Environmental Protection Operations Directorate Prairie & Northern Region 5019 52nd Street, 4th Floor P.O. Box 2310 Yellowknife, NT X1A 2P7

ECCC File: 6200 000 005/006 NWB File: 3BM-TAL1926



July 23, 2021

via email at: licensing@nwb-oen.ca

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

Dear Richard Dwyer

RE: 3BM-TAL1926 - Community and Government Services, Government of Nunavut -**Hamlet of Taloyoak – Water Licence Amendment**

Environment and Climate Change Canada (ECCC) has reviewed the information submitted to the Nunavut Water Board (NWB) regarding the above-mentioned water licence amendment. You will find our comments below.

ECCC's specialist advice 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:

Proposed removal of requirements for acute toxicity testing (Part D, Item 9)

Reference(s)

Hamlet of Taloyoak Water License 3BM-TAL1926 Amendment Application

Comment

The Proponent recommends that, the paragraph related to acute toxicity testing be removed from page vii of the license, in addition to Part D, Item 9 being removed in its entirety. The Proponent also proposes that unionized ammonia continue to be monitored and held compliant to 1.25 mg/L at TAL-6.

ECCC acknowledges the logistical difficulties associated with conducting acute lethality toxicity testing in Nunavut communities, and notes that there are barriers to obtaining valid test results. The analysis for unionized ammonia will provide an indication of effluent quality and should continue to be monitored as a licence condition.





ECCC Recommendation(s)

ECCC does not object to the removal of acute toxicity testing requirements in the license, and supports continuation of monitoring un-ionized ammonia.

2. Proposed removal of Effluent Quality Criteria at TAL-3 (Part D, Item 3)

Reference(s)

Hamlet of Taloyoak Water License 3BM-TAL1926 Amendment Application

Comment

The Proponent recommends that Part D, Item 3 be removed and that effluent discharged at TAL-3 be sampled, but effluent quality limits at this location be removed from the terms of the license.

ECCC notes that the sampling data collected at TAL-3 provides valuable information on the quality of the effluent prior to entering the wetland for further treatment. Upon completion of the new lagoon, monitoring prior to discharge will provide data to identify the treatment capacity in the lagoon and optimize management (e.g. timing of release). NWB-regulated Effluent Quality Criteria (EQC) are proposed to be met at the end of the wetland complex.

ECCC Recommendation(s)

ECCC supports the proposal to continue monitoring of effluent quality at the TAL-3 sampling location.

3. Proposed new Effluent Quality Criteria for CBOD and TSS (Part D, Item 8)

Reference(s)

Hamlet of Taloyoak Water License 3BM-TAL1926 Amendment Application

Comment

The Proponent has provided rationale for the proposed changes to carbonaceous biological oxygen demand (CBOD) and total suspended solids (TSS) EQC, and provided information on the achievability of the current EQC.

ECCC Recommendation(s)

ECCC does not disagree with the limits proposed by the Proponent. ECCC supports the use of best practices related to wastewater management and acknowledges that the upgraded lagoon will increase treatment overall by increasing retention time in the lagoon prior to release.

If you need more information, please contact Melissa Pinto at (867) 445-5384 or Melissa.Pinto@ec.gc.ca.

Sincerely,

[original signed by]

Melissa Pinto Senior Environmental Assessment Coordinator

cc: Jody Small, Acting Head, Environmental Assessment North (NT and NU)