermittently during quarrying, access-road construction and major civil excavation. During peak quarry or foundation work, blasting could occur several times per week, primarily during daytime hours. Explosives will be delivered in stages, transported by authorized carriers and stored in secure licensed magazines at approved quarry or laydown areas. The full Project requirement will not be stored onsite at one time.

Blasting-specific mitigation will include qualified blast design, warning and exclusion zones, controlled initiation, stemming, blast mats where required, vibration and air-overpressure controls, wildlife and nest checks, spill prevention, security measures and post-blast inspection. Setbacks will be established through site-specific design and will consider waterbodies, fish habitat, wildlife, active nests, archaeological and cultural sites, camps and public access. Blasting near fish-bearing waters will be designed to meet applicable DFO guidance.

Information to be refined:

Final explosive types, powder factors, individual blast sizes, magazine locations, maximum inventories, setbacks and monitoring criteria will be provided through the Explosives Management Plan and contractor-specific blast plans before explosives are transported to site and before blasting begins.

Project Proposal references: *Project Proposal: Sections 4.5.4.3, 6.5 and 9.0; Table 16.*

9. Borrow / quarry / aggregate sources

NIRB Comment / Information Request:

Confirm which potential material sources are expected to be used, approximate footprint of each selected source, estimated extraction volume from each selected source, location/footprint of crushing and screening areas, proposed haul routes, operating period, and whether each selected source is inside or outside the future reservoir area. Confirm whether explosives would be used in quarries, what type would be used, and the storage location.

Rationale / Context:

Information required to understand material sourcing, quarry development, haul routes, and related effects.

NNC Response / Action:

Potential hard-rock and sand-and-gravel source areas are identified on the consolidated Project layout and in the supporting spatial files. Final source selection has not been completed because source suitability depends on the 2026 geotechnical investigation program, material testing and completion of the detailed earthworks balance.

Preliminary geotechnical interpretation has identified more than approximately 200 million m^3 of potentially available hard rock and approximately 33 million m^3 of potentially available sand and gravel within the identified source areas. These values describe potential resources and do not represent expected extraction. The current Project-wide screening allowance is up to approximately 5 million m^3 of rock, earthfill, granular material and aggregate for access roads, the dam, spillway, intake, powerhouse, penstock, concrete production, laydown areas and other civil works.

For the approximately 66 km main access road and approximately 7 km of onsite roads, preliminary engineering information indicates approximately 153,000–230,000 m^3 of compacted granular base and surfacing material. Including an allowance for processing losses, unsuitable fractions, handling and construction variability, the corresponding gross quarry or borrow production requirement is approximately 176,000–287,000 m^3. This estimate excludes general embankment filling, crossing approaches, temporary roads, camp and laydown pads, transmission work areas and other civil infrastructure.

As much suitable material as practicable will be obtained from within the future reservoir inundation area. Sources outside the reservoir may be required where material is unavailable, insufficient or unsuitable. Crushing and screening will occur in designated areas associated with selected sources or major laydown areas. Haulage will use the Project access road and temporary quarry or construction roads. Source operation will generally coincide with road, quarry, dam and major civil-works phases.

Hard-rock sources may require blasting. Potential agents, transport, licensed magazine storage and mitigation are described in response to Request 8.

Information to be refined:

Source-specific footprints, extraction allocations, processing-area footprints, haul routes and operating periods will be finalized through geotechnical investigations, detailed design, Quarry Management Plans and the applicable land-use and water-licensing processes. Updated information will be provided before quarry or borrow development.

Project Proposal references: *Project Proposal: Sections 2.1.2 and 4.5.4.1 to 4.5.4.3; Figure 7; Table 16.*

10. Fuel storage and associated transport

NIRB Comment / Information Request:

Confirm whether the fuel quantities in the revised NIRB application represent total fuel use, maximum storage at one time, container inventory, or fuel moving through the construction logistics system. If final fuel volumes are not available, provide proposed storage locations or tank configurations expected during construction and operations.

Rationale / Context:

Fuel transport and storage information is required during screening to determine whether the project proposal could proceed with terms and conditions, requires review, or should be modified or abandoned.

