



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

Our File/CIDM's #: 351340

September 8, 2009

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

Re: Type "B" Water Licence Renewals, Department of National Defence (DND): 3BC-BAF0409 – Brevoort Island Project (BAF-3), 3BC-FOD0409 – Dewar Lakes Project (FOX-3), 3BC-SHE0409 – Shepherd Bay Project (CAM-3), 3BC-DYE0409 – Cape Dyer Project (DYE-M), 3BC-CAM0409 – Cambridge Bay Project (CAM-M), 3BC-FOH0409 – Hall Beach Project (FOX-H)

Please be advised that Indian and Northern Affairs Canada (INAC) has completed a review of six (6) Type "B" Water Licence Renewal applications for the Department of National Defence (DND), including Water Licence #3BC-BAF0409 - Brevoort Island Project (BAF-3); #3BC-FOD0409 - Dewar Lakes Project (FOX-3); #3BC-SHE0409 - Shepherd Bay Project (CAM-3); #3BC-DYE0409 - Cape Dyer Project (DYE-M); #3BC-CAM0409 - Cambridge Bay Project (CAM-M); #3BC-FOH0409 - Hall Beach Project (FOX-H).

All associated documents related to this licence posted on the NWB ftp site under 3BC-BAF, 3BC-FOD, 3BC-SHE, 3BC-DYE, 3BC-CAM and 3BC-FOH were included in my review (see attached Technical Review Memo).

Should you have any questions or comments, please do not hesitate to contact me at (867) 975-4738 or by email at Andrea.Cull@ainc-ianc.gc.ca

Yours truly,

Original Signed By

Andrea Cull
Water Management Specialist

Cc: Kevin Buck – Manager of Water Resources, INAC
Peter Kusugak – Manager of Field Operations, INAC
Andrew Keim – Water Resources Officer, INAC



Technical Review Memo

To: Richard Dwyer – Licensing Administrator, Nunavut Water Board

From: Andrea Cull – Water Management Specialist, Indian & Northern Affairs Canada

Re: Type “B” Water Licence Renewals, Department of National Defence (DND): 3BC-BAF0409 – Brevoort Island Project (BAF-3), 3BC-FOD0409 – Dewar Lakes Project (FOX-3), 3BC-SHE0409 – Shepherd Bay Project (CAM-3), 3BC-DYE0409 – Cape Dyer Project (DYE-M), 3BC-CAM0409 – Cambridge Bay Project (CAM-M), 3BC-FOH0409 – Hall Beach Project (FOX-H)

Water licence #'s 3BC-BAF0409, 3BC-FOD0409, 3BC-SHE0409 and 3BC-DYE0409 were all due to expire Feb 28, 2009. DND submitted four amendment applications to the NWB on Feb 11, 2009 requesting that the water licenses be extended for a period of six months to allow work to continue on site and provide such time that Nasittuq Corporation (contracted site operator) could be issued new water licenses by the Board. At that time, DND intended to apply to cancel their licenses. As a result of reconsideration DND has opted to renew these licenses in their name and not the contracted site operator's Nasittuq.

With respect to the existing water licenses #3BC-CAM0409 (CAM-M site) and 3BC-FOH0409 (FOX-H site) set to expire on June 30, 2009, Nasittuq has applied for a new licence as operator of the site (contracted by DND). Similar to the above renewals DND has chosen to re-apply for the renewal of these licenses at this time.

All of the above mentioned water licence renewal applications were submitted by DND and were received by the Board on July 30, 2009.

As a result of this review INAC recommends that the Board impose all of the comments/recommendations that were submitted by INAC between the dates of Feb 24 and March 4, 2009 in regard to the above mentioned projects (please see these 6 attached letters – in response to Nasittuq Corporation's applications to renew).

