



Water Resources  
Nunavut Regional Office  
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April 29, 2016

Ida Porter  
Licensing Administrator  
Nunavut Water Board  
P.O. Box 119  
Gjoa Haven, NU, X0A 1J0

Your file - Votre référence  
1BR-NIR1419

Our file - Notre référence  
CIDM#1046531

**Re: 1BR-NIR1419 – Nottingham Island Site Remediation – Indigenous and Northern Affairs Canada – Surface Water Monitoring Plan**

Dear Ms. Porter,

Thank you for your March 4, 2016 invitation for written comments on the above referenced monitoring plan.

The Water Resources Division of Indigenous and Northern Affairs Canada (INAC) has conducted a technical review of the Surface Water Monitoring Plan submitted by the Contaminated Sites Program of INAC and the results of our review are presented in the attached memorandum for the Nunavut Water Board's consideration. It is our understanding that the Contaminated Sites Program will be presenting more material to the Nunavut Water Board for this file.

Comments have been provided pursuant to INAC's mandated responsibilities under the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and the *Department of Indian Affairs and Northern Development Act*.

INAC appreciates the opportunity to participate in this review. If there are any questions or concerns, please contact me at (867) 975-3876 or by e-mail at [sarah.forte@aandc-aadnc.gc.ca](mailto:sarah.forte@aandc-aadnc.gc.ca).



Indigenous and  
Northern Affairs Canada

Affaires autochtones  
et du Nord Canada

Sincerely,

Sarah Forté  
Water Management Coordinator

cc. Scott Burgess, Acting Manager, Water Resources Division, INAC  
David Abernethy, Regional Coordinator, Water Resources Division, INAC  
Erik Allain, Manager of Field Operations, INAC  
Charlotte Lamontagne, Acting Director, Contaminated Sites Program, INAC

## **Technical Review Memorandum**

To: Ida Porter, Licensing Administrator, Nunavut Water Board

From: Sarah Forté, Water Management Coordinator, Water Resources Division, INAC

Date: April 29, 2016

Re: Review of Surface Water Monitoring Plan for Type B Water Licence #1BR-NIR1419

Applicant: Contaminated Sites Program of INAC  
Project: Nottingham Island Site Remediation  
Region: Qikiqtani

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### **A. BACKGROUND**

On March 4, 2016, the Nunavut Water Board (NWB or Board) provided notification of Indigenous and Northern Affairs Canada's Contaminated Sites Program's (the licensee or INAC - Contaminated Sites) submission of a Surface Water Monitoring Plan, dated December 11, 2015.

This is the second submission by INAC - Contaminated Sites to fulfill Part K, Item 2 of Type B water licence 1BR-NIR1419. The NWB invited comments on the first report, entitled *Nottingham Island Site Remediation – August 2013 Water Sampling*, on August 24, 2015.

On September 24, 2015, INAC - Water Resources submitted a Memorandum in which we recommended that the Licensee submit a Surface Water Monitoring Plan because we did not agree that the *Water Sampling* report submitted fulfilled Part K, Item 2 of the licence requirements.

The NWB requested interested parties review the new plan and make representations by April 4, 2016. INAC - Water Resources requested an extension in order to initiate discussion with INAC - Contaminated sites and this was granted until April 18, 2016. Subsequently, INAC - Contaminated sites requested an extension in order to submit new material and this was granted until April 29, 2016.

The material submitted by INAC - Contaminated sites on April 22, 2016 is a memo from Stantec Consulting Ltd. concluding that a Surface Water Monitoring Plan is not necessary. No new site specific information is presented.

## B. RESULTS OF REVIEW

On behalf of INAC - Water Resources, the following comments and recommendations are provided for the Board's consideration:

### 1. Plan objective

#### Reference:

- Surface Water Monitoring Plan/Monitoring Plan, Nottingham Island, NU, prepared by Stantec Consulting Ltd., December 11, 2015, Section 1
- Nunavut Water Board Water Licence 1BR-NIR1419, February 17, 2014, Part K, Item 2

#### Comment:

The stated objective of the plan submitted is:

*The objective of the Surface Water Monitoring program is to establish the water quality in any permanent surface water bodies following one season of remedial excavation activities and to collect surface water quality data during the second season of excavation activities until the work is complete.*

Part K, Item 2 of Type B water licence 1BR-NIR1419 reads:

*The Licensee shall submit to the Board, for approval, at least sixty days prior to initiating the monitoring, a proposal for the development of a Surface Water Monitoring Plan (SWMP). The proposal for the SWMP shall have objectives and requirements directed to determine if surface water exceedances are due to site activities or natural conditions at site.*

The plan's objective does not encompass what is required by the licence.

#### Recommendation:

INAC - Water Resources recommends that the licensee align their monitoring plan with the licence condition. Specifically, the plan needs to include sampling sites that are clearly outside, upwind and upgradient from the potentially impacted area and can be considered as background

### 2. Water quality exceedances

#### Reference:

- Phase III Environmental Site Assessment, Nottingham Island Nunavut, prepared by EBA Tetra Tech, January 2013
- Nottingham Island Site Remediation – August 2013 Surface Water Sampling Results, prepared by KGS Group, September 20, 2013

#### Comment:

Data presented in the Phase III Environmental Assessment include surface water samples with concentrations exceeding Canadian Council of Ministers of the

Environment (CCME) water quality criteria for the protection of aquatic life. The report recommends further sampling to determine if water concentrations are naturally elevated.

Data presented in August 2013 Surface Water Sampling report include two samples (NOTT-SW-001 and NOTT-SW-002) with copper and zinc concentrations over CCME criteria.

The proposed plan does not outline how it will be determined if these exceedances are due to site activities or natural conditions at the site, as required by the licence. The second possibility seems less likely given that these exceedances occur in only two of 11 samples taken in 2013.

**Recommendation:**

As stated in our September 24, 2015 memorandum, INAC - Water Resources recommends that the plan demonstrate how all areas of potential impacted surface water identified in the Phase III Assessment will be further evaluated. The Licensee should also further develop the Surface Water Response Plan.