NNC Response / Action:

The estimated approximately 9.56 million L represents cumulative construction and commissioning fuel consumption, primarily diesel. It is not a storage-capacity value and does not represent the amount held onsite at one time.

For screening, approximately 200,000–450,000 L of diesel may be present within the construction logistics system at one time, distributed among approved Iqaluit staging areas, the construction camp, headworks, quarry or borrow areas, laydown areas and selected work fronts. Location-specific planning ranges are not additive and are not expected to be at their maximum values simultaneously. Fuel will be delivered to Iqaluit by sealift and transported by road when suitable access is available. Limited early fuel transport may use authorized temporary access methods.

Storage methods may include approved double-walled tanks, enviro-tanks, temporary bulk tanks, day tanks, drums, cylinders, mobile fuel units or other authorized containers. Storage and dispensing areas will use

secondary containment, spill-response equipment, inspection procedures, fire-safety controls and controlled transfer procedures. During operations, fuel storage will be smaller and will support backup power, vehicles and maintenance equipment.

Preliminary fuel storage planning ranges

Location	Principal fuel types	Planning range / configuration	Key controls
Iqaluit staging / marshalling	Diesel, gasoline, propane, Jet A and lubricants	Diesel 100,000–250,000 L; gasoline 2,000–5,000 L; propane 10,000–25,000 L water capacity; Jet A 5,000–20,000 L if required.	Approved tanks/containers, secondary containment, controlled access and inspections.
Construction camp	Diesel, propane, gasoline and lubricants	Diesel 50,000–100,000 L; propane 10,000–30,000 L water capacity; gasoline 1,000–5,000 L. 1,000–5,000 L lubricants/hydraulic-fluids.	Double-walled or approved tanks; contained dispensing; 24-hour generator day tanks.
Headworks / dam area	Diesel, gasoline and lubricants	Diesel 100,000–200,000 L; gasoline 1,000–5,000 L; lubricants/hydraulic fluids 2,000–10,000 L.	Secondary containment, transfer controls, spill kits and alarms were applicable.
Quarry / borrow areas	Diesel and lubricants	Diesel 25,000–75,000 L; lubricants/hydraulic fluids 1,000–5,000 L.	Mobile or temporary storage in designated areas away from water were practical.
Laydown areas / work fronts	Diesel, gasoline and lubricants	Diesel 10,000–50,000 L; gasoline 1,000–3,000 L; lubricants/hydraulic fluids 1,000–5,000 L.	Drip trays, containment for stationary storage, housekeeping and inspections.
Aviation area, if required	Jet A	5,000–20,000 L; alternatively managed through Iqaluit aviation infrastructure.	Approved aviation storage, containment, transfer controls and spill response.
Backup generators	Diesel	Approximately 500 L to 2,000 L per generator day tank, depending on generator size and final camp/equipment configuration.	24-hour day tanks or integrated generator tanks.

Information to be refined:

Final peak inventories, tank sizes, storage locations, delivery frequency, terminal or barge alternatives and operational backup fuel requirements will be confirmed through detailed logistics planning and the Fuel Management, Spill Prevention and Response, and Hazardous Materials Management Plans.

Project Proposal references: *Project Proposal: Sections 4.5.5.3, 6.6 and 9.0; Tables 11, 14 and 16.*

11. Waste streams including contaminated materials

NIRB Comment / Information Request:

Provide waste quantities during construction and operations and confirm general disposal locations or receiving facilities once determined. Confirm whether landfills, recyclables storage, contaminated soil/snow handling, landfarm construction, shipment south, incinerators, composters, or other waste infrastructure are being considered.

Rationale / Context:

Information required to assess waste management, storage, transport, and disposal effects.

NNC Response / Action:

Screening-level waste estimates have been developed for a typical construction workforce of approximately 50 personnel and a peak workforce of up to approximately 90 personnel. Waste will be segregated and temporarily stored onsite in secure and wildlife-resistant containers, as applicable. Materials accepted locally will be transported to an authorized facility in Iqaluit, subject to facility acceptance. Hazardous waste, recyclable materials and waste not accepted locally will be packaged and shipped south to approved receiving facilities.