INAC also recommends that the NWB impose applicable standard conditions from the existing water licence #'s 3BC-BAF0409, 3BC-FOD0409, 3BC-SHE0409, 3BC-DYE0409, 3BC-CAM0409 and 3BC-FOH0409 on any renewed water licenses. In addition the following additional comments/recommendations are provided for your consideration in the licence approval process.

Recommendations/Comments:

Re: Water licence #3BC-BAF0409, 3BC-FOD0409, 3BC-SHE0409 and 3BC-DYE0409

Sewage Disposal

In INAC's 2008 inspection report for 3BC-BAF0409 it was noted that this site does not have a sewage lagoon or any other sewage waste treatment on site. INAC could not perform an inspection in 2009.



As written in the 2008 inspection report for 3BC-BAF0409: Contrary to issued license, Human wastes are macerated and discharged directly to environment via discharge pipe. No Lagoon or sump is present on site.

During 2009 site inspections of 3BC-FOD0409, 3BC-SHE0409 and 3BC-DYE0409 by an INAC Water Resources Officer, it was noted that these sites also do not have sewage lagoons or any sewage waste treatment on site.

As written in the 2009 inspection reports: Human wastes are not treated; rather they are discharged directly to the environment via an outfall pipe contrary to the existing licence. Previously the Inspector required that the Licensee comply with the terms of the existing licence. This issue is to be addressed prior to the period of the next inspection or enforcement actions will be undertaken under the Act.

Parts D, Item 5, of the existing water licenses (3BC-BAF0409, 3BC-FOD0409, 3BC-SHE0409 and 3BC-DYE0409) require that the Licensee shall manage all sewage through the use of Incinolet toilets, and dispose of all resulting ash in the approved on-site landfill facility. The disposal of sewage waste directly to the environment, as noted by the Inspector, appears to be a violation of Section 12 of the Nunavut Waters and Nunavut Surface Rights Tribunal Act (NWNSRTA), in that waste is being deposited in a manner contrary to Board approval. INAC feels that it is unacceptable to dispose of sewage waste without prior approved treatment.

Therefore INAC suggests that the Board impose an additional condition to any renewed license in these cases which would require a Compliance Plan with firm dates of implementation. The Plan at a minimum should include the installation of an appropriate sewage treatment system for both greywater and blackwater, an estimate of the amount of total wastewater generated at the site, restoration/clean-up of areas where raw sewage has been deposited, and an acceptable interim treatment system (portable, holding tanks, etc). The Plan should be submitted 30 days after renewal.



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

Your File: 3BC-SHE----
Our File:

February 26, 2009

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

**Re: Nasittuq Corporation - New Type B Water Licence Application
Shepherd Bay Project (CAM-3), Kitikmeot Region
Existing Licences – NWB6SHE0409 issued to Department of National
Defence (DND) AND 1BR-SHE0510 issued to Defence Construction
Canada for remediation activities.**

Indian and Northern Affairs Canada (INAC) has completed a review of Nasittuq Corporations New Type B Water Licence Application for the Shepherd Bay Project (CAM-3) situated in the Kitikmeot Region. The proponent submitted their application to the Nunavut Water Board (NWB) on February 13th, 2009.

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 Defence Construction Canada (1BR-SHE0510) 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 our review, INAC referred to the documents on the NWB's FTP-Site under 3BC-SHE. 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) 975-4568 or by email at Ian.Rumbolt@inac-ainc.gc.ca.

Sincerely,

Original signed by

Ian Rumbolt
Regional Coordinator



Technical Review Memo

To: Richard Dwyer – Licensing Administrator, Nunavut Water Board

From: Ian Rumbolt – Regional Coordinator, Indian & Northern Affairs Canada

Re: **Nasittuq Corporation - New Type B Water Licence Application
Shepherd Bay Project (CAM-3), Kitikmeot Region
Existing Licence – NWB6SHE0409 issued to Department of National
Defence (DND) AND 1BR-SHE0510 issued to Defence Construction
Canada for remediation activities.**

Background

Nasittuq Corporation (Nasittuq) is applying for a water licence for the Shepherd's Bay Project (CAM-3) and will be taking over all operational and maintenance responsibilities of the site (North Warning System – NWS) from the Department of National Defence (DND). The existing licence issued to DND will expire on February 28th, 2009 therefore it is important that a new licence is issued to Nasittuq before the old licence expires. Ongoing remediation by DND at the site is subject to separate licence # 1BR-SHE0510 issued to Defence Construction Canada (DCC) and is not related to the Nasittuq application. It is understood that upon issuance of any new licence to Nasittuq, DND will cancel the existing licence # NWB6SHE0409.

