



Water Resources Division
Nunavut Regional Office
Iqaluit, NU
X0A 0H0

NWB File: 3AM-GRA1015
CIDMS #: 1001475

Nov 30, 2015

Phyllis Beaulieu
Manager of Licencing
P.O. Box 119
Gjoa Haven, NU
X0A 0H0

**Re: Type "A" Water Licence Renewal Application – Technical Review of
Type "A" 3AM – GRA1015 - Hamlet of Rankin Inlet**

Please be advised that Aboriginal Affairs and Northern Development Canada (AANDC) have completed a review of the water licence application for 3AM-GRA1015 for the Hamlet of Rankin Inlet. The NWB circulated the Renewal Application for comments on October 30, 2015. All associated documents related to this application posted on the NWB ftp site under 3AM-GRA1015 were included in this review (see attached Technical Review Memo).

Should you have any questions or comments, please do not hesitate to contact me at (867) 975-4282 or by email at Ian.Parsons@aandc-aadnc.gc.ca.

Sincerely,

Original signed by

Ian Parsons, B.Sc.
Regional Coordinator

Cc. Andrew Keim, A/Manager of Water Resources – AANDC, Nunavut
Regional Office (NRO)
Erik Allain, Manager of Field Operations – AANDC, NRO



Technical Review Memorandum

Re: Type “A” Water Licence Renewal Application – Technical Review of
Type “A” 3AM – GRA1015 - Hamlet of Rankin Inlet

Comments/Recommendations

- 1) **Source:** 2015 Water Licence Renewal Application for the Hamlet of Rankin Inlet Submitted to the Nunavut Water Board.

Issue: AANDC notes that the applicant has indicated that they will be pumping water from Char River to supplement Nipissar Lake at a rate of 3485m³/day.

Recommendation #1: Based on the information provided by the applicant AANDC recommends that the applicant be required to provide further clarification on the number days they will be pumping and what the total transfer volume will be. AANDC is unable to determine from the information provided the number of days of pumping water the applicant requires. Will there be a minimum/maximum number of pumping days that will occur? Will the number of pumping days increase in subsequent years or will the pumping rate increase to account for more water use per year?

Recommendation #2: Based on the information provided AANDC would recommend to the Board that the applicant provide further information on the sustainability of the Char River to provide on-going annual recharge to Nipissar Lake. It is also recommended that the Board request details on options being considered in the event the current location of the intake at Char River is unable to support withdrawal of the required water volume in years of low water flow.

- 2) **Source:** 2015 Water Licence Renewal Application - Water Pumping Adaptive Management Plan

Issue: AANDC notes that there has been no alternative's assessment undertaken for additional water sources should Char River not be sufficient as a supplemental water source.



Recommendation #3: AANDC recommends that the applicant provide an assessment of what options are available to the applicant with respect to alternative water sources which could be utilized as a supplemental water source for Nipissar Lake.

- 3) **Source:** i) 2015 Water Licence Renewal Application for the Hamlet of Rankin Inlet

ii) Nunavut Water Board's ftp site

Issue: AANDC notes that there are either missing or incomplete administrative reports including annual and quarterly reports including monitoring data for all years of this water licence since the renewal in 2010.

Recommendation #4: AANDC recommends that the Hamlet provide the missing information or justification as to why it has not been submitted to the NWB. The missing information includes:

Year being reported	Annual Reports	Quarterly Reports	Water Level Monitoring Data	Effluent Quality Monitoring Data
2011	X	-	-	-
2012	X	-	X	X
2013	X	-	-	X
2014	X	-	X	X
2015	X	X	X	X

X = submitted to NWB

- = Missing or incomplete

- 4) **Source:** 2015 Water Licence Renewal Application - Updated Sewage Operation & Maintenance Plan

Issue: Deposit of Waste into Marine Environment (Sewage) AANDC is seeking a legal determination, through the Arctic Waters Pollution Prevention Act (AWPPA) on the authorizations required for this activity.

Recommendation #5: AANDC suggests that the Board require the applicant to provide information and documentation on the approvals they have received necessary for the deposit of waste into a marine environment.



5) **Source:** 2015 Third Quarter Report

Issue: In the absence of effluent quality parameters being set out in the water licence, AANDC looks to the Canadian Council of Ministers for the Environment (CCME) Guidelines to be used as criteria for water quality, in this case, Water Quality Guidelines for the Protection of Aquatic Life - Marine Environment. As indicated in the 2015 third quarter report submitted by the applicant, there are exceedances of copper in every quarter of 2015 as well as exceedances of cadmium (June and October) and the pH in June.

Recommendation #6: The applicant should submit to the Board an action plan which outlines how these exceedances will be reduced to below acceptable levels set out in the Protection of Aquatic Life - Marine Environment guidelines.

6) **Source:** Water Pumping Adaptive Management Plan

Issue: Documentation to be submitted January, 2016

Recommendation #7: AANDC also notes that the applicant plans on submitting a *Revised Water Pumping Adaptive Management Plan* as per Part C, Item 11 of Amendment No.1. AANDC looks forward to reviewing this plan when it is made available, but suggests that the Board require the submission of this plan in sufficient time for it to be reviewed by regulators, so it can be discussed at a potential public hearing and subsequently approved by the Board.