

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

ECCC File: 6100 000 018/004
NWB File: 3AM-ARV1016



August 4, 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: 3AM-ARV1016 – Hamlet of Arviat – 2020 Annual Report

Environment and Climate Change Canada (ECCC) has reviewed the information submitted to the Nunavut Water Board (NWB) regarding the above-mentioned 2020 Annual Report. You will find our Final Written Submission attached.

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

The following comments are provided:

1. Topic: Map of monitoring stations

Reference(s)

- Hamlet of Arviat 2020 Annual Report

Comment:

The Annual Report provides data for a number of monitoring stations; however, there is no map provided that depicts the locations of these sampling points. A map or figure that illustrates the locations of monitoring stations would aid the reviewer in interpretation of data provided. ECCC noted this same gap during review of the 2019 Annual Report.

ECCC Recommendation(s):

ECCC recommends that future annual reports provide a figure or map indicating the locations of all monitoring stations.



2. Topic: Unauthorized Discharges

Reference(s):

- Hamlet of Arviat 2020 Annual Report – Section E

Comment:

The annual report provides details regarding spills/unauthorized discharges but does not indicate what follow-up actions were taken. ECCC noted this same gap during review of the 2019 Annual Report.

ECCC Recommendation(s):

ECCC recommends that future annual reports describe any follow-up actions taken for any spills/unauthorized discharges.

3. Topic: Unauthorized Discharges

Reference(s):

- Hamlet of Arviat 2020 Annual Report

Comment:

The Annual Report states that emergency discharge was required in the spring of 2020 due to limited capacity within the lagoon. In addition, the monitoring results at ARV-4 indicate that effluent quality exceeded the effluent quality criteria for BOD and TSS during the September sampling event. ECCC notes that the spring emergency discharges have become frequent events, and that overall the lagoon is not providing sufficient treatment to meet effluent quality criteria. The lack of capacity and retention in the lagoon is likely resulting in low quality effluent being released to the receiving environment.

ECCC Recommendation(s):

ECCC recommends GN-CGS provide a timeline for the construction of the new sewage lagoon and provide a discussion of any additional mitigations that will be utilized to improve treatment in the interim, prior to the construction of the new facility.

If you need more information, please contact Jennifer Sabourin at Jennifer.Sabourin@ec.gc.ca.

Sincerely,



Jennifer Sabourin
Environmental Assessment Officer

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