

Appendix

GN-01: Water Parameter Monitoring and Testing	
Department	Environment
Organization	Government of Nunavut
Subject/Topic	Water Parameter Monitoring and Testing
References	<ul style="list-style-type: none"> • City of Iqaluit Type A Water Licence Amendment and Renewal Application • City of Iqaluit Water Licence 3AM-IQA1626 2025 Annual Water License Report • LTWP Preliminary Design Report – Appendix M – Environmental Management Plan
CONCERNS	
<p>The Government of Nunavut (GN) has concerns and is seeking additional information regarding the City of Iqaluit’s (Proponent) proposed water quality parameter monitoring. Water parameter testing is a necessary component of environmental management and is integral to determining project performance, impacts, and mitigation effectiveness.</p> <p>The Proponent’s 2025 annual report states “certain required parameters were not analyzed during the reporting period”. The report stated that these parameters were not tested as the Proponent lacked the required laboratory equipment and that staff were not fully aware of the required testing parameters. The report states:</p> <p><i>“The City has procured the necessary laboratory equipment required to support testing of the parameters associated with the monitoring stations, and this testing will be undertaken in 2026. In addition, the City’s third-party laboratory has been advised of the parameters that were previously omitted from testing, and these will be included in the monitoring program moving forward. The missing field parameters were primarily the result of current City staff not being fully aware of all required testing parameters at the time of sampling. To address this, ongoing efforts have been undertaken to familiarize operational staff with the applicable monitoring requirements and sampling procedure (including QA/QC).”</i></p> <p>The Proponent has included with their water license proposal an environmental management plan. Section 3.4 of the management plan includes a list of the information that will be collected during analysis.</p>	

- The name of the person(s) who performed the sampling or took the measurements including any relevant accreditations.
- The date, time, and place of sampling or measurement, and weather conditions.
- The date of analysis.
- The name of the person(s) who performed the analysis including any relevant accreditations.
- A description of the analytical methods or techniques used, and
- A discussion of the results of any analysis.

The management plan does not state the steps of the testing, what quality parameters will be analyzed or the equipment that will be utilized in this testing. This information is necessary to assess the efficacy of the management plan and if the issues of testing identified in the Proponent's 2025 annual report have been addressed.

RECOMMENDATIONS

The GN recommends the Proponent:

- Provide a list of the laboratory equipment that has been acquired for the purposes of conducting water quality testing.
- Provide and include in their management plan, a copy of the training plan for water quality personnel for the sampling, analysis, and reporting that will be used to ensure previously missing parameters will be tested.

ADDITIONAL COMMENTS

N/A

GN-02: Spill Contingency Plan	
Department	Environment
Organization	Government of Nunavut
Subject/Topic	Spill Contingency Plan
References	<ul style="list-style-type: none"> • City of Iqaluit, Type A Water Licence No. 3AM-IQA1626, Part H, Item 1. • City of Iqaluit, Spill Contingency Plan, updated May 2016, • City of Iqaluit Type A Water Licence Renewal/Amendment Application materials related to existing municipal facilities, new waste management facilities, and construction activities associated with the City's Long-Term Water Project (LTWP).
CONCERNS	
<p>The Government of Nunavut (GN) has concerns regarding the Spill Contingency Plan relied on in the City of Iqaluit's (Proponent) Type A Water Licence renewal/amendment application.</p> <p>The Proponent states that it has been maintaining and using a Spill Contingency Plan approved by the Board in accordance with Part H, Item 1 of the current Water Licence. The referenced Spill Contingency Plan was updated in May 2016 and includes procedures for reporting and responding to spills associated with municipal infrastructure.</p> <p>The application record includes existing municipal facilities, new waste management facilities, and construction activities associated with the City's Long-Term Water Project. The application record does not confirm whether the May 2016 Spill Contingency Plan remains applicable to the full scope of activities and facilities proposed under the renewed/amended licence. This creates uncertainty regarding whether current facilities, contact information, contaminants, existing and proposed contaminant storage, new facilities, and LTWP-related construction activities are fully addressed through current spill prevention, and management procedures.</p> <p>The application record also does not identify how any additional emergency response plans or facility-specific O&M manuals work together with the approved Spill Contingency Plan.</p>	
RECOMMENDATIONS	
<p>The GN recommends that the Proponent:</p>	

- Confirm whether the May 2016 Spill Contingency Plan remains applicable to the full scope of the renewed/amended licence, including all existing and new facilities, and construction activities associated with the Proponent's LTWP.
- Confirm that all existing or proposed contaminant storage that meets the applicable requirements under the Spill Contingency Planning and Reporting Regulations is covered by a current spill contingency plan.
- Confirm that other contaminant storage associated with the undertaking is addressed through appropriate spill prevention, and management.
- Identify how any additional emergency response plans, facility-specific operations and maintenance manuals, or related plans operate with the approved Spill Contingency Plan.
- Provide for review any updates or addenda required to reflect current facilities, contact information, contaminants, existing and proposed contaminant storage, and activities proposed under the renewed/amended license.

