CITY OF IQALUIT

WATER LICENCE 3AM-IQA1626

2025 ANNUAL WATER LICENSE REPORT

March 31, 2026

EXECUTIVE SUMMARY

Under a Type A Water License 3AM-IQA1626 (the License), the City of Iqaluit (the City):

- Extracts water from Apex River to Lake Geraldine and from Lake Geraldine for municipal use;
- Disposes of waste at West 40 Landfill and discharges landfill runoff.; and
- Discharges wastewater from the West 40 Wastewater Treatment Plant and backup Sewage Lagoon.

The City's existing license was issued by the Nunavut Water Board (NWB) in 2016 and expires on June 16, 2026. To date, there have been seven amendments made to the License, with the following amendments being relevant to the contents of the City's 2023 Annual Report:

- **Amendment No. 4** – effective April 1, 2020
- **Amendment No. 5** – effective March 15, 2021
- **Amendment No. 6** – effective October 15, 2021
- **Amendment No. 7** – effective August 12, 2022

This Annual Water License Report summarizes the activities conducted by the City in 2025, pursuant to the requirements stipulated in Schedule B of the License.

Monitoring Program

The City is currently undertaking efforts to ensure compliance with all monitoring requirements and to improve based on the Monitoring Program and Quality Assurance/Quality Control Plan (the "Monitoring Plan"). The proposed improvement measures, implementation schedule, and progress to date are provided in Section F.

Long-Term Water Supply and Storage

During 2025, the project progressed from preliminary design into detailed design, and regulatory permitting was advanced significantly. The Apex River was added as a water source, to complement the Lake Qikiqtaaluk source, per previous City Council direction (August 2024). Following a detailed delivery model review and associated market sounding, City Council approved (April 2025) a delivery model change from Design-Bid-Build (DBB) to Construction Management at Risk (CMAR) with Guaranteed Maximum Price (GMP). Key advantages of the collaborative CMAR model include early contractor involvement (EIC) and improved cost certainty.

Additional technical work completed in 2025 included detailed design development, geotechnical investigations, environmental studies, water balance assessments and ongoing coordination with Qulliq Energy Corporation (QEC) regarding electrical power requirements.

As of the end of December 2025:

- The design consultant submitted the 50% drawings (key components: two pumping stations, conveyance systems, new reservoir).
- Geotechnical investigations had advanced, with the resulting data informing plans for further 2026 investigations and de-risking.

- Four construction management (CM) companies were pre-qualified (seven companies submitted).
- Nunavut Planning Commission (NPC) review was complete.
- Nunavut Water Board and Nunavut Impact Review Board application packages were submitted.
- The Fisheries and Oceans Canada Request for Review was nearly ready for submission.

The regulatory submissions support the amendment and extension of the existing water licence and environmental screening required for the long-term water supply system.

Overall, the Raw Water Supply and Storage project continued to advance through design, permitting, and procurement stages in 2025.

Niaqunguk River (Apex River) Supplementary Pumping Program

No supplemental pumping was conducted in 2025, as the Lake Geraldine Dam remained consistently above the spillway elevation throughout the period and reservoir levels were sufficient to meet operational requirements without additional pumping from the Apex River. Accordingly, no water withdrawals were required under the supplemental pumping program during the 2025 season. Reservoir conditions remained stable, and the available storage at Lake Geraldine was adequate to support the City's water supply needs.

Water Treatment Plant

In 2025, the City withdrew 1,075,956 cubic metres of raw water from Lake Geraldine. No modifications or major maintenance work were carried out at this facility during the reporting period.

Wastewater Treatment

In 2025, the City discharged 1,314,673 cubic metres of effluent from the Wastewater Treatment Plant. In addition, 512 cubic metres of sludge were removed from the facility and disposed of at the City's West 40 Landfill. No modifications or major maintenance work were carried out at this facility during the reporting period.

Solid Waste Management

The North 40 Landfill and Waste Transfer Station are currently not operational. The City continues to accept and manage waste at the West 40 Landfill. In 2025, approximately 36,636 cubic metres of waste were deposited at the West 40 Landfill.

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ᖃᓄᐃᑦᑑᓂᖓ A ᐃᒥᕐᒧᑦ ᓚᐃᓴᓐᓯ 3AM-IQA1626 (ᓚᐃᓴᓐᓯ), ᐃᖃᓗᓐᓂ ᓄᓇᓕᐸᐅᔭᖅ (ᓄᓇᓕᐸᐅᔭᖅ):

- **ᐃᒥᖅᑖᕐᓂᖅ ᓂᐊᕐᑯᙳᐹ ᑰᖓᓂ ᑕᓯᖅ ᔨᐅᕈᐱᓐᒧᑦ ᐊᒻᒪᓗ ᑕᓯᖅ ᔨᐅᕈᐱᓐᒥᑦ Hᐋᒻᒪᓚᒃᑯᓐᓄᑦ ᐊᑐᖅᑕᐅᔫᒃᓴᖅ;**
- **ᐊᓂᑦᑎᕚᒃᑐᑦ West 40 ᐊᒃᑕᕐᕕᖕᒧᑦ ᑯᕕᑎᑦᑎᕚᒃᑐᑎᓪᓗ ᐊᒃᑕᕐᕕᐅᐸ ᑰᖕᓂᖓᓂ.; ᐊᒻᒪᓗ**
- **ᑯᕕᑎᑦᑎᕚᒃᑐᖅ ᐃᒥᕐᒥᒃ West 40 ᑮᓈᓗᖃᕐᕕᖕᒥ ᓴᓗᒻᒪᖅᓴᐃᕕᖕᒥ ᑮᓈᓗᖃᕐᕕᖕᒧᑦ.**

