



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

February 24, 2009

Phyllis Beaulieu  
Manager of Licensing  
Nunavut Water Board  
PO Box 119  
Gjoa Haven, NU X0A 1J0

**Re: 3BC-FOD0409 – Type 'B' Application for Amendment – Department of National Defence (DND) – FOX-3 – Dewar Lakes Project**  
**-AND-**  
**3BC-FOD0409 – Type 'B', New Water Licence Application – Nasittuq Corporation – FOX-3 – Dewar Lakes Project**

Please be advised that Indian and Northern Affairs Canada (INAC) has completed reviews of the following Type 'B' water licence applications;

- DND amendment application (submitted February 11, 2009) – this license expires on Feb 28, 2009 and DND wishes it extended until such time that Nasittuq is issued a new license.
- Nasittuq Corporation new water licence application (submitted October 3, 2008)

The NWB invited representations to be made to the Board, concerning both applications by February 27, 2009. Concerning the Nasittuq review, the NWB requested the following comments be specifically addressed;

- Owner vs. Operator Responsibility for Site Remediation – There is another water license issued to DND (1BR-FOD0813) for the clean-up of historical contamination at this site. It is a separate license from the applications referenced above (which relate to the operation of the site as part of the North Warning System (NWS)).
- Adequacy of Amount and Form of Proposed Security
- Request to treat Stamped and As-Built Drawings of Tank Farms as Confidential

In conducting the reviews, I have referred to all documents on the Nunavut Water Board FTP site as it relates to 3BC-FOD0409. Attached is a Technical Review Memorandum for your consideration in the approval of the application.

Please feel free to contact me should you have any questions or comments. I can be reached at (867) 975-4566 or by email at [trenholmt@inac.gc.ca](mailto:trenholmt@inac.gc.ca).



Indian and Northern  
Affairs Canada

Affaires indiennes  
et du Nord Canada

Sincerely,

*Original signed by*

Tanya Trenholm  
Pollution Policy Specialist



## Technical Review Memorandum

**To:** Phyllis Beaulieu, Manager of Licensing - Nunavut Water Board

**From:** Tanya Trenholm, Pollution Policy Specialist - Indian and Northern Affairs Canada – Water Resources Division

**Re:** **Department of National Defence – FOX-3 Dewar Lakes Project – Amendment Application**

### **Existing Water Licence # 3BC-FOD0409**

An amendment for a 6 month extension to the term of the existing water licence was requested by DND February 11, 2009. DND advised that the extension was to allow work to continue on site until such a time that the application submitted by Nasittuq is approved. At that time, DND intends to apply to cancel their licence. INAC is not opposed to this amendment request.

**Re: Nasittuq Corporation – FOX-3 Dewar Lakes Project – New Water Licence Application**

### **Existing Water Licence # 3BC-FOD0409**

#### **Recommendations / Comments**

##### **1. Increase in Daily Water Intake**

With the exception of site visits for necessary maintenance, the site will be unmanned from October to April. For the purposes of allowing the facility to operate at peak capacity from May to September, Nasittuq requested that the licence allow for the drawing of water at a rate of 40 m<sup>3</sup>/day (from 10 m<sup>3</sup>/day in the existing license), 3 times per month.

The NWB should impose a condition that requires the licensee to record the daily amount of water usage.

##### **2. Sewage Disposal**

During a July 13<sup>th</sup>, 2007 inspection by an INAC Water Resources Officer, a direction was issued that required the licensee to submit “a plan to address the release of sewage directly to the environment contrary to the issued license within 30 days of receipt of this report”.



As a result of this direction, the licensee requested clarification from the NWB regarding the type of sewage system approved for use by the NWB in their 2007 annual report.

In the current application, Nasittuq advises they wish to continue using this (unapproved) existing sewage system. Further, it is noted there is one incineration toilet on site, however, Nasittuq recognizes one incineration toilet will not support the requirements of the camp during times of occupation.

INAC is of the opinion that liquid sewage waste should be treated using appropriate technology. In addition, all effluent discharges should be monitored. The discharge of raw sewage from a storage tank without any treatment should not be approved by the NWB.

The existing licence requires that the licensee manage all sewage through the use of Incinolet toilets, and dispose of all resulting ash in the approved on-site landfill facility.

### **3. Solid Waste Disposal**

#### **Approved Landfill:**

The application states that nonhazardous, non-combustible waste ash from the incinerator and ash from the incinerator toilets will be disposed of in the approved landfill.

After reviewing the documents, it is unclear who is in control of the landfill facility. The NWB should identify who is in control of the 'approved landfill' (i.e. DND's landfill as approved through the 3BR-FOD0813 licence issued for the clean-up of historical contamination, or the existing 3BC-FOD0409 for operation of the NWS). If it is deemed that the authority for the landfill is under DND 1BR-FOD0813, then Nasittuq (applicant) should obtain written permission to deposit waste into the landfill.

Further to this, if the landfill is closed as part of completed remediation activities under license 1BR-FOD0813, Nasittuq should be required to submit a Waste Management Plan to the NWB.

Therefore, due to the lack of clarity with respect to waste management, the NWB should require that the applicant submit a formal and complete Waste Management Plan that clearly defines where wastes will be deposited. This Plan should be submitted to the NWB within 3 months of the issuance of the licence.

#### **Incineration:**

For greater certainty, the NWB should impose a condition that identifies products appropriate for burning in an approved incinerator, such as paper products,



paperboard packing and untreated wood wastes, etc. Incineration should be limited to such items in order to ensure that impacts to surface water resulting from the deposition of wastes associated with incomplete combustion and the leaching of ash residue through precipitation run-off are minimized. The burning of plastics, wood treated with preservatives, Styrofoam, electrical wire, asbestos, demolition wastes or any other wastes likely to produce dioxins and furans should be excluded from incineration.

#### **4. Spill Prevention**

Further, as previously stated, the application indicates that the site will be unmanned from October to April. Due to the inherent risk of spills or related adverse environmental impacts being undetected at unmanned sites, (i.e. Brevoort Island) INAC requests that the NWB impose a condition that requires the licensee to install a remote leak detection system which will trigger an appropriate site response in the event of such a spill or mishap.

#### **Other Concerns and Recommendations:**

##### **1. Owner vs. Operator Responsibility for Site Remediation**

DND's license 3BR-FOD0813 is issued for purposes of site remediation of historical contamination and is separate from site operations. As such, INAC supports a separation of licensing in this instance provided our requests for a determination as to who is approved to operate the landfill is provided.

##### **2. Adequacy of Amount and Form of Proposed Security**

The NWB should impose a condition that requires the applicant, on an annual basis, to provide up to date proof of environmental liability insurance. This could be included as a requirement of the Annual Report.

##### **3. Request to treat Stamped and As-Built Drawings of Tank Farms as Confidential**

At this time, INAC has no concerns regarding Nasittuq's request to have the stamped and as-built drawings of the tank farm treated as confidential "by the NWB".

Please feel free to contact me at your convenience should you wish to further discuss any part of this submission to the Board. I can be reached at 867-975-4566 or via email, [tanya.trenholm@inac.gc.ca](mailto:tanya.trenholm@inac.gc.ca).

Sincerely,

Tanya Trenholm



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**Pollution Policy Specialist**  
Indian and Northern Affairs Canada  
Nunavut Regional Office – Water Resources Division

Cc. Kevin Buck, Manager, Water Resources Division – Indian and Northern Affairs Canada;