A permanent onsite landfill, landfarm, incinerator or composter is not included in the base-case Project configuration. No routine generation of contaminated soil, snow or ice is anticipated. If generated following a spill, affected material will be stored in lined, covered and contained temporary storage, characterized and transported to an approved treatment or disposal facility. A temporary treatment cell or landfarm would only be considered if incident volumes warrant onsite treatment and the activity is authorized.

Screening-level construction and operations waste estimates

Waste stream	Construction estimate	Operations estimate	Preliminary management
Domestic solid waste	75–125 kg/day typical; 135–225 kg/day peak; 15–65 t/year	0.5–2 t/year	Wildlife-resistant storage; local disposal where accepted; shipment south where required.
Recyclable and reusable materials	Included in domestic/construction totals; segregated onsite	1–10 t/year during routine and major maintenance	Covered storage; reuse, local recycling or shipment south.
Non-hazardous debris	50–250 t/year	Minor routine quantities; higher during major maintenance	Reuse, recycling or approved disposal.
Used oil and hazardous liquids	5,000–20,000 L/year	1,000–5,000 L/year	Labelled containers in secondary containment; licensed transport.
Other hazardous solids	1–5 t/year	0.2–1 t/year	Segregated and labelled storage; approved receiving facility.
Contaminated soil, snow or ice	No routine generation; 50–200 m^3 contingency storage	Incident-dependent	Lined and covered temporary storage, characterization and approved treatment/disposal.
Major maintenance waste	Not applicable	10–50 t solids and 10,000–25,000 L liquids per major event	Planned removal by approved contractors.

Information to be refined:

Final quantities, storage areas, hauling frequency, receiving-facility acceptance, recycling arrangements and shipment routes will be identified in the Waste Management Plan before construction and updated for operations.

Project Proposal references: *Project Proposal: Sections 4.5.5.2 and 6.7; Tables 13 and 16.*

12. Wastewater / sewage / greywater

NIRB Comment / Information Request:

Provide information on wastewater, sewage, and greywater management, including estimated volumes, whether onsite treatment or offsite transport is expected, and the proposed general disposal or receiving facility approach.

Rationale / Context:

Information required for screening and impact assessment.

NNC Response / Action:

Construction-phase sewage and greywater generation is estimated at approximately 6–14 m^3/day under typical conditions and approximately 12–23 m^3/day during peak occupancy, equivalent to approximately 1,200–4,500 m^3/year. Operations wastewater is estimated at approximately 25–150 m^3/year, depending on attendance and maintenance activities.

The current base servicing assumption is collection in holding tanks and transport by vacuum truck to an authorized receiving facility in Iqaluit, subject to confirmation of municipal or facility acceptance. The construction logistics estimate anticipate approximately two to three vacuum-truck trips per week during active construction. A modular onsite treatment system remains an alternative under evaluation. If selected, treated effluent would only be discharged at an approved location in accordance with Nunavut Water Board licence requirements. Untreated sewage or greywater will not be discharged directly to the environment. Treatment residuals will be transported to an approved receiving facility.

Information to be refined:

The final collection or treatment system, tank capacity, haul frequency, receiving facility, discharge criteria, monitoring, contingencies and treatment-residual management will be specified in the Waste Management Plan, Site Water Monitoring and Management Plan and Type A Water Licence application.

Project Proposal references: *Project Proposal: Sections 4.5.5.2, 4.5.7, 6.7.3 and 9.0; Tables 13 and 16.*

13. Camp

NIRB Comment / Information Request:

Clarify whether the camp would be required during operations, anticipated size, type of camp, source of units/materials, and whether water and sewage processing would be required at site or sourced from the City of Iqaluit.

Rationale / Context:

Information required to understand construction and operations infrastructure, site services, and reclamation needs.