ᓄᓇᓕᐸᐅᔭᒃᑯᑦ ᓚᐃᓴᓐᓯᑖᓚᐅᖅᓯᒪᔪᑦ ᓄᓇᕗᒻᒥ ᐃᒪᓕᕆᔩᑦ ᑲᑎᒪᔨᖏᓐᓂᑦ (NWB) 2016-ᖑᑎᓪᓗᒍ ᐃᓱᓕᕝᕕᒃᓴᖃᖅᑐᓂᓗ ᔫᓂ 16, 2026-ᒥ. ᐅᓪᓗᒥᒧᑦ ᑎᑭᑦᑐᒍ, 7-ᓂᒃ ᐋᖅᑭᒋᐊᖅᑕᐅᓯᒪᔪᖅ ᓚᐃᓴᓐᓯᖓ, ᐅᑯᐊ ᐋᖅᑭᒋᐊᖅᑕᐅᓯᒪᔪᑦ ᐊᒃᑐᐊᓂᑏᑦ ᐃᓗᓕᖏᓐᓄᑦ ᓄᓇᓕᐸᐅᔭᐅᑉ 2023-ᒥ ᐊᕿᒍᑕᓖᖅᓯᐅᑦ ᐅᓂᒃᑳᖓᓂᑦ:

- **ᐋᖅᑭᒋᐊᕈᑦ ᓈᓴᐅᑎᖓ 4 – ᐱᒋᐊᖅᑐᓂ ᐄᐳᓗ 1, 2020**
- **ᐋᖅᑭᒋᐊᕈᑦ ᓈᓴᐅᑎᖓ 5 – ᐱᒋᐊᖅᑐᓂ ᒫᑦᓯ 15, 2021**
- **ᐋᖅᑭᒋᐊᕈᑦ ᓈᓴᐅᑎᖓ 6 – ᐱᒋᐊᖅᑐᓂ ᐊᒃᑑᕗ 15, 2021**
- **ᐋᖅᑭᒋᐊᕈᑦ ᓈᓴᐅᑎᖓ 7 – ᐱᒋᐊᖅᑐᓂ ᐋᒡᒌᓯ 12, 2022**

ᑖᓐᓇ ᐊᕿᒍᑕᓖᖅᓯᐅᑎ ᐃᒥᕐᒧᑦ ᓚᐃᓴᓐᓯᒧᑦ ᐅᓂᒃᑳᖅ ᓇᐃᓪᓕᒋᐊᖅᓯᒪᓪᓗᓂ ᐱᓕᕆᐊᖑᓯᒪᔪᓂᑦ ᓄᓇᓕᐸᐅᔭᒃᑯᓐᓄᑦ 2025-ᒥ, ᒪᓕᒃᑐᒋᑦ ᐊᑐᖃᐅᔭᓇᐊᓖᑦ ᓇᓗᓇᐃᖅᓯᒪᔪᑦ ᑎᑎᕋᖅᓯᒪᓂᓕᒃ B-ᒥ ᓚᐃᓴᓐᓯᒥ.

ᓇᐅᑦᑎᖅᓱᖅᓯᓂᕐᒧᑦ ᐱᓕᕆᐊᖑᕚᒃᑐᖅ

ᓄᓇᓕᐸᐅᔭᒃᑯᑦ ᒫᓐᓇ ᐱᓕᕆᐊᖃᖅᑐᑦ ᒪᓕᑦᑎᐊᕋᓗᐊᓇᐊᒃᓴᖏᓐᓂᒃ ᖃᐅᔨᓴᕆᐊᖃᖅᑕᓕᒫᖏᓐᓂᑦ ᐱᐅᓯᕚᓪᓕᕐᓗᒋᓪᓗ ᑐᙵᕕᒋᓕᒋᑦ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᐱᓕᕆᐊᖏᑦ ᐱᐅᓯᓂᓪᓗ ᐊᐅᓚᑦᑎᓂᕐᒧᑦ ᐱᕚᕆᔭᐅᑎᖓ (“ᖃᐅᔨᓴᖅᐸᓪᓕᐊᓂᕈᑦ ᐸᕐᓇᐅᑎ”). ᑐᒃᓯᕋᐅᑕᐅᓯᒪᔪᑦ ᐱᐅᓯᒋᐊᕈᑎᒃᓴᑦ, ᐊᑐᓕᖅᑎᑕᐅᓂᖏᑦ ᐅᓪᓗᖏᑦ, ᐱᕚᓪᓕᐊᓂᕆᔭᐅᔪᓪᓗ ᒫᓐᓇᒧᑦ ᑎᑭᑦᑐᒍ ᑎᑎᕋᖅᓯᒪᕗᑦ ᐊᕕᒃᓯᒪᓂᓕᒃ F-ᒥ.

