



Water Resources Division
Resource Management Directorate
Nunavut Regional Office
P.O. Box 100
Iqaluit, NU, X0A 0H0

Your file - Votre référence
3AM-ARV1016

Our file - Notre référence
GCDOCS # 99242532

November 30, 2021.

Mr. Richard Dwyer
Manager of Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU, X0B 1J0
sent via e-mail: licensing@nwb-oen.ca

Re: Crown-Indigenous Relations and Northern Affairs Canada's Completeness Check on Government of Nunavut - Community and Government Services renewal/amendment application for Hamlet of Arviat Type A Water Licence 3AM-ARV1016

Dear Mr. Dwyer,

Thank you for your November 22, 2021 invitation to reply to the Government of Nunavut, Department of Community and Government Services' (GN-CGS) responses to CIRNAC's comments on its Type A Water Licence (3AM-ARV1016) renewal and amendment application, submitted on behalf of the Hamlet of Arviat. .

On September 17, 2020, Nunavut Water Board (NWB) sent out an invitation to parties to undertake a completeness check. CIRNAC, responded on October 16, 2020, with 9 requests for information.

GN-CGS provided responses on October 26, 2020 with a commitment to providing a feasibility study for an upgraded wastewater treatment lagoon by January 8, 2021. CIRNAC was satisfied with GN-CGS responses provided via email on November 17, 2020. The only outstanding item remains a response to CIRNAC comment #6 on the water treatment plant manual; this required further clarification.

GN-CGS, provided further clarification via email on November 19, 2020. The responses provided satisfied CIRNAC, which was confirmed via email on November 19, 2020.



1. CIRNAC Information Request (IR-01):

- a) If the feasibility study for an upgraded Wastewater Treatment Lagoon has been completed, and if it can be made available for technical review; and
- b) How GN-CGS plan to manage sewage and when GN-CGS can provide that in an updated Sewage Treatment Facility O&M Plan.

GN-CGS Response:

- a) Feasibility study completion was delayed due to COVID19, expected CGS to provide the completed study by January 8, 2021; and
- b) The new reservoir was sized for 20-year horizon, the increases on a yearly basis will be much lower. A new lagoon is required and is in feasibility study stage, estimated completion as indicated above.

CIRNAC is satisfied with GN-CGS' response (b) but (a) remains outstanding.

2. CIRNAC Information Request (IR-02): Provide a rationale for lowering discharge criteria limits by specifying which Dalhousie studies they are referring to, and explaining how these studies are applicable to the system in Arviat, including whether the proposed criteria consider the treatment occurring in the wetland adjacent to the lagoon.

GN-CGS Response:

- a) Technical documents completed by Dalhousie University Centre for Water Resources Studies, Plus Arctic and EXP Services Inc. have been sent to NWB;
- b) The research reviewed lagoon and wetland systems in NU, and recommendations are based on drainage to a well-flushed marine environment; and
- c) The monitoring stations would remain in the same locations until a new/upgraded site is constructed.

CIRNAC is satisfied with GN-CGS' response.

3. CIRNAC Information Request (IR-03):

- a) If the feasibility study for an upgraded Solid Waste Management Site has been completed, and when it can be made available for technical review;
- b) When will GN-CGS provide an updated Solid Waste Facility O&M Plan that reflects current operations; and
- c) If GN-CGS foresees upgrading the existing facility or building a new facility within the 10 year renewal period being requested. If so, further information on tentative timelines would be helpful if available.

GN-CGS Response:

- a) Feasibility study completion was delayed due to COVID19, expected CGS to provide the completed study by January 8, 2021;



- b) The updated O&M plan is underway. The plan will be forwarded March 1, 2021; and
- c) The feasibility study is currently addressing a new/upgraded facility, however timelines on construction of this facility are currently unknown.

CIRNAC is satisfied with GN-CGS' response (b) and (c) but (a) remains outstanding.

4. CIRNAC Information Request (IR-04):

- a) How GN-CGS are currently managing hydrocarbon contaminated soil; and
- b) If GN-CGS foresee building a landfarm facility within the 10 year renewal period being requested. If so, further information on tentative timelines would be helpful if available.