ADDITIONAL COMMENTS

N/A

GN-03: Watercourse Crossings, Culverts, Drainage Crossings, and Watercourse Training	
Department	Environment
Organization	Government of Nunavut
Subject/Topic	Watercourse Crossings, Culverts, Drainage Crossings, and Watercourse Training
References	<ul style="list-style-type: none"> • Nunavut Waters and Nunavut Surface Rights Tribunal Act, Section 11. • Nunavut Waters Regulations, SOR/2013-69, Schedule 1, Item 3, Municipal undertaking. • Nunavut Waters Regulations, SOR/2013-69, section 3(f)(iii), Section 4, section 7, and Schedule 2, Item 2(1) to 2(3), licensing criteria for watercourse crossings, watercourse training, and alteration of flow of waters. • City of Iqaluit Type A Water Licence Renewal/Amendment Application materials related to the Long-Term Water Project (LTWP), municipal roads and access roads, drainage infrastructure, gravel source or reserve areas, access to new waste management facilities, the Waste Transfer Station, and the New North 40 Landfill. • City of Iqaluit Type A Water Licence Renewal/Amendment Application materials identifying or referring to infrastructure and drainage features associated with Carney Creek, the Apex River, intermittent streams, and drainage features associated with municipal infrastructure.
CONCERNS	
<p>The Government of Nunavut (GN) has concerns regarding the identification, authorization status, and supporting information for watercourse crossings, drainage crossings, culverts, watercourse training works, and alterations of flow associated with the City of Iqaluit's (Proponent) Type A Water Licence renewal/amendment application.</p> <p>Section 11 of the Nunavut Waters and Nunavut Surface Rights Tribunal Act prohibits the use of waters in Nunavut except in accordance with the conditions of a water licence, subject to the exceptions set out in the Act, including unlicensed uses of waters authorized by regulation.</p> <p>The Nunavut Waters Regulations identify a municipal undertaking as including a waste disposal or water system for a municipality. The Regulations also identify water uses related</p>	

to watercourse crossings, watercourse training, and alteration of flow of waters, with different authorization or licensing thresholds depending on the nature and scale of the activity.

The Proponent's application identifies municipal infrastructure and activities that may involve crossings, culverts, drainage features, watercourse training, alteration of drainage, or related works associated with the LTWP, access roads, gravel source or reserve areas, access to new waste management facilities, the Waste Transfer Station, and the New North 40 Landfill.

The application record does not include a consolidated inventory identifying all Proponent owned, operated, or proposed watercourse crossings, culverts, fords, watercourse training works, or alterations of flow associated with the project.

This creates uncertainty regarding which existing or proposed works are included in the renewed/amended licence application, which works may be authorized without a licence under the Regulations, which works may require a Type A or B licence, and whether appropriate conditions or mitigation measures are required to prevent sediment release, erosion, altered drainage, or contaminant transport to surface water.

The application record also does not appear to provide complete design drawings, technical specifications, or equivalent supporting information for all existing or proposed crossings and watercourse training works. Without this information, it is difficult to assess whether the works are designed, maintained, and monitored in a manner protective of water quality and drainage function.

RECOMMENDATIONS

The GN recommends that the Proponent:

- Provide a consolidated inventory of all Proponent owned, operated, or proposed watercourse crossings, culverts, fords, watercourse training works, and alterations of flow associated with the project.
- For each identified crossing or watercourse training work, identify the location, the feature affected, whether the work is existing or proposed, including whether the work is proposed to be authorized under the renewed/amended Type A licence, authorized without a licence under the Regulations, or addressed through another Nunavut Water Board (NWB) authorization or licensing process.
- Include, where applicable, crossings and drainage works associated with Carney Creek, the Apex River, access to the new waste management and waste transfer/baling facilities, gravel source or reserve areas, LTWP infrastructure, and intermittent streams or drainage features associated with municipal infrastructure.
- Provide design drawings and technical specifications for proposed crossings, culverts, drainage crossings, watercourse training works, or alterations of flow.
- Where formal design drawings are unavailable for existing works, provide available information sufficient to identify the crossing or training work and support appropriate licence conditions or mitigation measures. This should include, where applicable,

crossing type, description of the crossing, engineering parameters, or other events that may affect water quality.

- Where appropriate, ensure inspection, maintenance, and drainage management measures are informed by a recognized northern community drainage standard or guideline, such as CSA S503, or an equivalent standard acceptable to the NWB.