ᐊᑯᓂᐅᔪᒃᑯᑦ ᐃᒥᖅᑕᕐᕕᒃ ᐊᒻᒪᓗ ᑐᖅᑯᐃᕕᒃ

2025-ᖑᑎᓪᓗᒍ, ᐱᓕᕆᐊᖅ ᑲᔪᓯᓂᖃᓚᐅᖅᑐᖅ ᓯᕗᓪᓕᖅᐹᖅᓯᐅᑎᒥᑦ ᓴᓇᒪᓂᖓᑕ ᑕᐅᑦᑐᒃᓴᖓᓄᑦ ᓇᓗᓇᐃᔭᖅᓯᒪᑦᑎᐊᖅᑐᒧᑦ, ᐊᒻᒪᓗ ᒪᓕᒐᑎᒍᑦ ᐱᔪᓐᓇᐅᑎᑖᖅᑎᑦᑎᓂᖅ ᓯᕗᒻᒧᐊᒃᑎᑕᐅᓚᐅᖅᑐᖅ. ᓂᐊᕐᑯᙳ ᑰᖓ ᐃᒥᖅᑕᕐᕕᐅᓕᓚᐅᖅᑐᖅ, ᐃᓚᓕᐅᑎᓪᓗᒍ ᑕᓯᖅ ᕿᑭᖅᑖᓗᒃ, ᓄᓇᓕᐸᐅᔭᒃᑯᑦ ᑲᑎᒪᔨᖏᑕ ᑎᓕᓯᔾᔪᑎᒋᓚᐅᖅᑕᖏᑦ ᒪᓕᒃᑐᒋᑦ (ᐋᒡᒌᓯ 2024). ᓇᓗᓇᐃᔭᑦᑎᐊᖅᓯᒪᔪᓂᒃ ᑲᔪᓯᑎᑦᑎᓂᕐᒧᑦ ᐊᑐᖅᑕᐅᕚᒃᑐᒥᒃ ᕿᒥᕈᐊᒃᑲᓂᓚᐅᖅᑎᓪᓗᒋᑦ ᐊᒃᑐᐊᓂᓕᖕᓂᓪᓗ ᓂᐅᕈᑎᖃᖅᐸᖕᓂᕐᒧᑦ ᖃᐅᔨᓴᕐᓂᕐᒥᒃ, ᓄᓇᓕᐸᐅᔭᒃᑯᑦ ᑲᑎᒪᔨᖏᑦ ᐊᖏᖅᓯᓚᐅᖅᑐᑦ (ᐄᐳᓗ 2025-ᒥ) ᑲᔪᓯᑎᑦᑎᓂᕐᒧᑦ ᐊᑐᖅᑕᐅᕚᒃᑐᒥᒃ ᐊᓯᔾᔨᖅᓯᓂᕐᒥᒃ ᑕᐅᑦᑐᒃᓴᖓᓄᑦ-ᐊᑭᑦᑐᕋᐅᑎᓂᕐᒧᑦ-ᓴᓇᓂᕐᒧᑦ (DBB) ᓴᓇᓂᕐᒧᑦ ᐊᐅᓚᑦᑎᕝᖃᕐᓂᕐᒥᒃ ᖁᐊᖅᖂᕐᓇᖅᑐᑏᑐᐃᓐᓇᓇᐊᓕᓐᓂᒃ (CMAR) ᑕᐃᒪᐃᓪᓚᓇᓐᓂᐊᕐᓂᕋᖅᓯᒪᓪᓗᓂ ᐊᑭᑐᓛᖓᓂ (GMP). ᐊᑲᕿᑎᒋᔭᐅᓪᓗᐊᑕᖅᑐᖅ ᐱᓕᕆᖃᑎᒌᖕᓂᒃᑯᑦ CMAR-ᒧᑦ ᐊᑐᖅᑕᐅᕚᒃᑐᒧᑦ ᐃᓚᖃᖅᐳᖅ ᑳᓐᑐᓛᑕᐅᑲᐅᖅᑐᕐᓂᖓᓂᒃ (EIC) ᐱᐅᓯᒋᐊᖅᑎᑦᑎᓂᕐᒥᓪᓗ ᐊᑭᖏᓐᓂᒃ ᓇᓗᙱᑦᑎᐊᕐᓂᕐᒥᒃ.

ᐱᓕᕆᔾᔪᑎᓄᑦ ᐱᓕᕆᐊᖑᒍᑲᓐᓂᖅᑐᖅ ᐱᔭᕇᖅᑕᐅᓚᐅᖅᑐᑦ 2025-ᒥ ᐃᓚᖃᖅᑐᓂ ᓇᓗᓇᐃᔭᖅᓯᒪᔪᓂᒃ ᑕᐅᑦᑐᒃᓴᙱᓂᒃ ᐱᕙᓪᓕᐊᑎᑦᑎᓂᕐᒥᒃ, ᓄᓇᓕᕆᓂᕐᒧᑦ ᖃᐅᔨᓴᕐᓂᖅ, ᐊᕙᑎᓕᕆᓂᕐᒥᒃ ᐃᓕᓐᓂᐊᕐᓂᖅ, ᐃᒪᐅᑉ ᓇᓕᒧᕆᙵᓂᙱᓄᑦ ᖃᐅᔨᓴᕐᓃᑦ ᐱᓕᕆᖃᑎᖃᐃᓐᓇᕐᓂᕐᒥᓪᓗ ᕿᓪᓕᖅ ᐆᒪᖅᑯᑎᓕᕆᔨᒃᑯᑦ ᒥᑎᕐᑯᑖᓂᑦ (QEC) ᐱᔾᔪᑎᒋᓪᓗᒋᑦ ᓄᑭᓪᓚᐅᑎᓄᑦ ᐊᑐᖅᑕᐅᔭᕆᐊᓖᑦ.

ᐅᑎᓯᐱᕆ 2025 ᓄᕐᙳᐊᓂ:

- ᓴᓇᒪᓂᙵᑕ ᑕᐅᑦᑐᒃᓴᙱᓄᑦ ᖃᐅᔨᒃᑲᐃᔨ ᑐᓂᓯᓚᐅᖅᑐᖅ 50%-ᖓᓂ ᑎᑎᕋᐅᔭᖅᓯᒪᔪᒥᒃ (ᐃᓗᓕᓪᓗᐊᑕᖏᑦ: ᒪᕿᒃ ᒥᓪᓗᐊᕐᕚᒃ, ᐃᖏᕐᕋᑎᑦᑎᔾᔪᑎᑦ, ᓄᑖᖅ ᐃᒥᖅᑕᕐᕕᒃ).
- ᓄᓇᓕᕆᓂᕐᒧᑦ ᖃᐅᔨᓴᕐᓂᖅ ᓯᕗᒨᒃᐸᓪᓕᐊᓚᐅᖅᑐᖅ, ᓴᖅᑭᑦᑐᑦ ᑎᑎᕋᖅᓯᒪᔪᑦ ᑐᓴᖅᑎᑦᑎᔾᔪᑕᐅᓪᓗᑎᒃ ᐸᕐᓇᐅᑎᓂᒃ 2026-ᒥ ᖃᐅᔨᓴᒃᑲᓂᕐᓂᕐᒧᑦ ᐊᒻᒪᓗ ᐊᑦᑕᕐᓇᕈᓐᓃᖅᑎᑦᑎᓂᕐᒥᒃ.
- ᑎᓴᒪᑦ ᐃᒡᓗᓕᐅᓂᕐᒧᑦ ᐊᐅᓚᑦᑎᔨᑦ (CM) ᑳᐸᓂᐅᔪᑦ ᐊᔪᙱᑎᑕᐅᕙᕆᓚᐅᖅᑐᑦ (7 ᑳᐸᓂᐅᔪᑦ ᑐᓂᓯᓚᐅᖅᑐᑦ).
- ᓄᓇᕗᒻᒥ ᐸᕐᓇᐃᔨᑦ ᑲᑎᒪᔨᖏᑦ (NPC) ᕿᒥᕐᕈᓂᖓ ᐱᔭᕇᓚᐅᖅᑐᖅ.
- ᓄᓇᕗᒻᒥ ᐃᒪᓕᕆᔨᒃᑯᑦ ᑲᑎᒪᔨᖏᑦ ᐊᒻᒪᓗ ᓄᓇᕗᒻᒥ ᐊᕙᑎᓕᕆᔨᒃᑯᑦ ᑲᑎᒪᔨᖏᑦ ᐱᓇᔪᑎᑦ ᑲᑎᖅᓱᖅᓯᒪᔪᑦ ᑐᓐᓂᖅᑯᑕᐅᓚᐅᖅᑐᑦ.
- ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑲᓇᑕᒥ ᑐᒃᓯᕋᐅᑎᙵ ᕿᒥᕐᕈᓂᕐᒧᑦ ᐊᑐᐃᓐᓇᐅᓕᓚᐅᖅᑐᖅ ᑐᓂᔭᐅᓂᐊᕐᓗᓂ.