NNC Response / Action:

The temporary construction camp is expected to accommodate approximately 50 personnel under typical conditions and up to approximately 90 personnel during peak construction. The existing exploration camp consists of weather-haven-style accommodation and work tents, kitchen and washroom facilities, laboratory space and storage. It will be progressively expanded or replaced with weather-haven or modular construction-camp units delivered primarily by sealift.

Camp water will be withdrawn from an approved onsite surface-water source using screened intakes and treated as required for potable and domestic use. Sewage and greywater will be collected in holding tanks and transported to an authorized receiving facility in Iqaluit, subject to acceptance. Modular onsite treatment remains an alternative under evaluation.

No permanent full-service operations camp is proposed. A limited emergency shelter with basic accommodation and supplies will remain for emergency response, dam-safety inspections and extended maintenance activities. The majority of operations personnel are expected to be based and housed in Iqaluit.

Information to be refined:

Final camp layout, footprint, accommodation units, water treatment, wastewater configuration, fire protection, waste and fuel storage, emergency systems and closure requirements will be confirmed during detailed design and licensing.

Project Proposal references: *Project Proposal: Sections 4.4.7, 4.5.7, 6.6.1 and 6.7.3; Tables 11, 12 and 13.*

14. Operations / maintenance

NIRB Comment / Information Request:

Identify any new operations/control building, communications tower, backup power system, or other physical infrastructure required outside the powerhouse/substation or existing Iqaluit facilities.

Rationale / Context:

Any such infrastructure should be identified as part of the Project scope.

NNC Response / Action:

The primary plant control room will be located within the powerhouse. The facility will be designed for automated operations using SCADA and remote monitoring by operations personnel in Iqaluit. Routine onsite attendance will be periodic rather than continuous and will be based on inspection, maintenance, dam-safety and operational requirements.

Communications are expected to use the fibre-optic cable installed with the transmission line. No separate communications tower is included in the current screening scope. Critical control functions will be backed up by a 125 V DC battery system and uninterruptible power supply. A standby generator at the powerhouse is being considered for longer-duration backup power; its capacity, fuel type and storage configuration remain under design.

Other operational infrastructure may include maintenance and storage space within or adjacent to the powerhouse, the emergency shelter, localized fuel storage, parking, security, lighting and emergency-response equipment. No separate operations/control building outside the powerhouse or a confirmed new remote operations-centre building in Iqaluit is included in the current screening scope. The need for a second substation in Iqaluit will depend on the selected QEC interconnection point and voltage.

Information to be refined:

Final control architecture, backup generation, operations staffing, maintenance space, Iqaluit interconnection facilities and any ancillary infrastructure will be confirmed through detailed electrical and operational design and coordination with QEC and the City of Iqaluit.

Project Proposal references: *Project Proposal: Sections 2.2 and 4.6.1 to 4.6.3; Section 4.4.4.*

15. Mapping / project layout

NIRB Comment / Information Request:

Ensure the revised NIRB application includes updated maps that are consistent with the Project Proposal and show all current Project components together in one clear project layout. Maps should identify the full extent of the Project area and confirm whether all proposed components are located within the mapped Project area.

Rationale / Context:

Information required to ensure all parties can understand the full Project footprint and components.

NNC Response / Action:

The revised Project Proposal includes updated maps and supporting spatial files that are consistent with the current screening basis. Figure 7 provides the consolidated Project layout and identifies the Project assessment boundary and the permanent and temporary components carried forward for screening.

The consolidated layout shows the dam, reservoir and inundation boundary, intake, spillway, low-level outlet, powerhouse, tailrace, three access-road options, preliminary watercourse crossings, transmission corridors, substations, construction camp, emergency shelter, laydown and staging areas, borrow and quarry areas, crushing and screening areas, fuel-storage areas, waste-management areas, helicopter landing areas and other supporting infrastructure. Components subject to final design are shown as preliminary corridors, polygons or potential development areas.

All components carried forward for screening are located within the mapped Project assessment boundary. Figures 1 to 10 and the supporting spatial files use consistent component names and boundaries. The map package is included with the submission independently of the online portal display.

