



Water Resources
Nunavut Regional Office
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August 9, 2013

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

Your file - Votre référence
1BR-BIR----
Our file - Notre référence
CIDM# 702464

**Re: 1BR-BIR---- Stantec Consulting Inc. – Bathurst Island Remediation – Phase III
Environmental Site Assessment Project – New Type B Application**

Dear Phyllis Beaulieu:

Aboriginal Affairs and Northern Development Canada (AANDC) has performed a review of the water licence application, 1BR-BIR---- (Bathurst Island Remediation – Phase III Environmental Site Assessment Project) submitted to the Nunavut Water Board (NWB) by Stantec Consulting Inc. The following advice has been provided pursuant to AANDC's mandated responsibilities for the enforcement of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (NWNSTRTA) and the *Department of Indian Affairs and Northern Development Act* (DIAND Act). In conducting our review, AANDC Water Resources referred to the documents on the NWB's FTP-site under 1BR-BIR----.

Should you have any questions or comments, please do not hesitate to contact me at (867) 975-4738 or by e-mail at Jean.Allen@aandc-aadnc.gc.ca

Sincerely,

Original Signed By

Jean Allen
Water Management Specialist

Cc. Murray Ball, Manager, Water Resources, AANDC
Erik Allain, Manager, Field Operations, AANDC

Technical Review Memorandum

To: Phyllis Beaulieu – Manager of Licensing, Nunavut Water Board

From: Jean Allen – Water Management Specialist, AANDC

Re: 1BR-BIR---- Stantec Consulting Inc. – Bathurst Island Remediation – Phase III Environmental Site Assessment Project – New Type B Application

A. Project Description

On July 10, 2013, the Nunavut Water Board (NWB) distributed Stantec Consulting Inc.'s (Stantec) application for a Type B water licence for the Bathurst Island Remediation – Phase III Environmental Site Assessment (ESA) Project (Project). Stantec is requesting a licence term of one or two years (July 2013 – August 2014) to conduct a Phase III ESA on several areas of potential environmental concern associated with oil and gas exploration activities abandoned between the 1970's to 1990's (Bent Horn, Ile Vanier, Stokes Range, Young Inlet, and Humphries Hill and 2 abandoned Hill pads on southern Bathurst Island).

The Project is located on Bathurst Island, Cameron Island, and Ile Vanier, all of which are on Crown land located approximately 310 kilometers (km) from Resolute Bay, NU. A temporary camp will be set up in one of two locations on Ile Vanier or Cameron Island (76° 8' 20"N, 104° 3' 42" W or 76° 19' 35" N, 104° 4' 35" W) to accommodate up to 15 people for about 30 days. Stantec will conduct Phase III ESA activities on behalf of Public Works and Government Services Canada and AANDC following standard procedures to clean up listed contaminated sites in Nunavut.

The camp water source will be from an unnamed lake adjacent to one of the proposed camp locations and water will be stored in a soft bladder. The overall estimated use for camp use is 2 cubic metres per day (m³/day), grey water will be directed to a sump or natural depression, sewage will be solidified and backhauled to Resolute Bay, as will all solid waste. Material contaminated with oil, preservative, or fuel will be packaged and shipped south for disposal. There will be 36 x 205L barrels of Jet A, 15 x 205L barrels of diesel, 4 x 25lb tanks of propane, and 100 x 10ml vials of methanol on site.

B. Results of Review

AANDC Water Resources Division offers the following comments/ recommendations for the NWB's consideration.

Water Licence Application

1. Block 13 states that water will be drawn from an unnamed lake adjacent to one of the proposed camp locations. However, in the supplementary questionnaire, item 26 states that the location of water sources is to be determined and item 29 states that drinking water will be imported into site. AANDC requests clarification on the sources of water proposed for this project.
2. Block 15 states that sewage will be solidified and back hauled to Resolute Bay. AANDC requests clarification on the solidification method proposed and requests more information on the treatment of other sewage phases (i.e. liquid sewage) to ensure that sewage will not impact freshwater within the Project area.
3. Block 15 states that solid waste (combustible and non-combustible) will be backhauled to Resolute Bay for disposal. While it is understood that they are in the process of negotiating tipping fees with the Hamlet of Resolute Bay, AANDC recommends that Stantec submit to the NWB, written authorization from the Hamlet of Resolute Bay confirming that they will accept the proposed types and quantities of waste for proper disposal at their solid waste treatment facility.

Supplementary Questionnaire

4. Section 9, 26: There are currently 2 potential camp locations, one on Bathurst Island and one on Ile Vanier. AANDC recommends that the final camp location and coordinates of the final water source (if applicable) be submitted to the NWB once available.

Spill Contingency Plan

5. Spill Response: While there appears to be a general spill response plan, there is no detail on how the spilled chemical will be controlled or mitigated and there is no distinguishing between spill responses on land versus those on water. AANDC recommends that the applicant provide the NWB with a more detailed spill response plan.
6. Training: The plan does not indicate whether personnel on site will be trained on spill response procedures. AANDC recommends that all personnel that may be involved in a spill response be trained on spill response procedures in the plan.
7. Spill Reporting: The plan states that government representatives will only be contacted if given direction from the Project Manager. AANDC recommends that the NT-NU 24-Hour Spill Line be contacted as required in the NT-NU Spill Report Form (which should be included in the Spill Contingency Plan) and that a spill report be submitted to the NWB within 30 days of a spill, regardless of the quantity.

8. Material Safety Data Sheets (MSDS): Jet A, diesel, propane, and methanol are to be stored on site and it is stated that general MSDS for the listed chemicals are in Annex A. It is noted that there is no MSDS for propane but there is MSDS for isopropanol (rubbing alcohol) which is not listed under fuels and chemicals in the first table. AANDC recommends that MSDS for propane be submitted to the NWB when MSDS are replaced with manufacturer's MSDS at time of product ordering.

Closure and Restoration Plan

9. The closure and restoration plan and the provisions for solid waste removal and site clean-up provided in the water licence application and supplementary questionnaire appear to be sufficient for the scope of this Project.
10. Section 2.2.3: As previously mentioned, disposal of solidified sewage is provided in the application, but there is no plan for the treatment and/or disposal of liquid sewage. AANDC recommends that the closure and restoration plan also include treatment/disposal of the liquid component of sewage to ensure that there is no impact to nearby water bodies.
11. Section 2.2.6: AANDC notes that the applicant intends to submit a final closure and restoration report following the final inspection of the site that will include locations and photographs of all disturbed areas and site maps showing the locations, grey water sump, camp location, and fuel cache locations.