ᒪᓕᒋᐊᓕᙴᓄᑦ ᑐᓐᓂᖅᑯᑕᐅᔪᑦ ᐃᑲᔪᖅᑐᐃᕗᑦ ᐋᖅᑭᒋᐊᕈᑎᓂᒃ ᐅᙱᕙᕆᐊᖅᑕᐅᓂᖏᓗ ᐱᑕᖃᖅᐸᕆᖅᑐᖅ ᐃᒪᕐᒧᑦ ᓚᐃᓴᓐᓯ ᐊᒻᒪᓗ ᐊᕙᑎᒥᒃ ᖃᐅᔨᓴᖅᑕᐅᔭᕆᐊᓕᒃ ᐊᑯᓂᐅᔪᒃᑯᑦ ᐃᒥᖅᑕᕐᕕᖕᒧᑦ.

ᐊᑕᖏᓪᓗᓂ, ᐃᒥᖅᑕᕐᕕᒃ ᐊᒻᒪᓗ ᑐᖅᑯᐃᕕᒃ ᐱᓕᕆᐊᖅ ᓯᕗᒻᒧᐊᒃᐸᓪᓕᐊᖏᓐᓇᓚᐅᖅᑐᖅ ᐋᖅᑭᒃᓯᒪᓂᒃᓴᙱᓄᑦ, ᐱᔪᓐᓇᐅᑎᑖᖅᑎᑦᑎᓂᖅ, ᐊᒻᒪᓗ ᓂᐅᕕᖅᐸᓪᓕᐊᓂᕐᒥᒃ 2025-ᒥ.

ᓂᐊᕐᑯᙵᒨ ᑰᖓ (Apex River) ᒥᓪᓗᐊᖅᓯᒃᑲᓐᓂᕐᓂᕐᒧᑦ ᐱᓕᕆᐊᖅ

2025-ᒥ ᒥᓪᓗᐊᖅᓯᒃᑲᓂᓚᐅᙱᑦᑐᑦ, ᑕᓯᖅ ᔨᐅᕈᑏᓐ ᖁᕝᕙᓯᙱᓂᖃᐃᓐᓇᓚᐅᕐᓂᙱᓄᑦ ᐊᒻᒪᓗ ᐃᒥᖅᑕᕐᕕᐅᑉ ᖁᕝᕙᓯᙱᓐᖓ ᓈᒻᒪᓚᐅᖅᑐᖅ ᐊᐅᓚᓂᕐᒧᑦ ᐱᔭᕆᐊᓕᓐᓄᑦ ᒥᓪᓗᐊᖅᑕᐅᒃᑲᓂᙱᒃᑲᓗᐊᕐᓗᓂ ᓂᐊᕐᑯᙵᒨ ᑰᖓᓂ. ᑕᐃᒪᐃᓐᓂᙱᓄᑦ, ᐃᒪᖅᑕᒃᑲᓂᕆᐊᖃᓚᐅᙱᑦᑐᑦ 2025-ᒥ ᐅᑭᐅᒥ. ᐃᒥᖅᑕᕐᕕᐅᑉ ᖃᓄᐃᓕᙱᓂᖓ ᓈᒪᐃᓐᓇᓚᐅᖅᑐᖅ, ᐊᒻᒪᓗ ᐊᑐᐃᓐᓇᐅᔪᖅ ᐃᒪᖃᕐᕕᒃ ᑕᓯᖅ ᔨᐅᕈᑏᓐ ᓈᒻᒪᓚᐅᖅᑐᖅ ᓄᓇᓕᐸᐅᔭᐅᑉ ᐃᒥᖅᑕᕐᕕᒋᔭᕆᐊᖃᖅᑕᙱᓄᑦ.

ᐃᒥᕐᒧᑦ ᓴᓗᒻᒪᖅᓴᐃᕕᒃ

2025-ᒥ, ᓄᓇᓕᐸᐅᔭᒃᑯᑦ ᐃᒥᕐᒥᒃ ᐊᑐᓚᐅᖅᑐᑦ 1.075,956 ᑭᐹᓇᒃᑐᓂᒃ ᒦᑕᓂᒃ ᐃᒪᕐᒥᒃ ᑕᓯᖅ ᔨᐅᕈᑏᓐᒥᑦ. ᐋᖅᑭᒋᐊᖅᑕᐅᔪᖃᓚᐅᙱᑦᑐᖅ ᐅᕝᕙᓘᓐᓃᑦ ᐊᖏᔪᓂᒃ ᐋᖅᑭᐅᒪᑎᑦᑎᔪᖃᓚᐅᙱᑦᑐᖅ ᑕᕝᕙᓂ ᐃᒡᓗᕐᔪᐊᒥ ᐅᓂᒃᑳᕐᓇᐅᑎᓪᓗᒍ.

