



December 05, 2014

Paul Clow,
Project Officer
Engineering Department
City of Iqaluit
PO BOX 460
IQALUIT NU X0A-0H0

Dear Mr. Clow:

A meeting was conducted between yourself, Mr. Matthew Hamp, A/Director of Engineering and myself on November 14, 2014. The purpose of this meeting was to review and re-evaluate water monitoring criteria currently being conducted at the City of Iqaluit based on the requirement from the expired water licence 3AM-IQA0611, Part 1, Item 4 and Schedule C-Conditions applying to Monitoring.

Background

One item that we discussed related to water monitoring was the waste water treatment plant included in the application process for the water licence in 2006. It was explained and further demonstrated during an inspection in the June 2014 that the waste water treatment plant building was constructed and the waste water treatment process equipment was installed but was not able to operate in a way that could be consistent with the requirements of the water licence. It was further explained that the majority of the treatment equipment was removed from the waste water treatment plant building, leaving only the primary treatment portion in place. It is during the primary treatment of the waste water that the City of Iqaluit is currently removing solids and the resulting sludge is placed in a designated area at the West 40 Landfill.

Water Sampling Criteria Discontinuance

After reviewing the water licence 3AM-IQA0611, Part 1, Item 4 and Schedule C-Conditions applying to Monitoring it was noted that there were water monitoring parameters related to the design and commissioning and continued operation of a functional waste water treatment plant.

As previous documentation has provided, the City of Iqaluit has not been able to meet the requirements of waste water treatment and has been the recipient of a Direction from Environment Canada to provide a compliance plan showing how waste water will be treated and provide a timeline with deliverables the City of Iqaluit is required to meet.

It is to this end that, in collaboration with AANDC Nunavut Regional Senior Project Engineer, AANDC Water Inspections Unit does not require the following parameters to be tested or monitored at any water quality monitoring sites until either a new treatment plant is operational, as required in a new water licence issued by the Nunavut Water Board, or, as required by an Inspector.

- Chlorinated Paraffins
- LC50 Bioassay (R Trout)

Water Sampling Criteria - Alteration of Monitoring and Reporting Requirement in Table 1

Furthermore, water sampling and monitoring is not required to be submitted for sampling sites IQ1 (Raw Water Supply) as this is already sampled and monitored by the City of Iqaluit and the Government of Nunavut, Environmental Health, in relation to safe drinking water standards set out in the *Public Water Supply Regulations*.

Water sampling and monitoring is also not required at locations IQA-03 'Influent Sewage Lagoon' or IQA-05 'Influent to Wastewater Treatment Plant'. Both of these monitoring locations serve only to provide data on raw, untreated effluent. AANDC understands that the City of Iqaluit will continue to test as required to gather data for the design of the future waste water treatment plant in the forthcoming water licence however; this information will not be required to be submitted as part of the ongoing monitoring program.

The data provided to AANDC through the monitoring sites IQA-02 Final Discharge Point from the Sewage Lagoon' and IQA-04 'Final Discharge Point from the Wastewater Treatment Plant' will provide representative data on what is contained within the influent at both IQA-03 and IQA-05 due to the wastewater only receiving primary treatment prior to discharge.

All other water sampling and monitoring is required to be undertaken according to Part 1, Item 4 and Schedule C-Conditions applying to Monitoring in expired water licence 3AM-IQA0611 with the exception that frequency of testing is only required to be conducted quarterly at monitoring locations IQA-04 'Final Discharge Point from the Wastewater Treatment Plant' and IQA-06 Sludge at Wastewater Treatment Plant'.

Table 1

Station	Location	Testing Requirements	Testing Frequency
IQA - 01	Raw Water Supply	Not Required	NA
IQA - 02	Effluent Sewage Lagoon	Required	Intermittently (During Decants)
IQA - 03	Influent Sewage Lagoon	Not Required	NA
IQA - 04	Effluent Wastewater Treatment Plant	Required	Quarterly
IQA - 05	Influent Wastewater Treatment Plant	Not Required	NA
IQA - 06	Sludge Wastewater Treatment Plant	Required	Quarterly
IQA - 07	Surface Water Entering West 40 Landfill	Not Required	NA
IQA - 08	Discharge West 40 Landfill	Required	Intermittently (During Decants)
IQA - 09	Contaminated Soils Accepted at West 40 Landfill	Not Required	NA

A further requirement to treat, test, and discharge contact water from the West 40 Landfill, the Detention Pond, and Retention Pond (both located at or near the West 40 Landfill) will be discussed and addressed in further correspondence.

Please note that the above alteration to the sampling and reporting requirement may continue until either a new treatment plant is operational, as required in a new water licence issued by the Nunavut Water Board, or, as required by an Inspector.

Sincerely,

A handwritten signature in black ink, appearing to read 'R. Savard', with a stylized, cursive script.

Robert Savard
Water Resources Officer
Aboriginal Affairs and Northern Development Canada

cc. Erik Allain, Manager, Field Operations, AANDC Iqaluit.
John Mabberi-Mudonyi, Chief Administrative Officer, City of Iqaluit.
Mathew Hamp, Director of Engineering, City of Iqaluit
Curtis Didham, Enforcement Officer, Environment Canada
Phyllis Beaulieu, Nunavut Water Board