



Your file - Votre référence  
1BR-FOX1118

April 20, 2015

Our file - Notre référence  
IQALUIT-#909421

Phyllis Beaulieu  
Manager of Licensing  
Nunavut Water Board  
GJOA HAVEN, NU X0E 1J0

**Re: Aboriginal Affairs and Northern Development Canada Review of Defence Construction  
Canada's Application to Renew and Amend Water Licence #1BR-FOX1118**

Dear Ms. Beaulieu:

Thank you for your email of March 18, 2015, concerning the above mentioned application. A memorandum is provided for the Board's consideration. Comments and recommendations have been provided pursuant to Aboriginal Affairs and Northern Development Canada'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 by telephone at 867-975-4555 or email at [david.abernethy@aandc-aadnc.gc.ca](mailto:david.abernethy@aandc-aadnc.gc.ca) for further information.

Sincerely,

David Abernethy  
Regional Coordinator  
Water Resources Division  
Resource Management Directorate  
Aboriginal Affairs and Northern Development Canada  
IQALUIT, NU X0A 0H0

Encl.

c.c.: Andrew Keim, A/Manager, Water Resources Division, AANDC Nunavut  
Erik Allain, Manager, Field Operations Division, AANDC Nunavut

# Memorandum

To: Phyllis Beaulieu, Nunavut Water Board

From: David Abernethy, Aboriginal Affairs and Northern Development Canada

CC: Andrew Keim (AANDC) and Erik Allain (AANDC)

Date: April 20, 2015

**Re: Water Licence Renewal and Amendment Application, #1BR-FOX1118**

Licensee: Defence Construction Canada  
Project: FOX-4, Cape Hooper DEW Line Site  
Region: Qikiqtani

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Comments:

A. Background

On March 18, 2015, the Nunavut Water Board (NWB) provided notification of Defence Construction Canada's (the "Licensee") application to renew and amend their Type 'B' water licence, #1BR-FOX1118. This licence authorizes the use of water and deposit of waste associated with remediation of the FOX-4 Cape Hooper Distant Early Warning (DEW) Line Site.

According to the completed questionnaire included in the application, site remediation activities were completed in 2013. The Licensee is now implementing a post-construction landfill monitoring program as described in the Department of National Defence – Nunavut Tunngavik Inc Environmental Cooperation Agreement.

B. Results of review

On behalf of Aboriginal Affairs and Northern Development Canada (AANDC), the following comments and recommendations are provided:

**1. Twenty-five year licence term**

The 25 year licence term with an August 2040 expiry date requested by the Licensee should be granted. The use of water and deposition of waste associated with monitoring the integrity of landfills is minimal. If necessary, any changes to the scope of activities requiring NWB approval can be addressed through a licence amendment.

## **2. Deposition of Waste into Water**

The Licensee will not discharge any waste into water. Sewage and greywater generated from camp activities (five to eight people on site for one to two days at a time) will be directed to pit latrines. Solid wastes will be removed from site. As a result, several conditions applying to waste disposal included in Part D of the licence should be removed to reflect the monitoring program's scope (e.g., all landfills have been and closed, the Sewage Disposal Facility has been closed and remediated, and the Waste Handling Facility has been closed and remediated).

## **3. Monitoring Requirements**

The Licensee should continue to provide Annual Reports every year, even for years that the site is not accessed as part of the monitoring program. These reports should include the results of the licensee's landfill monitoring program.

## **4. Revised Spill Contingency Plan**

The revised Spill Contingency Plan included in the renewal amendment application provides confidence that the Licensee is prepared to manage any hazardous material spills (minimal risk given that fuel will only be used to power an all terrain vehicle).

The plan should be revised to include a copy of the [NT-NU Spill Report form](#) and a listing of spill kit contents. The Licensee should familiarize itself with Nunavut's [Spill Contingency Planning and Reporting Regulations](#).

## **5. Review of Existing Licence Terms and Conditions**

As part of AANDC's program review as conveyed to Mr. Hohnstein on January 30, 2015 through correspondence from Erik Allain, Manager of Field Operations, the Field Operations Unit is reviewing previous conditions within existing water licenses and is making recommendations to the NWB to ensure the jurisdiction of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* applies to all terms and conditions and to maintain the integrity of the program delivery.