ᑭᓈᓗᖃᕐᕕᖕᒧᑦ ᓴᓗᒻᒪᖅᓴᐃᕕᒃ

2025-ᒥ, ᓄᓇᓕᐸᐅᔾᑯᑦ ᑯᕕᑎᑦᑎᓚᐅᖅᑐᑦ 1,314,673 ᑭᐸᕇᓐᑐᑦ ᒦᑕᓂᒃ ᑭᓈᓗᖃᕐᕕᖕᒥ ᓴᓗᒪᖅᓴᐃᕕᖕᒥ. ᓱᓕᒃᑲᓂᖅ, 512 ᑭᐸᕇᓐᑐᑦ ᒦᑕᑦ ᑭᓂᖅᑐᑦ ᐲᔭᖅᑕᐅᓚᐅᖅᑐᑦ ᐃᒋᑕᐅᓪᓗᑎᓪᓗ ᓄᓇᓕᐸᐅᔾᑯᑦ West 40 ᐊᒃᑕᕐᕕᖓᓄᑦ. ᐋᖅᑭᒋᐊᖅᑕᐅᔪᖃᓚᐅᙱᑦᑐᖅ ᐅᕝᕙᓘᓐᓃᑦ ᐊᖏᔪᓂᒃ ᐋᖅᑭᐅᒪᑎᑦᑎᔪᖃᓚᐅᙱᑦᑐᖅ ᑕᕝᕙᓂ ᐃᒡᓗᕐᔪᐊᒥ ᐅᓂᒃᑳᕐᓇᐅᑎᓪᓗᒍ.

ᑕᖏᓕᖕᓂᒃ ᐊᐅᓚᑦᑎᓂᖅ

North 40 ᐊᒃᑕᕐᕕᒃ ᐊᒻᒪᓗ ᑭᓈᓗᖃᕐᕕᒃ ᐊᐅᓚᑦᑎᕕᒃ ᐊᐅᓚᖏᑦᑐᖅ. ᓄᓇᓕᐸᐅᔾᑯᑦ ᐱᖃᑦᑕᐃᓐᓇᖅᑐᑦ ᐊᐅᓚᑦᑎᕙᒃᑐᑎᓪᓗ ᐊᒃᑕᖅᑕᐅᔪᓂᒃ West 40-ᒥ ᐊᒃᑕᕐᕕᖕᒥ. 2025-ᒥ, ᐃᒻᒪᖄ 36,636 ᑭᐸᕇᓐᑐᑦ ᒦᑕᑦ ᐊᒃᑕᑯᑦ ᐊᒃᑕᖅᑕᐅᓚᐅᖅᑐᑦ West 40-ᒧᑦ.

INTRODUCTION

In June 2016, the City of Iqaluit (the City) was issued a Water License number 3AMIQA1626 (the License) by the Nunavut Water Board (NWB). The license was issued for a ten-year period concluding in June 2026.

A requirement of the License is an annual report due March 31 of each year, summarizing activities governed by the License for the previous calendar year. In accordance with Schedule B of the Water License, this Annual Water License Report summarizes the activities conducted by the City of Iqaluit in 2025.

ANALYSIS

A. The monthly and annual quantities in cubic meters of fresh water withdrawn from the Lake Geraldine Reservoir (Monitoring Station No. IQA-01).

The total raw water drawn from Lake Geraldine was 1,075,956 cubic meters in 2025, which is below the maximum allowable withdrawal allowance of 2,000,000 cubic meters.

Table 1: Raw Water Drawn from Lake Geraldine Reservoir

Month	Volume (m^3)
January	98,307
February	91,373
March	104,672
April	97,404
May	96,453
June	83,552
July	81,043
August	79,764
September	83,292
October	88,991
November	84,745
December	86,360
Total Volume	1,075,956

B. The monthly and annual quantities in cubic meters of any discharges from the Wastewater Treatment Facilities (Monitoring Stations No. IQA-02, IQA-04, IQA-08).

- A total volume of 8,208 m^3 of effluent was discharged from the Sewage Lagoon to Frobisher Bay (Station ID IQA-02) in August 2025.
- The West 40 landfill (Station ID IQA-08) did not discharge any effluent in 2025.
- A total volume of 1,314,673 m^3 of effluent was discharged from the City's Wastewater Treatment Plant (WWTP) to Frobisher Bay (Station ID IQA-04) in 2025.

Table 2: IQA-04 – Effluent Discharge from the WWTP to Frobisher Bay

Month	Volume (m^3)
January	96,622
February	90,378.27
March	101,085.06
April	119,891.27
May	127,259.89
June	119,417
July	137,080
August	113,467
September	110,837
October	112,635
November	92,239
December	93,762
Total Volume	1,314,673

C. Reports generated from Dam Safety Inspections and Dam Safety Reviews and proposed actions to address issues identified and/or updates on continuing actions to address issues.

The City acknowledges that no Dam Safety Inspections (DSIs) were completed in 2025 for either the Lake Geraldine Dam or the Wastewater treatment facilities.

In 2026, the City initiated procurement processes to retain a qualified consultant to provide these services. This approach is intended to ensure ongoing compliance with this requirement and represents the City's ongoing effort. As part of this work, the consultant will also be required to provide training to current City operational staff to improve internal understanding of DSI and DSR requirements and to support the City to assist in inspections. This work will also help ensure that current operational staff are fully informed of identified deficiencies and are better equipped to develop plans to address them in subsequent years. Progress on these deficiencies, along with actions taken to address them, will be documented in future annual reports.

D. The monthly and annual quantities in cubic meters of sludge removed from the Wastewater Treatment Facility.

The total sludge removed from the Wastewater Treatment Plant was 512 cubic meters in 2025.

Table 3: Sludge removed from the WWTP Treatment Plant

Month	Volume (m^3)
January	45
February	39
March	43
April	48
May	36

June	48
July	44
August	40
September	39
October	41
November	45
December	44
Total Volume	**512**

E. The monthly and annual quantities of waste disposed at the West 40 Landfill.

The total waste disposed at West 40 Landfill was 36,636 cubic meters in 2025.

Table 4: Waste disposed at the West 40 Landfill

Month	Volume (m^3)
January	2399
February	1957
March	2218
April	2167
May	2966
June	2506
July	4105
August	4029
September	3809
October	4189
November	3433
December	2858
Total Volume	**36636**

F. A summary report which includes all data and information generated under the Monitoring Program, including the QA/QC program, in electronic and printed formats acceptable to the Board.

The laboratory and field monitoring results are available in **Appendix A**

At IQA-01, monthly raw and treated water monitoring results indicate generally stable water quality throughout 2025. Field pH ranged approximately from 6.52 to 7.15, laboratory pH from 6.22 to 7.22, conductivity at 25°C from about 28 to 51 µS/cm, and turbidity generally remained low at about 0.2 to 0.9 NTU. Total suspended solids were generally reported as <3 mg/L, with a few isolated values of 3 to 7 mg/L. Treated water free chlorine was typically present at about 0.65 to 1.08 mg/L, and total chlorine ranged from about 0.79 to 1.23 mg/L.

