

Environmental Protection Operations Directorate  
Prairie & Northern Region  
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ECCC File: 6200 000 006  
NWB File: 3AM-RUT



September 24, 2020

via email at: [licensing@nwb-oen.ca](mailto:licensing@nwb-oen.ca)

Karén Kharatyan  
Director of Technical Services  
Nunavut Water Board  
P.O. Box 119  
Gjoa Haven, NU X0B 1J0

Dear Karén Kharatyan:

**RE: 3AM-RUT – Qikiqtani Region – Utilidor System Hamlet of Resolute Bay – Water License Renewal Application**

Environment and Climate Change Canada (ECCC) has reviewed the information submitted to the Nunavut Water Board (NWB) regarding the above-noted Water License Renewal Application. We appreciate the opportunity to submit these comments to the registry. You will find our comments below.

ECCC's specialist advice is based on our mandate pursuant to the *Canadian Environmental Protection Act* and the pollution prevention provisions of the *Fisheries Act*.

ECCC provides the following comments:

**1. Environmental Management Plan – Water Quality Monitoring**

Reference(s)

- Environmental Management Plan – Char Lake Pump House and Signal Hill Water Treatment Plant

Comment

As an outcome of the technical meeting of July 14-15, 2020, the updated Environmental Management Plan for the Char Lake Pump House and Signal Hill Water Treatment Plant was provided for review. In regards to works in or near water, the Plan outlines measures to be taken to avoid and reduce the potential for impacts to surface water from erosion and sedimentation, including implementing silt fences for runoff control and turbidity curtains for construction of the intake line. However, although these mitigation measures are proposed, no information has been provided on any associated water quality monitoring which will be



done to ensure that mitigation measures are performing as intended and no impacts to water quality are occurring during construction/decommissioning.

#### ECCC Recommendation(s)

ECCC recommends that the Government of Nunavut - Community and Government Services (GN-CGS) provide a description of proposed water quality monitoring during works in or near Char Lake in association with the decommissioning/construction of the new Pump House.

## **2. Summary of Previously Resolved Issues**

During the information request period, technical review period, and discussions at the technical meeting, ECCC engaged with all parties to discuss comments and issues related to the Resolute Bay Water Licence Renewal. The issues that ECCC identified during the water licence renewal application review process are considered resolved as they have been adequately addressed during the review process, through GN-CGS commitments, or will be addressed through Regulatory conditions. Summaries of the main resolved issues are provided below.

#### Wastewater Treatment Plant

During the technical review and technical meeting, ECCC had requested details on the proposed new wastewater treatment plant, including the anticipated level of treatment. As a result of the technical meeting, GN-CGS has committed to provide the detailed Design Report for the Wastewater Treatment Plant (WWTP), including treatment targets for Carbonaceous Biochemical Oxygen Demand (CBOD) and ammonia at least 60 days prior to construction. In addition, the Licence will include a condition to provide toxicity test validation results for effluent within 6 months of commissioning of the WWTP and monthly effluent data to be submitted to the NWB following commissioning.

#### Fecal Coliforms

During the review process, ECCC had requested that a previously completed site-specific study on fecal coliforms be provided for review as part of the license renewal process, as no EQC for fecal coliforms have been proposed. In response, GN-CGS has reviewed the fecal coliform data and provided a memo to assist the NWB in determination of potential fecal coliform criteria.

#### Quality Assurance/Quality Control and Spill Contingency Plan Updates

During the review process, ECCC recommended that in addition to field blanks and blind duplicates that the QA/QC measures also include trip blanks. In addition, ECCC identified several errata in the QA/QC Plan and the Spill Contingency Plan, which required updating. In response, GN-CGS has committed to including trip blanks in their QA/QC measures and to providing updated plans prior to the hearing or as a License requirement.

If you need more information, please contact Anna Graham at [Anna.Graham2@Canada.ca](mailto:Anna.Graham2@Canada.ca).

Sincerely,

A handwritten signature in black ink, appearing to read "Margaret", with a stylized flourish at the end.

Margaret Fairbairn  
Regional Director, Environmental Assessment Program

cc: Brian Asher, Acting Head, Environmental Assessment North (NT and NU)  
Anne Wilson, Team Lead, Expert Support – Water Quality