Information to be refined:

Final road micro-alignment, transmission structure locations, watercourse crossings, source selection and temporary construction footprints will be updated as design advances. Material changes to the screening envelope will be provided to NIRB and applicable regulators before the related activities proceed.

Project Proposal references: *Project Proposal: Section 2.1.2 and Table 4; Figures 1 to 10 and supporting spatial files.*

16. Dam safety

NIRB Comment / Information Request:

Confirm the expected dam classification, design life, downstream risk considerations, emergency response approach, and when the Dam Safety Plan and Emergency Response Plan would be available.

Rationale / Context:

Information required for assessment purposes.

NNC Response / Action:

The final dam consequence classification has not been established. For screening purposes, a preliminary Significant consequence classification is being evaluated based on potential effects on Project workers, land users, downstream environmental and cultural resources, Project infrastructure and the regional electrical system. This preliminary classification will be confirmed or revised through a formal dam-breach and downstream-consequence assessment.

Permanent civil infrastructure is expected to have a useful life greater than 100 years with appropriate inspection, maintenance, rehabilitation and periodic safety review. Major mechanical and electrical components will have shorter service lives and will be refurbished or replaced as required.

The downstream-consequence assessment will consider workers, land users, cabins or camps, travel routes, aquatic habitat, culturally important areas, downstream infrastructure and the consequences of an interruption of electricity generation. Project-wide accidents and malfunctions will be addressed through the Emergency Response and Accident Risk Plan. Dam-specific emergencies will be addressed through Emergency Preparedness and Response Plans based on the dam-breach and inundation assessment.

Information to be refined:

A preliminary Dam Safety Plan will be developed during detailed design. A dam-breach inundation study and draft Emergency Preparedness and Emergency Response Plans will also be prepared during detailed design. Final dam-safety documentation, including the Dam Safety Plan, Operations, Maintenance and Surveillance Manual and Emergency Preparedness and Response Plans, will be completed before reservoir filling and commissioning and updated periodically.

Project Proposal references: *Project Proposal: Sections 4.4.1.1, 6.5 and 9.0; Tables 1 and 16.*

17. Management plans

NIRB Comment / Information Request:

Confirm the list of management plans expected to be prepared, the general purpose of each plan, and when each plan would be provided, as monitoring and plans are required as part of an impact assessment.

Rationale / Context:

Information required for assessment purposes.

NNC Response / Action:

NNC has identified the anticipated environmental and social management plans, monitoring programs and dam-safety manuals. Plans will be developed progressively as design, assessment, licensing and construction planning advance. Permit-level plans will accompany the applicable regulatory applications, and final activity-specific plans will be completed before the associated activity begins.

Each final plan will identify its scope, responsible parties, applicable requirements, mitigation measures, monitoring methods, reporting procedures, training requirements, adaptive-management triggers, document control and review frequency. The Emergency Response and Accident Risk Plan addresses Project-wide construction and operational emergencies; the Emergency Preparedness and Response Plans address dam-specific emergencies.

Anticipated management plans, programs and manuals

Plan / program / manual	Brief content	Submission or implementation timing
Environmental Protection Plan	Overarching environmental requirements, roles, inspections, compliance tracking, reporting and corrective actions.	Preliminary framework with applicable applications; final before major construction mobilization.
Emergency Response and Accident Risk Plan	Project-wide accident scenarios, prevention, communications, evacuation, notification, response and recovery.	Before mobilization; operational update before commissioning.