At IQA-02, the sewage lagoon effluent results included three sewage lagoon effluent samples collected on August 5, August 10, and August 14, 2025. The lagoon effluent results showed pH

at 25°C ranging from 7.34 to 7.40, total suspended solids ranging from 110 to 200 mg/L, ammonia ranging from 120 to 144 mg/L as N, total phosphorus ranging from 27.6 to 30.9 mg/L, orthophosphate ranging from 28.2 to 30.6 mg/L, BOD5 ranging from 78 to 193 mg/L, and fecal coliform ranging from 1.0×10^6 to 1.4×10^6 CFU/100 mL. Metals were generally low with iron ranging from 4.58 to 5.49 mg/L, copper from 0.112 to 0.117 mg/L, manganese from 0.352 to 0.358 mg/L, and zinc from 0.059 to 0.064 mg/L.

At IQA-04, wastewater treatment plant effluent pH ranged from 7.16 to 7.93, TSS ranged from 16 to 200 mg/L, BOD5 ranged from 10 to 207 mg/L, ammonia ranged from 20.5 to 38.6 mg/L as N, and total phosphorus ranged from 1.70 to 6.93 mg/L. The acute lethality test reported a temperature of 15.8°C, pH of 7.18, total ammonia of 25.7 mg/L as N, un-ionized ammonia of 0.112 mg/L as N, total chlorine of less than 0.020 mg/L, and a trout bioassay result of Pass.

At IQA-06, quarterly sludge sampling completed on January 13, April 7, July 7, and October 20, 2025. The sludge results showed total solids ranging from 18.2% to 22.5%, ammonia ranging from 697 to 1,240 µg/g, total phosphorus ranging from 2,550 to 3,750 µg/g, orthophosphate ranging from 538 to 1,070 µg/g, and fecal coliform ranging from 4.78×10^9 to 3.47×10^{10} CFU/g. Metals in sludge were variable, with measurable concentrations of iron, copper, zinc, chromium, nickel, manganese, lead, and mercury, including iron up to 17,600 µg/g, copper up to 252 µg/g, zinc up to 277 µg/g, lead up to 125 µg/g, and mercury up to 1.98 µg/g.

At IQA-08,QA-08A, and IQA-08B, The landfill monitoring results showed pH at 25°C of 8.0 at all three stations, BOD5 of 9 mg/L at IQA-08 and less than 3 mg/L at IQA-08A and IQA-08B, COD of 100 mg/L at IQA-08 compared with 26 mg/L and 22 mg/L at IQA-08A and IQA-08B, ammonia of 15.0 mg/L at IQA-08 compared with 0.25 mg/L and 2.00 mg/L at IQA-08A and IQA-08B, iron of 3.49 mg/L, 2.11 mg/L, and 1.60 mg/L, manganese of 0.464 mg/L, 0.182 mg/L, and 0.671 mg/L, and zinc of 4.260 mg/L, 0.037 mg/L, and 0.043 mg/L, respectively.

In accordance with Water Licence No. 3AM-IQA1626, the applicable effluent criteria currently provided are specific to surface drainage and runoff, requiring pH to remain between 6.0 and 9.0 and total suspended solids (TSS) to not exceed a maximum average concentration of 50 mg/L or a maximum grab concentration of 100 mg/L. Based on the 2025 monitoring results, pH values observed across the monitored stations were generally within the applicable range. However, elevated TSS concentrations were observed at IQA-02 and IQA-04 during certain sampling events, with recorded values exceeding the specified TSS limits. Other monitored locations, including IQA-01 and the IQA-08 series, generally indicated stable conditions with lower suspended solids concentrations. The City notes that comparison of all monitoring results to the Water Licence criteria is somewhat limited, as the parameters and limits set out in the Licence apply specifically to surface drainage and runoff.

No monitoring was conducted at IQA-03, IQA-07, IQA-09, IQA-11, IQA-12, IQA-13, and IQA-17 because the monitoring requirements for these stations were either conditional, subject to approved monitoring, or the stations were no longer active during the reporting period. For IQA-10, no volume was recorded, as no water was withdrawn from the Upper Niaqunnguk River for direct transfer to the Reservoir during the reporting period. In addition, no monitoring activities were carried out at IQA-14, IQA-15, IQA-16, SW1, SW2, SW3, WS100, WS101, WS102, 19MW-03, 19MW-04, 19MW-05, WS-107, WS-108, WS-109, WS-110, and WS-111, as no

sampling was conducted at the new North 40 Landfill or the Waste Transfer Station, since neither facility was operational during the reporting period.

The City acknowledged that certain required parameters were not analyzed during the reporting period and are noted below. A schedule is also provided to address these deficiencies and to achieve compliance with the Monitoring Program going forward.

Missing Parameters in 2025

IQA-01 – Lake Geraldine Reservoir - Raw Water

R – Routine

Conductivity field and Oxidation-Reduction Potential (ORP) field

IQA-02 – Sewage Lagoon-Effluent Discharge Point

E - Effluent

Temperature field, Conductivity field pH field and Flow

IQA-04 – WWTP- Effluent Discharge Point

E - Effluent

Temperature field, Conductivity field, pH field

IQA-06 – Sludge – From WWTP

B – Biological

Biochemical Oxygen Demand

N – Nutrients

Nitrate-N and Nitrite-N

E – Effluent

Temperature field, Conductivity field, Conductivity Lab, pH field and pH Lab

IQA-08A – Station situated up-gradient of West 40 Landfill

N – Nutrients

Nitrate-N, Nitrite-N and orthophosphate

E – Effluent

Temperature field, Conductivity field, Conductivity Lab, pH field, pH Lab and Flow

IQA-08B – Station situated down-gradient of West 40 Landfill

N – Nutrients

Nitrate-N, Nitrite-N and orthophosphate

E – Effluent

Temperature field, Conductivity field, Conductivity Lab, pH field, pH Lab and Flow

Schedule to Support Sampling Activities

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).

G. A summary of all construction activities carried out for the facilities.

No construction activities were carried out during the reporting period at the North 40 Landfill and West 40 Landfill, LTWP – Supply and Storage, Waste Transfer Station, Water Treatment Plant and Wastewater Treatment Plant.

