Environmental Protection Operations Directorate Prairie & Northern Region 933 Mivvik Street, 3rd Floor P.O. Box 1870 Iqaluit, NU X0A 0H0

February 21, 2019

ECCC File: 6200 000 001/012 NWB File: 3AM-IQA1626

Via email at: licensing@nwb-oen.ca

Richard Dwyer
Manager of Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0

Dear Richard Dwyer:

RE: 3AM-IQA1626 – City of Iqaluit – Updated Landfill Operations and Maintenance (O&M) Manual

Environment and Climate Change Canada (ECCC) has reviewed the information submitted to the Nunavut Water Board (NWB) regarding the above-mentioned Landfill O&M Manual and is submitting comments via email. ECCC's specialist advice is provided based on our mandate, in the context of the *Canadian Environmental Protection Act* and the pollution prevention provisions of the *Fisheries Act*.

The following comments are provided:

1. Surface Water Management

Reference

 Landfill O&M Manual, Section 11 - Surface Water Management and Appendix E: 2006 Drainage Improvements.

Comment

There is little detail provided on surface water management strategy at the Landfill. Section 11 of the Landfill O&M Manual refers to the Appendix E West 40 Landfill Drainage Management Review, which discusses several different options for collection of the run-off within the Landfill as well as different treatment and discharge options. The referenced Drainage Management Review is from 2011 and



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does not indicate the existing state of the surface water management at the Landfill. Section 11 should include specifics on the selected water management strategy for the Landfill and should be included directly in the Landfill O&M Manual rather than referring to Appendix E.

ECCC Recommendation

ECCC recommends that the Proponent update the Landfill O&M Manual. Details on the selected water management strategy at the Landfill including discharge locations, receiving water bodies and an overview of the overall water management strategy should be included.

2. Sampling Station Monitoring

References

Landfill O&M Manual, Section 15.7.1.1 - Monitoring Station IQA-08.

Comment

Section 15.7.1.1 of the Landfill O&M Manual describes that testing will occur at monitoring station IQA-08: "once prior to discharge to the storage and treatment ponds, once during discharge and once prior to discharge" (page 49, Landfill O&M Manual).

While it may be assumed that "during" and "prior" to discharge are referring to discharge from the storage and treatment ponds to the receiving environment, this this should be clarified in order to avoid confusion in the Landfill O&M Manual.

ECCC Recommendation(s)

ECCC Recommends that the Proponent update the Landfill O&M Manual to provide additional clarity on the sampling requirements for monitoring station IQA-08.

3. Landfill Fire Run-off Pond

References

City of Iqaluit 2016 Annual Water Licence Report

Comment

ECCC notes "the Landfill run-off originating from the Landfill fire in 2014 started treatment in 2015. The on-site pond has completed the first phase of treatment and transferred to the new off-site pond for secondary treatment. In 2016, all run-off originating from the Landfill fire was treated, tested and discharged into Koojesse Inlet" (page 2, City of Iqaluit 2016 Annual Water Licence Report).

The management of the Landfill fire run-off pond is not mentioned in the Landfill O&M Manual. It is unclear what the management plans for the pond are, or if the pond is still in use.

ECCC Recommendation(s)

ECCC recommends that the Proponent update the Landfill O&M Manual to include details on management of the Landfill fire run-off pond.

Should you require further information, please do not hesitate to contact me at (867) 975-4981 or Richard.Bingley@canada.ca.

Sincerely,

[original signed by]

Richard Bingley

Environmental Assessment Coordinator

cc: Bradley Summerfield, A/Head, Environmental Assessment North (NT and NU)