Plan / program / manual	Brief content	Submission or implementation timing
Fuel Management Plan	Fuel transport, storage, transfer, dispensing, containment, inspections, fire prevention and closure of storage areas.	With applicable land-use and water-licence applications; final before bulk fuel is mobilized or stored onsite.
Explosives Management Plan	Explosive transport, storage, security, magazine management, blast planning, exclusion zones, notification and incident response.	With applicable permit applications where required; final before explosives are transported to site or blasting begins.
Spill Prevention and Response Plan	Spill prevention, reporting, containment, recovery, cleanup, remediation and follow-up monitoring.	With applicable land-use and water-licence applications; final before construction mobilization and updated by Project phase.
Site Water Monitoring and Management Plan	Withdrawals, dewatering, runoff, erosion and sediment control, discharge, water-quality and flow monitoring and corrective actions.	With the Type A Water Licence application, final before water withdrawal, dewatering or discharge begins.
Waste Management Plan	Waste identification, segregation, storage, recycling, transport, treatment, disposal and receiving facilities.	With the Type A Water Licence application; final before camp expansion or construction.
Hazardous Materials Management Plan	Inventories, compatibility, labelling, storage, handling, transport, disposal, inspections and training.	With applicable permit applications, final before hazardous materials are mobilized onsite.
Roads Management Plan	Road construction, drainage, crossings, traffic, maintenance, dust, erosion, wildlife interactions and access controls.	Preliminary framework with the land-use application; final before access-road construction.
Quarry Management Plan	Quarry and borrow development, extraction, blasting, crushing, stockpiling, runoff, geochemistry, reclamation and closure.	With applicable land-use and water-licence applications; final before quarry or borrow development.
Air Quality Monitoring and Management Plan	Dust and emission sources, mitigation, monitoring, reporting, complaints and adaptive-management thresholds.	Before major earthworks, quarrying or road construction.
Noise Abatement Plan	Noise and vibration sources, sensitive receptors, operating controls, blasting notifications, monitoring and complaint response.	Before blasting and major construction.
Aquatic Effects Monitoring Program	Hydrology, water quality, fish, fish habitat and downstream aquatic conditions to verify effects predictions and mitigation.	Preliminary program with the Draft EIS and Type A Water Licence application; construction component before in-water work and operational component before reservoir filling.
Wildlife Monitoring and Mitigation Plan	Wildlife avoidance, seasonal restrictions, nest protection, caribou interactions, stop-work procedures and monitoring.	Before clearing, road construction or other major ground disturbance.

Plan / program / manual	Brief content	Submission or implementation timing
Cultural and Heritage Resources Protection Plan	Avoidance, buffers, awareness, chance-find procedures, stop-work protocols, reporting and engagement.	With applicable heritage permits; final before ground-disturbing construction.
Community Involvement Plan	Engagement, issue tracking, notifications, feedback, plain-language reporting and Inuit participation in monitoring.	Developed and implemented during assessment and updated before construction and operations.
Closure and Reclamation Plan	Closure objectives, infrastructure disposition, water management, waste removal, stabilization, reclamation and monitoring.	Conceptual plan with Type A Water Licence application; periodically updated; final execution plan before closure.
Follow-up and Adaptive Management Plan	Indicators, thresholds, reporting, decision responsibilities, corrective actions and mitigation adjustments.	Before construction and updated to reflect licence and Project Certificate requirements.
Dam Safety Plan and Operations, Maintenance and Surveillance Manual	Dam-safety governance, inspections, instrumentation, surveillance, operating limits, maintenance and safety reviews.	Preliminary Dam Safety Plan during detailed design; final plan and manual before reservoir filling and commissioning.
Emergency Preparedness and Response Plans	Dam-specific emergency procedures, inundation mapping, warning, notification, evacuation coordination, exercises and updates.	Draft following dam-breach assessment during detailed design; final before reservoir filling and operations; tested and updated periodically.

Information to be refined:

Plan content and timing will be updated to incorporate NIRB direction, Project Certificate terms if applicable, water-licence conditions, land-use permit conditions, final design, contractor procedures and commitments arising from Inuit engagement.

Project Proposal references: *Project Proposal: Section 9.0 and Table 16; Sections 6.4.4, 6.5, 6.6 and 6.7.*

Submission Package and Future Updates

These responses should be read with the revised INP Project Proposal, the concordance table, the completed figures and spatial files, and the supporting technical attachments included in the submission package. NNC considers the requests addressed at a level appropriate for NIRB screening, while recognizing that several construction- and permit-level details remain subject to final design, contractor planning and regulatory review.

Where future refinements materially change the Project footprint, water use, discharge management, fuel storage, access configuration, waste management or potential environmental and socio-economic interactions, NNC will provide updated information to NIRB and applicable regulators before advancing the affected activities.