



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

*Your file - Votre référence*  
1BR-GLA0815

April 27, 2015

*Our file - Notre référence*  
9545-2-1.1BR.GLAA

Phyllis Beaulieu  
Manager of Licensing  
Nunavut Water Board  
Gjoa Haven, NU X0E 1J0

**Re: Aboriginal Affairs and Northern Development Canada's (AANDC) Review of  
Defence Construction Canada's Renewal Application for Water Licence #1BR-  
GLA0815 DEW Line Clean-Up Project, CAM-2 – Gladman Point**

Dear Ms. Beaulieu,

On March 27, 2015, AANDC received notice from the Nunavut Water Board (NWB) regarding the above mentioned application, inviting interested parties to provide comments by April 27, 2015.

AANDC reviewed the amendment application and the results of our technical review are provided in the enclosed memorandum in Part A 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*.

AANDC's Field Operations division has reviewed the terms and conditions of the current licence and their suggestions for modifications are included after the memorandum, in Part B, for the Board's consideration.

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

Regards,

Sarah Forté  
Water Management Coordinator

c.c.: Andrew Keim, Acting Manager of Water Resources, AANDC Nunavut  
Erik Allain, Manager of Field Operations, AANDC Nunavut



Aboriginal Affairs and  
Northern Development Canada

Affaires autochtones et  
Développement du Nord Canada

# PART A



## **Technical Review Memorandum**

To: Phyllis Beaulieu, Manager of Licensing, NWB

From: Sarah Forté, Water Management Coordinator, AANDC

Date: April 27, 2015

Re: Water Licence Amendment and Renewal Application, #1BR-GLA0815

Licensee: Defence Construction Canada  
Project: DEW Line Clean-Up Project, CAM-2 – Gladman Point  
Region: Kitikmeot

---

### **A. BACKGROUND**

On March 27, 2015 the Nunavut Water Board provided notification to interested parties that Defence Construction Canada (DCC) had submitted an application to renew their Type 'B' water licence, #1BR-GLA0815.

The licence is for water use and disposal of waste associated with activities located at the CAM-2 Distant Early Warning line station at Gladman Point in the Kitikmeot region of Nunavut. The site was determined to be surplus and remediated under the initial Water Licence NWB5GLA0308, which was subsequently renewed as 1BR-GLA0815. The present application requests a twenty five year renewal term. Post closure monitoring activities on site will be continued, following the same monitoring plan presented in 2008.

After the remediation and decommissioning activities completed in 2005, five landfill areas remain on site and are the subject of continuing monitoring activities. A temporary camp for 5 – 8 people will be set up on-site for 4 – 5 days during each monitoring event in order to do visual monitoring, collect groundwater and soil samples and collect thermal monitoring data. According to the plan submitted, monitoring events should occur in years 10, 15 and 25 following the initiation of monitoring (2015, 2020 and 2030). After year 25 the data will be reviewed to determine if monitoring every 10 years is appropriate. Bottled water will be used in the camp and DCC is requesting permission to use less than 1 m<sup>3</sup>/day of water to obtain groundwater samples and deposit sewage in a pit toilet and buried onsite.

Interested parties were asked to review the information and provide comments by April 27, 2015



## **B. RESULTS OF REVIEW**

### **General**

- 1) The nature of interest in the land has not been specified in box 6.
- 2) The applicant only requests water to obtain groundwater samples (box 12) however the Remote Camp Questionnaire states additional water may be extracted from the water supply lakes (Item 26). The water source indicated is Hamlet water supply (Item 27), which is surprising as it is 75 km away. AANDC recommends allowing water use for camp purposes after clarifying the water source.
- 3) The proposed term of licence on the application is 25 years (Box 25) and the Remote Camp Questionnaire schedule ends after 15 years (Item 5). AANDC recommends a 25 year licence term since activities will not be changing and it fits with the proposed monitoring schedule.
- 4) The present licence permits drilling activities for the installation of additional monitoring wells. Neither the monitoring program presented nor the present application request permission for drilling operations.

### **Spill Contingency Plan**

- 5) The Spill Contingency Plan (SCP) does not appear to include contact information for the DCC Project Manager.