AV341-AV335 and MH93-MH86 Upgrade

Construction activities for the AV341–AV335 and MH93–MH96 Upgrade were undertaken in two phases. As of 2025, the AV341–AV335 phase had been completed and included the replacement of approximately 350 m of underground water, recirculation, and sanitary sewer piping, along with the installation of associated infrastructure. The second phase, covering MH93 to MH96, is scheduled for completion in 2026 and would include the replacement of approximately 300 m of underground water, recirculation, and sanitary sewer piping. The City acknowledged that no issue-for-construction drawings were provided during the reporting period. IFC drawing is included in **Appendix B**, and an Engineering Construction Summary Report will be submitted upon completion of the project.

H. A summary of any modifications and/or major maintenance work carried out at the facilities and any associated structures.

No modifications or major maintenance work were carried out during the reporting period at the North 40 Landfill and West 40 Landfill, LTWP – Supply and Storage, Waste Transfer Station, Water Treatment Plant and Wastewater Treatment Plant.

I. A progress report and revisions (if applicable) to any studies requested by the Board that relate to waste management, water use, or reclamation and a brief description of any future studies planned by the Licensee including, a non-technical executive summary for the general public, translated into Inuktitut.

Niaqunguk (Apex) River Supplemental Pumping

No supplemental pumping from the Apex River was required in 2025, as Lake Geraldine was fully recharged through natural inflows and precipitation. The reservoir reached spill elevation on August 17, 2025, and remained at or near that level until November 9, 2025. As a result, the supplemental pumping program functioned primarily as a preparedness, maintenance, and monitoring initiative rather than an active water transfer operation.

Program activities in 2025 included mobilization of pumping infrastructure, coordination with the territorial electrical authority, installation and testing of mechanical and electrical systems, river flow monitoring, pump servicing, and replacement of the turbo generator set. A suspected fuel spill at the pumping site also prompted soil investigation and mitigation measures, which led

to the design and construction of a permanent lined fuel containment berm. All equipment, except the semi-permanent pipeline, was demobilized in October 2025, with final project closeout completed in early November.

Overall, the 2025 program maintained operational readiness, met regulatory requirements, and improved environmental protection at the Apex pumping site, despite no active pumping being required.

The Apex River Pumping report is available in **Appendix C**.

J. Any revisions required, in the form of addenda, to Plans, Manuals and Reports approved under the License.

Updated O&M manuals will be provided as part of the City's response to the comments received on the renewal application.

K. A list and description, including volumes and Spill Report Line Identification Numbers, of all un-authorized discharges, spills and summaries of follow-up action taken.

A detailed list of reported spills, including Spill Report Line Identification Numbers, recorded volumes (where available), and summaries of corrective actions taken, is provided in the attached table. A copy of the spill reports is appended in **Appendix D**.

Table 5: Summary of spills/unauthorized discharges in 2025

Date	Location	Type	Volume	Cause	Follow-Up Action
04-Oct-2025	AV226 (63.7469 - 68.5130)	Sewage	1500L	Possible Parshall collapse	Sewer Truck called to pump down AV. City crew called in to blast sewer main. Sewer truck sucked up what they could. **A sewer truck was mobilized to pump down the AV area and reduce the overflow while City crews cleared the sewer main by blasting it to re-establish flow. The spilled sewage was recovered by the sewer truck as much as practicable and hauled to the Wastewater Treatment Plant for proper disposal. Upon completion of the sewer response, the City*

					road crew scrapped and cleaned the affected area to remove remaining waste and debris. All recovered material was disposed of at the Wastewater Treatment Plant, and the site was inspected after cleanup to confirm the area had been properly addressed
14-Oct-2025	AV670 (63.7466, -68.5169)	Sewage	Unknown ** The volume of the spill is unknown as the incident was not immediately identified. The spill occurred when a contractor inadvertently damaged a sewer line. As the damage went unnoticed for a period of time, a significant volume of sewage was released before staff were made aware of the situation and able to respond. Due to the delay in detection and response, it was not possible to accurately estimate the total volume of the spill.*	Pipe Leaks	Contractors pulled out our sewer line causing a spill at AV 470 Sewer truck was called in to keep the AV pumped out , we will clean up what we can Tower was called to fix the sewer line. **A sewer truck was mobilized to pump out the overflowing AV and reduce the overflow while restoring normal flow conditions. Spilled sewage was recovered as much as practicable and hauled to the Wastewater Treatment Plant for disposal. The spill volume was unknown because the discharge occurred during an active backup and could not be accurately measured before the flow was controlled. A third-party contractor repaired the damaged sewer line and ensured the system was operating properly afterward.*
15-Dec-2025	AV30 (63.742315564, -68.510085561)	Sewage	15000L	Busted valve on in water main	A busted valve in our water main at MH 48 caused water to overwhelm our sewer main and lift station causing Water and sewer to over flow from AV 30 and MH 32 sewer trucks were called in and stayed until valve was replaced

					And road crew was called to clean up what they could. **A sewer truck was mobilized to pump down the affected access vault area and reduce the overflow while City crews responded to the broken valve on the water main at MH 48 and completed the necessary repair. The overflow was controlled as much as practicable through continuous pumping operations. City road crews were also dispatched to clean and scrape the affected area to remove any remaining waste, water, and debris for disposal at the Wastewater Treatment Plant. Following completion of the emergency response and valve replacement, the site was inspected to confirm that the area had been appropriately cleaned and that normal system operation had been restored.*

** Indicates the follow-up actions and corrective measures undertaken, and where applicable, provides the reason the spill volume is unknown.*

L. A summary of any closure and reclamation work undertaken and an outline of any work anticipated for the next year, including any changes to implementation and scheduling.

No closure or reclamation work was carried out in 2025. At this time, no closure or reclamation activities are anticipated for next year, and there are no proposed changes to implementation or scheduling.

M. A summary of actions taken to address concerns or deficiencies listed in the inspection reports and/or compliance reports filed by an Inspector.

The 2025 Water Licence inspection, conducted on June 20, 2025, by CIRNAC, found no obvious signs of non-compliance. As no deficiencies were identified, no corrective actions were required.