Comments/Recommendations:

- 1) Terms and conditions of existing licence # NWB6SHE0409 issued to DND should be incorporated into the new licence applied for by Nasittuq with some exceptions.
- 2) There should be no open burning of plastics, wood treated with preservatives, electrical wire, Styrofoam, asbestos or painted wood to prevent the deposition of waste materials from incomplete combustion



and/or leachate from contaminated ash residues from impacting any surrounding waters.

- 3) INAC is requesting that the applicant provide more information about the sewage disposal system, specifically, a diagram of the system should be provided as well as a map showing effluent sampling point SHE-2. It was noted in the INAC 2008 inspection report that the current sewage system was unacceptable due to “lack of treatment for sewage or appropriate retention before discharging”. If this is the case then Nasittuq will have to install a proper sewage system (approved by the NWB) for the treatment of this type of waste.
- 4) INAC recommends that the proponent provide secondary containment for all fuels stored on site. The 2008 INAC Inspection Report noted fuel being stored (i.e. jerry cans and drums stored directly on the ground without secondary containment) inappropriately.
- 5) Nasittuq is required to provide an up to date, complete Spill Contingency plan to address fuel/chemical handling, transportation and storage on site. This plan should include but not be limited to; a site diagram, quantities and MSDS of fuels and chemicals, spill kit contents and locations, as well as contact information for persons responsible in the event of a fuel or chemical spill. Training and procedures for spill response should be included into this plan. In addition a copy of Nasittuq’s Environmental Protection Plan – EEP should be provided to the NWB and the INAC Water resources Officer (A. Keim)
- 6) Nasittuq states in their application that non-hazardous materials will be disposed of in an appropriate landfill. There is no information regarding the landfill in the application. Nasittuq must submit a site diagram indicating the landfill location at a minimum. Furthermore, if Nasittuq is proposing to use a landfill site that is approved pursuant to the DND remediation water licence # 1BR-SHE0510, then written permission must be submitted to the NWB. It is noted that the DND remediation licence expires in 2010. Therefore, in addition, Nasittuq should provide a comprehensive waste



management plan to the Board for approval within 3 months of the licence issuance. The plan must contemplate waste disposal options should the landfill be closed and/or backhauling of wastes for disposal at an approved facility.

- 7) If a spill should occur it should be reported immediately to the Spill Line (867-920-8130) as per the Spill Contingency Plan. The contact information for INAC is listed below.

Manager, Field Operations

Tel: (867) 975-4295

Fax: (867) 979-6445

Melissa Joy, Water Resource Officer

Tel: (867) 982-4302

Fax: (867) 982-4307

Email: Melissa.Joy@inac-ainc.gc.ca

Baba Pederson, Resource Management Officer

Tel: (867) 982-4306

Fax: (867) 982-4307

Email: Baba.Pedersen@inac-ainc.gc.ca

Other Concerns and Recommendations:

1. Owner vs. Operator Responsibility for Site Remediation

DND's license 1BR-SHE0510 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".

Should you have any questions or comments, please do not hesitate to contact me at (867) 975-4568 or by email at Ian.Rumbolt@inac-ainc.gc.ca.

Sincerely,

Original signed by

Ian Rumbolt
Regional Coordinator

Cc. Kevin Buck, Manager of Water Resources – Indian and Northern Affairs
Canada, Nunavut Regional Office