



Water Resources
Nunavut Regional Office
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June 24, 2011

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

Your file - Votre référence
1BR-MDR----
Our file - Notre référence
CIDM# 469655

**Re: 1BR-MDR---- New Water License Application – Iqaluit Metal Dump
Remediation Project – Transport Canada – Qikiqtani Region**

Aboriginal Affairs and Northern Development Canada (AANDC) has performed a review of the new water license application, 1BR-MDR---- (Iqaluit Metal Dump Remediation and Risk Management Project), submitted by Geological Survey of Canada (GSC) to the Nunavut Water Board (NWB). 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* (NW&NSRT Act) and the *Department of Indian Affairs and Northern Development Act* (DIAND Act). In conducting our review, AANDC referred to the documents on the NWB's FTP-site under 1BR-MDR----.

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

Sincerely,

Original Signed By

Eva Paul
A/Manager of Water Resources, Aboriginal Affairs and Northern Development
Canada, Nunavut Regional Office

Cc.

Kevin Robertson, A/Manager of Field Operations, Aboriginal Affairs and
Northern Development Canada, Nunavut Regional Office



Technical Review Memorandum

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

From: Eva Paul – A/Manager of Water Resources, Aboriginal Affairs and
Northern Development Canada, Nunavut Regional Office

**Re: 1BR-MDR---- New Water License Application – Iqaluit Metal Dump
Remediation Project – Transport Canada – Qikiqtani Region**

A. Project Description

On May 24, 2011 the Nunavut Water Board (the Board) distributed Transport Canada's (TC) application for a Type B water licence to allow for the disposal of waste associated with the Iqaluit Metal Dump Remediation and Risk Management Project. TC has requested a licence term from June 2011 to December 2016.

The Iqaluit Vehicle Dump and Community Landfill is situated approximately 1.7 km southwest of the city of Iqaluit and occupies an area of approximately 7.25 ha. It was used as a military landfill in the 1950's and 60's, and by the community of Iqaluit until the 1970's. Contamination from PHCs, PCB, metals, and pesticides is present. The purpose of the project is to remediate the site over a period of four years. This will include the recovery and removal of recyclable non-hazardous waste, the removal and proper disposal of hazardous waste, the landscaping and closure of the landfill, and monitoring of contaminants throughout. No water use is anticipated and no hazardous materials will be kept on-site. A waste management site will be established to sort excavated materials.

B. Results of Review

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

1. General

AANDC recommends that the proponent refer to the AANDC publication: *Abandoned Military Site Remediation Protocol; 2008, Vols I & II* to complete the items suggested in this review. Remediation protocols and monitoring should meet or exceed the standards described in this guide.



2. Operation/Maintenance

AANDC recommends that an Operation and Maintenance plan be requested from the proponent to address operation and maintenance procedures for the waste management facility, as well as runoff diversion and management measures in the project area. The proponent may refer to the *“Guidelines for the Preparation of an Operation and Maintenance Manual for Sewage and Solid Waste Disposal Facilities in the Northwest Territories; 1996”* in the preparation of this manual.

AANDC recommends that engineered or detailed design drawings be submitted for the landfill area and waste management site. These plans should include details of the diversion/interceptor trench and access road. AANDC would also suggest that the Board request confirmation that the gravel to be used as fill/cover material be from a non-potentially acid generating source.

As identified in the Summary of Potential Environmental and Resource Impacts document, there are a number of impact risks to water quality from hazardous materials and siltation. Mitigation measures should be detailed for each stage of the project in order to minimize the risk to water bodies from deleterious substances, sediment, or erosion. If berms are to be employed, a map or detailed drawings should be provided.

The proponent identifies the use of an existing Land Treatment Unit (1BR-LTU1013) for fuel-contaminated soil and describes the installation of monitoring wells at this facility. AANDC would suggest that the proponent clarify whether or not these changes conform to their existing water licence, and confirm that the proposed use will not exceed the capacity of their existing Land Treatment Unit.

AANDC notes that hazardous waste is to be disposed of off-site, however the location is not specified and authorization is not provided. AANDC recommends that the applicant specify where hazardous waste will be disposed, and provide a copy of the authorization to the Board.

3. Revised Spill Plan

AANDC recommends that the Spill Plan be updated prior to the field season to include the following information:

- a) An onsite contact number.
- b) Material Safety Data Sheets.

AANDC also notes that reference is made in the plan to INAC's Spill Inspector. This person is more accurately referenced as the Manager of Field Operations.



4. Monitoring Plan

AANDC recommends that a detailed monitoring program be provided to the Board. This plan should elaborate on construction and post-construction monitoring of soil and water quality, including frequencies, parameters and thresholds that meet the Board's approval. If thermal monitoring is not to be included in the monitoring plan, an explanation is requested.

Cc. Kevin Robertson, A/Manager of Field Operations, Aboriginal Affairs and Northern Development Canada, Nunavut Regional Office