ADDITIONAL COMMENTS

N/A

GN-04: Waste Discharges, Effluent Criteria, and Receiving Environments	
Department	Environment
Organization	Government of Nunavut
Subject/Topic	Waste Discharges, Effluent Criteria, and Receiving Environments
References	<ul style="list-style-type: none"> • Nunavut Waters and Nunavut Surface Rights Tribunal Act, Section 12. • Nunavut Waters Regulations, sections 5 and 8; Schedule 1, Item 3, Municipal undertaking; Schedule 3, Item 3, deposits of waste for a municipal undertaking. • City of Iqaluit Type A Water Licence No. 3AM-IQA1626, Part E, Waste Disposal; Schedule I, Monitoring Program. • Attachment 45, Sewage Lagoon O&M Manual, Executive Summary; Section 3.3.1; Section; Section 6.1 Wastewater Sampling; Table 3; Table 4 Effluent Quality Requirements. • Attachment 47, West 40 Landfill Operations and Maintenance Manual 2024, Section 11 Surface Water Management; Section 12 Landfill Leachate Management and Storage; Section 15.7 Monitoring. • Attachment 48, West 40 Landfill Decommissioning Technical Memorandum, Section 4 Closure Plan; Section 4.4 Drainage Restoration; Section 5 Post-Closure Plan; Section 5.2 Post-Closure Care Activities. • Attachment 52, North 40 Landfill Leachate Collection and Characterization Plan, Leachate Characterization; Table 1 Proposed Effluent Objectives; Contingency Measures and Emergency Discharge. • Attachment 59, Facility Monitoring Plan - Landfill and Waste Transfer Station, Section 2.1 Site Overview and Location; Section 3.8 Effluent Discharge Limits; Table 3-4 Effluent Discharge Limits; surface water monitoring locations, including WS-103.
CONCERNS	
<p>The Government of Nunavut (GN) has concerns regarding the waste-deposit authorizations being sought for the City of Iqaluit's (Proponent) Type A Water Licence renewal/amendment application.</p> <p>Section 12 of the Nunavut Waters and Nunavut Surface Rights Tribunal Act applies to the deposit of waste in waters in Nunavut, or in any other place in Nunavut under conditions where the waste, or waste resulting from that deposit, may enter waters in Nunavut. The Nunavut</p>	

Waters Regulations classify municipal undertakings and identify authorization thresholds for deposits of waste.

The application includes several major municipal facilities that discharge, may discharge, or may require future or contingency discharge of wastewater, leachate, contact water, runoff, or other waste streams. These include the Wastewater Treatment Plant, the Sewage Lagoon Facility, the West 40 Landfill, the New North 40 Landfill, and the Waste Transfer Station.

The application materials are spread across multiple plans and manuals. As a result, the application record does not clearly consolidate the waste-deposit authorization being sought for each major facility and waste stream. This creates uncertainty regarding which discharges are proposed to be authorized under the renewed/amended licence, which would be conditional or contingency-based, which would require a future Nunavut Water Board (NWB) approval process, and which waste streams would be managed without discharge to the environment.

For the Wastewater Treatment Plant and Sewage Lagoon Facility, the application record does not clearly consolidate the authorization basis for discharge, discharge points, discharge pathways to Koojesse Inlet, discharge circumstances, monitoring requirements, notification requirements, discharge volumes, applicable existing licence requirements, and any proposed discharge criteria or objectives for the NWB's consideration.

For the West 40 Landfill, the application includes decommissioning-related materials, while the West 40 operations and maintenance manual describes continued management of contact water, leachate, runoff, internal pond transfers, and retention pond discharge to Koojesse Inlet. The application record does not describe how these waste streams and discharges will be authorized, and managed.

For the New North 40 Landfill, the application materials describe collection, containment, and characterization of leachate, while also discussing possible future or contingency discharge pathways. The application record does not clearly identify whether authorization is being sought at this time for routine, intermittent, emergency, or contingency leachate discharge, or whether future discharge would require a further NWB process. The application also does not clearly distinguish proposed design objectives, treatment targets, or screening values from discharge criteria that may be proposed for the NWB's consideration.

For the Waste Transfer Station, the application record does not clearly identify whether runoff, seepage, wash water, contact water, snowmelt, or other waste streams are proposed to be discharged to the environment, or how those waste streams would otherwise be collected, contained, treated, transported, or managed.

RECOMMENDATIONS

The GN recommends that the Proponent:

- Provide a facility-by-facility table or equivalent summary for the Wastewater Treatment Plant, Sewage Lagoon Facility, West 40 Landfill, New North 40 Landfill, and Waste Transfer Station.

- For each facility, identify each waste stream or effluent source, including all discharge criteria, management, and parameters. State whether discharge authorization is being sought under the renewed/amended licence or through a future NWB process.
- For the West 40 Landfill, clarify how the existing leachate and retention pond system will be addressed during closure and post-closure care.
- For the Waste Transfer Station, clarify whether runoff, and waste water are proposed for discharge. Where discharge is not proposed, describe how these waste streams will be collected, and managed.

ADDITIONAL COMMENTS

N/A