At this time AANDC is providing comments to the NWB on water licence applications where there appears to lack a clear connection between water use, waste deposit to water, or appurtenant undertakings related to water use and/or deposit of waste to water, subject to the act and regulations.

AANDC would like to bring to the attention of the NWB the following conditions that were part of the water licence 1BR-FOX1118 that have been considered during this review and the subsequent recommendations of Field Operations Unit.

### **Review Findings**

The following conditions do not appear to have a clear connection between water use, waste deposit to water, or appurtenant undertakings related to water use and/or deposit of waste to water, subject to the act and regulations. Field Operations would like to propose the following recommendations for the Board's consideration to ensure all terms and conditions reflect AANDC's jurisdictional ability to enforce.

## **Part B: General Conditions**

### **Item 1**

#### *Existing text:*

Licensee shall file an Annual Report on the appurtenant undertaking with the Board no later than March 31st of the year following the calendar year being reported which shall contain the following information:

- a. The monthly and annual quantities (in cubic metres) of fresh water obtained from all sources;
- b. The monthly and annual quantities (in cubic meters) of treated sewage discharged;
- c. A summary of all waste treated and/or backhauled for disposal at approved facilities under Part D;
- d. A summary of any construction work, modification and major maintenance work (including as-built diagrams) carried out on all new and existing waste handling facilities associated with this Licence;
- e. Tabular summaries for all data and information generated under the "Monitoring Program";
- f. An analysis of data collected during the "Monitoring Program" and a brief description of any future studies planned by the Licensee;
- g. A summary of remediation work undertaken during the year and an outline of work anticipated for the following year;
- h. A summary of any studies requested by the Board that relate to waste disposal, water use or reclamation, and a brief description of any future studies planned;
- i. A list of unauthorized discharges and summary of follow-up actions taken;
- j. Any revisions to the approved plan under Part I, Item 1, entitled "Spill Contingency Plan Cape Hooper (FOX-4) DEW Line Site" dated March 2011;
- k. Any revisions to the "Project Specific Information Requirements, Cape Hooper (FOX-4) DEW Line site" dated February 2011;
- l. If applicable, a description of any trenches and sumps excavated, including but not limited to the following: GPS coordinates, dimensions, depth below active layer, and secondary containment features;
- m. A public consultation/participation report describing consultation with local organizations and the residents of the nearby communities;
- n. A brief summary of work done to address concerns or deficiencies listed in the inspection reports and/or compliance reports prepared by an Inspector;
- o. An executive summary in English, and Inuktitut of all plans, reports, or studies conducted under this Licence; and

- p. Any other details on water use or waste disposal requested by the Board by November 1st of the year being reported.

*Proposed text:*

Licensee shall file an Annual Report on the appurtenant undertaking with the Board no later than March 31st of the year following the calendar year being reported which shall contain the following information:

- a. The monthly and annual quantities (in cubic meters) of fresh water obtained from all sources;
- b. The monthly and annual quantities (in cubic meters) of treated sewage discharged;
- c. **A summary of waste disposal activities related to water use, deposit of waste to water or appurtenant undertaking.**
- d. A summary of any construction work, modification and major maintenance work (including as-built diagrams) carried out on all new and existing waste handling facilities associated with this Licence;
- e. Tabular summaries for all data and information generated under the "Monitoring Program";
- f. An analysis of data collected during the "Monitoring Program";
- g. **A summary of licensed remediation work undertaken during the year and an outline of work anticipated for the following year;**
- h. **A summary of any studies requested by the Board that relate to the appurtenant undertaking;**
- i. A list of unauthorized discharges and summary of follow-up actions taken;
- j. Any revisions to the approved plan under Part I, Item 1, entitled "Spill Contingency Plan Cape Hooper (FOX-4) DEW Line Site" dated March 2011;
- k. Any revisions to the "Project Specific Information Requirements, Cape Hooper (FOX-4) DEW Line site" dated February 2011;
- l. If applicable, a description of any trenches and sumps excavated, including but not limited to the following: GPS coordinates, dimensions, depth below active layer, and secondary containment features;
- m. **m\*. A brief summary of work done to address concerns or deficiencies listed in the inspection reports and/or compliance reports prepared by an Inspector;**
- n. An executive summary in English, and Inuktitut of all plans, reports, or studies conducted under this Licence; and

- o. Any other details on water use or waste disposal requested by the Board by November 1st of the year being reported.