N. A brief update on the implementation plan of all facilities within the scope of this License including projected implementation and status of the Upgraded Wastewater Treatment Plant.

N/A

O. A summary of any studies, reports and plans requested by the Board that related to waste disposal, water use, or reclamation and a brief description of any future studies planned.

WWTP HVAC Ventilation Assessment and Planned Upgrades
The City has engaged a third-party consultant and is currently working with them to improve ventilation at the facility. This work includes planned HVAC ventilation upgrades, as well as computational fluid dynamics (CFD) modelling of airflow and hydrogen sulphide (H_2S) analysis to assess indoor air quality conditions. The study is expected to result in a technical report in 2026, which will be provided in the next reporting period.

Lake Geraldine Water Balance Model Calibration Update
The final updated water balance model is in **Appendix E.**

Ongoing Operational Improvements to WWTP and Lagoon
As part of the City's ongoing efforts to improve wastewater treatment performance, the City is currently working with its Owner's Engineer to review and optimize operations at the WWTP to ensure that all equipment is operating properly and functioning as intended. Items currently under review include opportunities to introduce redundancy within existing equipment systems, improve operational reliability, and increase loading or retention capacity where feasible. In addition, the City is in the process of developing an operational plan to improve effluent quality at the sewage lagoon. Funding to support this work has been included in the current year's Capital Budget.

P. Any other details on the use of water or waste disposal requested by the Board by November 1st of the year being reported.

Please see **Appendix F** for additional information provided by the City in response to feedback provided for 2022 - 2024 Annual Report.

Q. Details of the SPP Program and monitoring at Station No IQA-10.

Appendix C outlines details of the Apex River Supplemental Pumping Program.

R. Monthly and annual quantities in cubic meters of fresh water withdrawn from Imiqtarviviniq (Dead Dog Lake) at Monitoring Station No. IQA-14.

The City did not withdraw any water from the Dead Dog Lake (Station ID IQA-014) in 2025.

S. Monthly and annual quantities, and general types of waste brought to the Waste Transfer Station and disposed at the New North 40 Landfill.

There were no monthly or annual quantities of waste delivered to the Waste Transfer Station and subsequently disposed of at the New North 40 Landfill, as the facility was not operational or utilized during the 2025 reporting period.

T. Review of procedures for packaging, storage and shipment of harmful hazardous waste.

Hazardous waste is temporarily stored at the West 40 Landfill in 20-foot Dangerous Goods (DG) containers and Quartex bags, which are used to segregate materials such as adhesives, aerosols, batteries, and other regulated substances. Unknown or unidentified waste materials are stored separately and are assessed in coordination with the City's waste management contractor to ensure proper classification and handling. The City coordinates the annual removal and off-site disposal of hazardous materials through the City's waste management contractor. The City is currently awaiting records confirming the proper disposal of waste removed from the site by the contractor. These records will be provided once they become available.

Table 6: Hazardous Waste Quantity Tracker Shipped for Final Disposal in 2025

Item	Description	Quantity
1	Removal, sealift and final disposal of 20' containers containing used tires (incl. supply of new empty sea containers)	13
2	Removal, sealift and final disposal of 20' containers containing electronic waste (incl. supply of new empty sea containers)	5
3	Removal, sealift and final disposal of Quatrex bags containing used automotive batteries (incl. supply of new empty bags)	24
4	Removal, sealift and final disposal of Freon 407 (125-lb cylinders)	5
5	Removal, sealift and final disposal of bulk fluid totes containing mixed liquid waste	18
6	Removal, sealift and final disposal of 50-lb propane cylinders	28
7	Removal, sealift and final disposal of 1-lb pallet size bin of propane cylinders	3
8	Removal, sealift and final disposal of 100-lbs propane cylinders	5
9	Removal, sealift and final disposal of 5-gal pails household batteries	9
10	Removal, sealift, and final disposal of 140-kg drums of hydrofluorosilicic acid (HFS)	96
11	Removal, sealift and final disposal of 300-kg drums of liquid caustic soda	21
12	Mixed flammable liquids/solvents	2
13	Viva Oxy (Liquid bleach agent)	9
14	Unknown Waste	15
15	Mixed waste	2
16	Floculents	165
17	Paint	1

U. Update on the capacity of the landfill cell currently in use, including the installation timing calculation (inputs and result), including discussion on the required actions/schedule for design and installation of the next lined disposal area in the sequence

In 2025, the City retained a third-party contractor to undertake an aerial survey and airspace consumption assessment of the West 40 Landfill. The results indicated that, as of July 2025, the landfill had an estimated effective waste disposal capacity of 46,422m³ within Area A, which is the portion currently in use. Including Area B, the total available airspace was estimated at 75,721 m³; however, use of Area B remains dependent on the removal of the existing building. These estimates exclude the scrap metal area and assume that overfilled waste will not be relocated.

Based on the 2024/2025 average airspace consumption rate of 57.6 m³/day, approximately 7,041 m³ of airspace was projected to be consumed by December 30, 2025. This results in an estimated remaining capacity of 39,381 m³ in Area A and 68,680 m³ in Areas A and B combined at the end of 2025. Under the current top-of-waste design, the landfill is projected to have sufficient capacity until approximately 2028. Refer to the table below for the estimated landfill lifespan years remaining.

Table 7: Estimated landfill lifespan years remaining

Airspace Projection Basis Years Remaining	Area A (Estimated Years Remaining)	Area A & B (Estimated Years Remaining)
Year Rolling Average	2.1	3.6
2025 Average	2.6	4.6

Area A refers to the active area located at the top and eastern portion of the landfill site

Area B refers to the lower zone surrounding the Quonset structure and the access route leading to it.

The next lined disposal area has already been constructed, and the work has been completed; however, it is not yet active.

Please refer to **Appendix G** for 2025 Aerial survey, Waste Generation and West 40 Landfill Airspace Projections

APPENDIX A – Laboratory and Field Monitoring Results

APPENDIX B – Issue for Construction Drawings

APPENDIX C – Apex River Supplemental Pumping Draft Report

APPENDIX D – Spill Reports

APPENDIX E – Water Balance Model

APPENDIX F – 2022-2024 Annual Report Comments

APPENDIX G – West 40 Landfill Survey