### **Compliance**

AANDC's understanding is that an agreement between the Board and DCC has been made so that monitoring reports submitted can be considered as annual reports. Monitoring reports are available for 2008, 2009, 2010 and 2012, which matches with the years with planned events in the monitoring plan. DCC has informed us that they were not on site the other years.

## **C. CONCLUSION**

AANDC considers DCC's renewal application for water licence #1BR-GLA0815 to be receivable.

# **PART B**

April 27, 2015

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 and amendments 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 2AM-MRY1325 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 and Proposed Changes are underlined:*

The 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) A summary report of water use and waste disposal activities related to water use, deposit of waste to water or the appurtenant undertaking;
- b) A summary of any construction work, modification and major maintenance work (including as-built diagrams) carried out on Solid Waste Disposal Facilities as it related to water use, deposit of waste to water or the appurtenant undertaking;
- c) Tabular summaries for all data and information generated under the "Monitoring Program";
- d) An analysis of data collected during the "Monitoring Program" and a brief description of any future studies planned by the Licensee;
- e) The results of any review conducted by the Environmental Working Group and any recommendations regarding any changes to the Monitoring Plan and/or remediation requirements;

- f) A summary of remediation work undertaken during the year and an outline of work anticipated for the following year;
- g) A summary of any studies requested by the Board that relate to waste disposal to water, water use or reclamation, and a brief description of any future studies planned;
- h) A list of unauthorized discharges and summary of follow-up actions taken;
- i) Any revisions to the remediation plan;
- j) Any updates or revisions for manuals and plans as required by changes in operation and/or technology;
- k) 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;
- l) Revisions or addendum for the Spill Contingency Plan, including contact information as required under Part I, Item 2;
- ~~m) A public consultation/participation report describing consultation with local organizations and the residents of the nearby communities;~~
- n) 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) p. Any other details on water use or waste disposal to water requested by the Board by November 1st of the year being reported.

## Item 2

*Existing text:* The Licensee shall notify the NWB of any changes in operating plans or conditions associated with this project at least thirty (30) days prior to any such change.

*Proposed text:* The Licensee shall notify the NWB of any changes in operating plans or conditions associated with the appurtenant undertaking at least thirty (30) days prior to any such change.

## Item 4

*Existing text:* The Licensee shall, for all plans submitted under this licence, include a proposed timetable for implementation. Plans submitted, cannot be undertaken without subsequent written Board approval and direction. The Board may alter or modify a Plan if necessary to achieve the legislative objective and will notify the Licensee in writing of acceptance, or rejection or alterations of the Plan.

*Proposed text:* The Licensee shall, for all Plans submitted under this Licence, include a proposed timetable for implementation. Plans submitted, cannot be undertaken without subsequent written Board approval and direction. The Board or an Inspector may alter or modify a Plan if necessary to achieve the legislative objectives and will notify the Licensee in writing of acceptance, rejection or alteration of the Plan. The Inspector will notify the Board of any alteration or modification. Conditions and clauses within all plans manuals will be enforced where there is 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.

## Item 7

*Existing text:* The Licensee shall, within sixty (60) days of issuance of this Licence, post signs in the appropriate areas identifying the locations of the Water Supply Facility, Solid Waste Disposal Facilities and the Monitoring Program Stations. All postings shall be in the Official Languages of Nunavut.

*Proposed text:* The Licensee shall, within sixty (60) days of issuance of this Licence, post signs in the appropriate areas identifying the locations of the Water Supply Facility, and the Monitoring Program Stations. All postings shall be in the Official Languages of Nunavut.

### **Part C: Conditions Applying to Water Use and Management**

#### **Item 5**

*Existing text:* The Licensee shall not cause erosion to the banks of any body of water and shall provide necessary controls to prevent such erosion.

*Recommendation:* Include this condition in Part D: Waste Disposal to Water.

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

#### **Item 3**

*Existing text:* The Licensee shall backhaul all solid waste to an approved Solid Waste Disposal Facility or as otherwise approved by the Board, in writing.

*Proposed Change:* The Licensee shall not practice on-site landfilling of domestic waste that will impact groundwater, unless otherwise approved by the Board in writing.

#### **Item 4**

*Existing text:* The Licensee shall provide to the Board, prior to the backhauling of any waste, documented authorization from the operator of the approved Solid Waste Disposal Facility where camp waste will be deposited.