GN-CGS Response:

- a) Hydrocarbon contaminated soil is managed by shipping soil during sealift season; and
- b) There is no plan to build a landfarm over the next 10 years.

CIRNAC is satisfied with GN-CGS' response.

5. CIRNAC Information Request (IR-05):

- a) Report – on the pumping rate from Wolf Creek;
- b) Report the typical number of hours and days the Hamlet of Arviat pumps in a month; and
- c) Report during which months pumping occurs.

GN-CGS Response: Estimated 34L/s, 24 hrs/day, mid July to mid September (approximate, weather and equipment operation dependent). This is based on current pumping configuration.

CIRNAC is satisfied with GN-CGS' response.

6. CIRNAC Information Request (IR-06):

- a) Provide 'As-Built' plans for the water treatment plant and new cell;
- b) Provide Operation and Maintenance procedures for water pumping operations to fill the reservoirs from Wolf Creek; and
- c) Provide Information on what is discharged through the overland discharge pipe.

GN-CGS Response:

- a) As-built drawings not received from contractor. Will send immediately once received;
- b) The updated O&M plan is underway. Will be forwarded March 1, 2021; and



- c) Unclear what this is referring to. There is no discharge from the WTP, all goes to the waste tank. This may be the overland intake, or the resupply pipe from Wolf Creek. Clarification required.

Clarifications was provided and the issue was resolved. CIRNAC is satisfied with GN-CGS' response.

7. CIRNAC Information Request (IR-07): Provide an updated Environmental Emergency Contingency Plan.

GN-CGS Response: The updated Environmental Emergency Contingency plan is underway. Will be forwarded March 1, 2021.

CIRNAC is satisfied with GN-CGS' response.

8. CIRNAC Information Request (IR-08): Comment on when GN-CGS could provide an updated Environmental Monitoring Program and Quality Assurance/Quality Control Plan.

GN-CGS Response: The updated Monitoring plan is underway. Will be forwarded March 1, 2021.

CIRNAC is satisfied with GN-CGS' response.

9. CIRNAC Information Request (IR-09): Clarify if the old sewage lagoons have been restored.

GN-CGS Response: The old sewage lagoon has not been cleaned or reclaimed. However, the Hamlet received approval from the Federal Government to decant the lagoon once samples were sent in for testing.

CIRNAC is satisfied with GN-CGS' response.

COMPLETENESS OF APPLICATION

CIRNAC notes that NWB deferred the review process in line with the Environment and Climate Change Canada (ECCC) submission which states that:

"In the responses to the Completeness Check comments, the Hamlet identified that the feasibility studies for the upgrades to the solid waste facility and sewage lagoon facility have been delayed and will be provided in January 2021. In addition, the Hamlet identified that a number of updated plans will be provided in March 2021. In the absence of this information, no new technical information has been presented as part of this water licence renewal and amendment. ECCC recommends deferring technical review until such time that these plans and studies are made available for review."



GN-CGS stated in an email on November 22, 2021 that:

“The feasibility study was undertaken by the Government of Nunavut and it was determined that the project cannot proceed as originally intended because the cost estimate was much higher than the amount of funding available. A new assessment will be undertaken by the Government of Nunavut in 2022/23 to determine what improvements can be undertaken at the current site with the available funding. Once this report is complete it will be submitted to NWB”.

The above statement confirmed that the original feasibility study was completed and it was then determined that the project could not proceed as intended due to a lack of adequate funding. It is unclear which report was submitted as a product of the feasibility study.

CIRNAC recommends that GN-CGS clarify:

- a) The statement that: *“The feasibility study was undertaken by the Government of Nunavut and it was determined that the project cannot proceed as originally intended because the cost estimate was much higher than the amount of funding available”*. Does this mean the construction of the upgraded water treatment lagoon is suspended until adequate funding is available; and
- b) If the feasibility study reports were provided for review as requested by CIRNAC. If it was provided, the title of the reports will be helpful.

CIRNAC appreciates the opportunity to participate in this review. If there are any questions, please contact me at (867) 975-4738 or vincent.okonkwo@rcaanc-cirnac.gc.ca or Andrew Keim at (867) 975-4550 or andrew.keim@rcaanc-cirnac.gc.ca

Sincerely,

Vincent Okonkwo,
Senior Environmental Assessment Specialist