**Item 1 \*(m)**

*Proposed Changes:*

Remove Condition

**Part C: Conditions Applying to Water Use**

**Item 3**

*Existing text:*

The Licensee shall not remove any material from below the ordinary high water mark of any water body.

*Proposed changes:*

The Licensee shall not conduct work below the ordinary high water mark of any water body unless authorized.

**Part D: Conditions Applying to Waste Disposal**

**Item 2-Item 8** (obligations or intention may have been meet)

*Proposed changes:*

Remove conditions

**Item 18**

*Existing text*

The Licensee shall provide proper storage, treatment and disposal at an approved facility for any hazardous waste materials, including waste oil generated through the demolition and remediation activities, unless otherwise approved by the Board in writing.

*Proposed changes:*

The Licensee shall implement proper handling, storage and transportation procedures for hazardous materials to prevent entry to any water body.

**Item 19**

*Proposed changes:*

Remove condition

**Part E: Conditions Applying to the Undertaking**

**Item 1** (obligations may have been meet)

*Proposed changes:*

Remove conditions

**Item 2**

*Existing text:*

The Licensee shall, upon the failure of any constructed facilities, repair such facilities immediately to the appropriate standards as recommended by an Engineer.

*Proposed text:*

The Licensee shall upon the failure of any constructed facility related to the appurtenant undertaking, repair such facility immediately to the appropriate standards as recommended by an engineer.

**Item 3**

*Existing text:*

The Licensee shall implement proper handling, storage and transportation procedures for hazardous materials during clean-up activities.

*Proposed text:*

The Licensee shall implement proper handling, storage and transportation procedures for hazardous materials to prevent entry to any water body.

**Item 4 and 11 and 13**

*Proposed changes:*

Remove condition as activities are related to land use issues.

## **Part J: Conditions Applying to Abandonment, Reclamation and Closure**

### **Item 1**

#### *Existing text:*

The Licensee shall complete all restoration work prior to the expiry of this Licence.

#### *Proposed text:*

The Licensee shall complete all restoration work related to use of water, deposit of waste and appurtenant undertaking subject to the Act and its Regulations, prior to the expiry of the licence.

### **Item 2**

#### *Existing text:*

The Licensee shall carry out progressive reclamation of any components of the project no longer required for the Licensee's operations.

#### *Proposed text:*

The Licensee shall carry out progressive reclamation of any licensed components of the project no longer required for the Licensee's operations related to water use, deposition of waste to water and/or appurtenant undertakings, subject to the Act and Regulations.

### **Item 3 and 4**

#### *Proposed changes:*

Remove condition, land use activities

### **Item 5**

#### *Existing text:*

All roads and airstrips, if any, shall be re-graded to match natural contours to reduce erosion.

#### *Proposed text:*

All roads and airstrips, if any, shall be re-graded to reduce erosion and sedimentation to water.

### **Item 7 and 8**

#### *Proposed changes:*

Remove condition



## **Part K: Conditions Applying to the Monitoring Program**

### **Item 10**

#### *Existing text:*

All sampling, sample preservation and analyses shall be conducted in accordance with methods prescribed in the current edition of *Standard Methods for the Examination of Water and Wastewater*, or by such other methods approved by the Board in writing.

#### *Proposed changes:*

All sampling, sample preservation and analyses shall be conducted in accordance with methods prescribed in the current edition of *Standard Methods for the Examination of Water and Wastewater*, or by such other methods approved by a laboratory certified by the Canadian Association of Environmental Analytical Laboratories (CAEAL).