*Recommend removal of this condition:* Reasoning - AANDC lacks the legislation and jurisdiction to track and control the shipping of hazardous wastes, waste oil and non-combustible waste generated by a proponent in Nunavut. AANDC can only tell a proponent that such waste cannot be deposited to Inland water or Arctic waters. This issue can be address by the GN-Environmental Protection Act/Regulations or through municipal by-laws.

#### **Item 5**

*Existing text:* The Licensee shall backhaul and dispose of all Hazardous Wastes, including waste oil generated through the course of the operation, in an approved waste disposal site.



*Recommend removal of this condition:* Reasoning - AANDC lacks the legislation and jurisdiction to track and control the shipping of hazardous wastes, waste oil and non-combustible waste generated by a proponent in Nunavut. AANDC can only tell a proponent that such waste cannot be deposited to Inland water or Arctic waters. This issue can be address by the GN-Environmental Protection Act/Regulations or through municipal by-laws.

#### **Item 6**

*Existing text:* The Licensee shall maintain records of all waste backhauled and records of confirmation of proper disposal of backhauled waste. These records shall be made available to an Inspector upon request.

*Proposed Change:* Recommend the removal of this condition.

#### **Item 9**

*Existing text:* For any camp with a design population over 300 and less than 2,000 person days per year, and less than 5,000 person days for the life of the camp, the Licensee shall dispose of all toilet wastes through incineration, chemical or composting toilets. Any remaining residue generated through the course of the operation shall be backhauled and disposed of in an approved waste disposal site.

*Proposed Change:* For any camp with a design population over 300 and less than 2,000 person days per year, and less than 5,000 person days for the life of the camp, the Licensee shall dispose of all toilet wastes through incineration, chemical or composting toilets. Any remaining residue generated through the course of the operation shall be managed in a way to prevent waste from entering water.

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

#### **Item 5**

*Existing text:* The deposition of debris or sediment into or onto any water body is prohibited.

*Recommendation:* Move this condition to Part D: Conditions Applying to Waste Disposal.

### **Part G: Conditions Applying to Drilling Operations**

#### **Item 3**

*Existing text:* The Licensee shall ensure that all drill waste, including water, chips, muds and salts (CaCl<sub>2</sub>) in any quantity or concentration from drilling, shall be disposed of in a properly constructed sump or an appropriate natural depression located at a distance of at least thirty (30) metres from the ordinary high water mark of any adjacent water body, where direct flow into a water body is not possible and no additional impacts are created.

*Proposed Change:* The Licensee shall dispose of all drill wastes at a distance of at least 31 metres from the ordinary high water mark of any adjacent water body, where direct flow into a water body is not possible and no additional impacts are created.

## **Part H: Conditions Applying to Modifications**

### **Item 1**

*Existing text:* The Licensee may, without written approval from the Board, carry out modifications to the Water Supply and Waste Disposal Facilities provided that such modifications are consistent with the terms of this Licence and the following requirements are met:

- a. the Licensee has notified the Board in writing of such proposed modifications at least sixty (60) days prior to beginning the modifications;
- b. these modifications do not place the Licensee in contravention of the Licence or the Act;
- c. the Board has not, during the sixty (60) days following notification of the proposed modifications, informed the Licensee that review of the proposal will require more than sixty (60) days; and
- d. the Board has not rejected the proposed modifications.

*Proposed Change:* The Licensee may, without written approval from the Board, carry out modifications to the Water Supply and Waste Disposal Facilities provided that such modifications are consistent with the conditions of this Licence and within the scope of the water licence application. The Licensee is required to provide a 30 day notification to the Inspector and the Board prior to the modifications.

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

### **Item 3**

*Existing text:* The Licensee shall remove from the site any solid wastes generated from the camp as well as empty barrels and drums at the end of each monitoring event.

*Proposed Change:* Item will be recommended for inclusion under the land authorization.

### **Item 4**

*Existing text:* The Licensee shall remove from the site infrastructures and site material associated with the temporary camp described in the application filed on February 15, 2008, when no longer needed for site activities. All disturbed areas as a result of the undertaking shall be contoured, stabilized, and re-vegetated as required, upon completion of work and restored as practically as possible to a pre-disturbed state.

*Proposed Change:* Item will be recommended for inclusion under the land authorization.

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

### **Item 6**

*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 Change:* 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).