



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

Your file - Votre référence
1BR-EKA1017

August 15, 2017

Our file - Notre référence
CIDM#1169126

Richard Dwyer
Licensing Administrator
Nunavut Water Board
Gjoa Haven, NU X0B 1J0

**Re: 1BR-EKA1017 – FOX-C Ekalugad Fjord Long Term Monitoring Program –
Indigenous and Northern Affairs Canada – Water Licence Renewal
Application**

Dear Mr. Dwyer,

Thank-you for the email notice received on July 25, 2017 regarding the above mentioned renewal application.

Indigenous and Northern Affairs Canada's Water Resources Division reviewed the application and the results of our review are provided in the enclosed memorandum for the Board's consideration. Comments have been provided pursuant to the Department's mandated responsibilities under the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and the *Department of Indian Affairs and Northern Development Act*.

Please do not hesitate to contact me at 867-975-3876 or sarah.forte@aandc-aadnc.gc.ca for any additional information.

Regards,

Sarah Forté
Water Management Coordinator

Technical Review Memorandum

To: Richard Dwyer, Licensing Administrator, NWB

From: Sarah Forté, Water Management Coordinator, INAC

Date: August 15, 2017

Re: Water Licence Renewal Application, #1BR-EKA1017

Licensee: Indigenous and Northern Affairs Canada
Project: FOX-C Ekalugad Fjord Long Term Monitoring Program
Region: Qikiqtani

A. BACKGROUND

On July 25, 2017 the Nunavut Water Board (Board or NWB) provided notification to interested parties of Indigenous and Northern Affairs Canada - Contaminated Sites Division (INAC - Contaminated Sites or the licensee's) application for renewal of their type 'B' water licence #1BR-EKA1017. The undertaking licensed is for long term monitoring at the FOX-C site on Ekalugad Fjord in the Qikiqtani region of Nunavut.

The FOX-C Intermediate Distant Early Warning (DEW) Line Site was constructed in 1957 and subsequently abandoned in 1963. It is located on the Northeast coast of Baffin Island on the south shore of Ekalugad Fjord and is approximately 240 km from Qikiqtarjuaq and 260 km from Clyde River. Remediation at the FOX-C site was completed between 2006-2008 and involved the construction of a non-hazardous waste landfill (NHWL), the only structure remaining onsite.

A long term monitoring program was initiated to monitor the NHWL post-closure at FOX-C in 2009 and includes visual inspection, groundwater sampling, soil sampling (as required), and natural environment monitoring. The next long term monitoring event is scheduled for the fall of 2018. Future events will occur in 2023, 2028, and 2033.

The existing license, which expires September 30, 2017, was for use of less than 5 m³/year of water during groundwater sampling. In their renewal application, the licensee states the undertaking is the same as in the previous licence and requests that permitted water use remain at 5 m³/year. They are requesting a 17 licence term, for the renewed licence to be valid until 2034.

B. RESULTS OF REVIEW

On behalf of Indigenous and Northern Affairs Canada Water Resources (INAC - Waters), the following comments and recommendations are provided for the Board's consideration.

1. Long term monitoring plan addendum

Reference:

- Nunavut Water Board Water Licence 1BR-EKA1017 Type "B", March 1, 2010, Part J
- RE: NWB 1BR-EKA0809/TR/K14 – Indian and Northern Affairs Canada – Submission of FOX-C Ekalugad Fjord Long-Term Monitoring Plan, Environment Canada, April 27, 2009
- Long term monitoring, 2011, FOX-C, Ekalugad Fjord, Nunavut, Franz Environmental Inc., January 17, 2012
- Long term monitoring, 2013, FOX-C, Ekalugad Fjord, Nunavut, Franz Environmental Inc., January 20, 2014
- Long term monitoring, 2016, FOX-C Ekalugad Fjord, Nunavut, Arcadis Canada Inc., February 3, 2017

Comment:

Part J Item 2 of the licence which is to be renewed states:

The Licensee shall submit within sixty (60) days following issuance of the Licence, an addendum to the approved Plan referred to in Part J, Item 1, that addresses comments made by Environment Canada on April 27, 2009 and includes the following:

- a. Section 2.2.3 should include 'ponding' and 'erosion' under visual monitoring;*
- b. The plan shall state how the Licensee will comply with thermal monitoring requirement from the preceding licence, Part K, Item 14;*
- c. The plan should include monitoring for the fuel storage pad, sewage lagoons, hazardous waste processing area, beach tank demolition and land filing area, asbestos abatement area, temporary PCB and hazardous waste storage areas and landfarm for at least one of the first few site monitoring visits;*
- d. Include reference to the Long Term Monitoring Report required under Part J, Item 7;*
- e. Identify each monitoring point including key visual monitoring areas to increase consistency;*
- f. Include the requirement for field blanks under the Quality Assurance/Quality Control section; and*
- g. Provide threshold limits for monitoring where facilities will be considered to have failed.*

This requested addendum to the Long Term Monitoring Plan was not found on the NWB's ftp site, and does not appear to have been submitted since it is not referred to in the list of documents and reports consulted by the contractors carrying out the monitoring activities.

Some of the comments seem to have been addressed even without the addendum; for example, the last three monitoring reports mention erosion and ponding. However, other comments, such as thermal monitoring, have not been addressed.

Recommendation:

The licensee should provide the requested addendum or justification of why it was not needed prior to the issuance of a renewed licence.

2. Spill contingency plan

Reference:

- Spill Contingency Plan, Clean Up and Camp Service, FOX-C Dew Line Site, Ekalugad Fjord Project, Qikiqtaaluk Corporation, July 2006

Comment:

The latest version of the Spill Contingency Plan available on the NWB ftp dates from 2006, before the site remediation had been completed. It is outdated and contains site information that is no longer accurate.

Since the only activity on site is monitoring, no potentially harmful products which might spill are stored on site. The only potential spill risk we can foresee is fuel from the helicopter. Our understanding is that though re-fueling the helicopter is not always necessary, extra fuel was carried on the board in 2016 in case of unforeseen circumstances.

Recommendation:

INAC - Waters recommends that the licensee also transport a spill kit when they are carrying extra fuel.

3. Licence term

Reference:

- Application for Water Licence Renewal, Indigenous and Northern Affairs Canada, May 4, 2017, Box 25

Comment:

The licensee is requesting a 17 year licence term, until 2034. This would allow them to complete their long term monitoring plan, which ends in 2033.

INAC - Waters agrees with the proposed licence term.