



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

Your file - Votre référence
3BM-ARC1419

August 12, 2019

Our file - Notre référence
CIDM#1259103

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

Re: Crown-Indigenous Relations and Northern Affairs Canada's reply to applicant's response to our comments for the Government of Nunavut – Community and Government Service's renewal application for water licence #3BM-ARC1419 – Hamlet of Arctic Bay

Dear Mr. Dwyer,

Thank you for your August 2, 2019 email inquiring if the applicant's response for the above referenced application addressed the comments Crown-Indigenous Relations and Northern Affairs Canada's (CIRNAC) submitted on July 29, 2019. The Water Resources Division of CIRNAC reply to each comment response is listed below. Of the 10 numbered recommendations and one suggestion:

- 1 requires immediate further clarification (#2);
- 6 are considered resolved (# 1, 3, 4, 5, 9 & 10); and
- 4 require further attention, which we would be satisfied receiving after licence renewal (suggestion, #6, 7 & 8).

Quality assurance/quality control plan

CIRNAC thanks the applicant for providing a stand-alone Quality assurance/quality control (QA/QC) plan that consolidates and makes uniform information previously scattered throughout other plans. Below are comments on the July 2019 QA/QC plan:

- The plan does not include sampling locations. These should be indicated on a map and their coordinates should be included.
- The checklist provided in Appendix A is helpful, and should be kept, but references to Kimmirut (including in the title, bottle order and sampling station ARC-3, ARC-4 and ARC-5 sections) should be changed to Arctic Bay.
- The list of stations and their positions should be updated after a renewed licence is issued. The updates should be throughout the document including in Table 2, sections 2.2.3.1 & 2.2.3.2, and appendices A & B.

Considering some of the changes requested are to reflect the monitoring program of a renewed licence, CIRNAC would be satisfied to see these changes made to the QA/QC plan within 90 days of any renewed licence issuance.

Comment #1. Water quantity requested

CIRNAC is satisfied with the applicant's response; the quantity of water requested is reduced to 59 900 m³ and no water will be drawn from Dog Lake for potable water or any other uses.

Comment #2. Measuring water quantity

CIRNAC thanks the applicant for their response. Since they are expecting a new Water Treatment Plant in the next 3 years, a renewed licence should include provisions for submission of plans and an Operation & Maintenance (O&M) manual for this facility.

CIRNAC notes that the annual reports do not include water used at Nanisivik, which is appropriate. CIRNAC is still not clear on what water use is being referred to in the water licence application with the statement : "*Nanisivik & other municipal activities=39,953 cubic meters*".

CIRNAC seeks further clarification on why the applicant is using Nanisivik and other municipal activities as an explanation for amending the quantity of water required.

Comment #3. Water quality of sewage lagoon effluent

The applicant's response addresses CIRNAC's comment.

Comment #4. Water quality of solid waste facility run-off

CIRNAC is satisfied with the applicant's response and would like to see them take action on the suggestion.

Comment #5. Monitoring program

CIRNAC's suggestions for simplifications to the monitoring program were meant for discussion for the Nunavut Water Board and the applicant. We do not recommend the applicant follow our suggested changes, but rather they should follow the monitoring program that will be included in any renewed water licence.

Comment #6. Spill contingency plan

CIRNAC thanks the applicant for providing an updated Spill contingency plan. It is an improvement over the previously submitted plan, though it still needs corrections.

Outstanding corrections from previous comment:

- A recent map with topography/drainage directions and infrastructure is an important part of a spill plan because it can help plan interventions in the event of a spill.
- Since calcium hypochlorite is used as the disinfectant at the water truck fill stations, it should be included in the plan. Appropriate sections might be 6.0 (potential contaminants) and 10.1.

- Spill kit storage locations need to be indicated on a map. Section 11.1.1 has them kept in the Hamlet Garage, so the garage should be identified on the map.

Corrections on August 2019 version

- The information under the heading “Sewage production” in section 4.0 is unclear. It refers to the P-lagoon, which is from another hamlet, and the years and population in Table 4 are also from another hamlet. Since it is not necessary to have sewage production calculations in a Spill contingency plan, we recommend this heading and associated information be removed.
- Section 8.3 states *“At least one spill kit will be kept at the 3 cell lagoon site during maintaining works take place.”* Arctic Bay has a single cell lagoon, so the reference to 3 cells should be removed as it could lead to confusion.
- Section 8.5 states *“The community is concerned about the environment and the possibility of a spill occurring and takes precautions when working with hazardous materials; however, no formal preventative measures are in place.”* The use of secondary containment is a preventative measure that is used at the fuel tanks and should be used for hazardous material at the landfill. The text in section 8.5 is inaccurate and should be removed or modified to reference these preventative measures.
- There are two lists of spill kit contents (sections 11.1.1 and 11.1.5) that are different and could lead to confusion. A single spill kit content list should be included in the plan, with the equipment necessary for dealing with spills of the nature described elsewhere in the plan.

CIRNAC would be satisfied to see these changes made to the Spill contingency plan within 90 days of any renewed licence issuance.

Comment #7. Solid waste facility operation and maintenance manual

CIRNAC thanks the applicant for providing the Solid waste facility O&M manual with an updated cover page and table of contents. Our 2015 comments on the content of the plan remain outstanding. The most pressing ones regard location & layout (#2), managing residual ash (#5), fencing (#8), and secondary containment of hazardous waste (#9).

CIRNAC would be satisfied to see an updated Solid waste facility O&M manual addressing CIRNAC’s 2015 comments with the 2019 annual report, along with a description of the work done for comment #4 above.

Comment #8. Truckfill operation and maintenance manual

The applicant has addressed CIRNAC’s recommendation. CIRNAC notes the error in our recommendation, asking for an updated Spill contingency plan rather than an updated Truckfill operation and maintenance manual. As a result, CIRNAC would be satisfied to see the changes requested made to the Truckfill operation and maintenance manual within 90 days of any renewed licence issuance.

Comment #9 Annual reporting

CIRNAC has read the applicant's response and would like to clarify that inspection reports do not include any of the Municipal Engineer's comments, they are solely the work of the Water Resources Officers.

Our recommendation remains unchanged but does not require action on the applicant's part prior to licence renewal.

Comment #10 Licence term

The applicant did not provide a response, but their response to comment #1 references a 5 year term, so CIRNAC considers this comment resolved.

CIRNAC appreciates the opportunity to participate in this licence renewal review. If there are any questions or concerns, please contact me at (867) 975-3876 or by e-mail at sarah.forte@canada.ca.

Sincerely,



Sarah Forté
Water Management Specialist