



October 18, 2010

Our reference
File #9545-2-3.1BR.LTUA
CIDM #4331336

Sent by email: licensing@nunavutwaterboard.org

Your reference
1BR-LTU1013/TR/I1

Phyllis Beaulieu
Manager of Licensing
Nunavut Water Board
Gjoa Haven, Nunavut
X0E 1J0

**Re: Nunavut Water Board Licence #1BR-LTU1013/TR/I1, Transport
Canada, Iqaluit Airport Project, Qikiqtani Region, Abandonment and
Restoration Plan**

Dear Phyllis,

Thank you for your September 17, 2010 notice of Transport Canada's July 12, 2010 "Stand Alone Abandonment and Remediation Targets – LTU Closure," which was submitted to satisfy their water licence requirements. Interested parties were requested to review this submission and provide written representations by October 18, 2010.

A Technical Review Memorandum is provided for the Board's consideration.

Please do not hesitate to contact me by telephone at 867 975-4555 or email at david.abernethy@inac-ainc.gc.ca to discuss this submission.

Regards,

David W. Abernethy
Water Resources Regional Coordinator
Operations Directorate
Nunavut Regional Office
Iqaluit, Nunavut
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Encl.

c.c.: L.A. Cornacchio, Water Resources Manager
P. Kusugak, Field Operations Manager

Technical Review Memorandum

TO Phyllis Beaulieu
Manager of Licensing
Nunavut Water Board

OUR REFERENCE
File #9545-2-3.1BR-LTUA
CIDM #431336

FROM David Abernethy
Water Resources Regional Coordinator
Indian and Northern Affairs Canada

YOUR REFERENCE
1BR-LTU1013/TR/I1

DATE
October 18, 2010

SUBJECT Nunavut Water Board Licence #1BR-LTU1013/TR/I1, Transport Canada, Iqaluit Airport Project, Qikiqtani Region, Abandonment and Restoration Plan

A. PROJECT DESCRIPTION

On Sept. 17/10 the Nunavut Water Board (NWB or Board) provided notice of Transport Canada's July 12/10 "Stand Alone Abandonment and Remediation Targets – LTU Closure" that was submitted pursuant to Part I: Conditions Applying to Abandonment and Restoration or Temporary Closure, Item #1 of water licence, #1BR-LTU1013. Interested parties were requested to review this submission and provide written representations by October 18, 2010.

Part I, Item #1 of the licence states,

The Licensee shall submit to the Board for approval in writing, within sixty (60) days of issuance of this Licence, a standalone Abandonment and Restoration Plan, for the licensed facilities and include or address the following:

- a. Pre-ambule with effective period, project name, location description, reference to maps and regulatory instruments in place;*
- b. Introduction with descriptions of the project area, scope of the plan and when seasonal or final abandonment will be implemented;*
- c. Schedule with estimated time frame for carrying out the plan; and*
- d. Project infrastructure including seasonal and final abandonment and restoration procedures for the project components.*

B. RESULTS OF REVIEW

On behalf of the Indian and Northern Affairs Canada Water Resources Division I am providing the following comments / recommendations for the Board's consideration,

1. General Observations

Although the document submitted by Transport Canada, “Stand Alone Abandonment and Remediation Targets – LTU Closure,” addresses the Iqaluit Airport Project’s eventual abandonment and restoration it does not fully satisfy the requirements specified in Part I, Item #1 of the water licence. Rather, it appears to be the terms of reference/ scope of work for a contract that will be issued to close the land treatment unit following the remediation of petroleum hydrocarbon contaminated soils. It is recommended that Transport Canada submit a stand alone Abandonment and Restoration Plan that satisfies the Part I, item #1 of the licence.

2. Restoration of Excavated Sites

Restoration procedures for sites where petroleum hydrocarbon contaminated soils are excavated and transferred to the land treatment unit should be provided. The reclamation work required to mitigate any additional environmental impacts (e.g., erosion, ponding, permafrost disturbance) at each site following excavation works should be specified. This would include the former military site, two previously constructed land treatment unit cells, and a First Air cargo building.

3. Scope of Project

The scope of the Iqaluit Airport Project should be included in an Abandonment and Restoration Plan. The original 2006 licence application referenced the treatment of hydrocarbon contaminated soils from a former military site (also referred to as Apron 1) and two previously constructed land treatment unit cells at a former fire response training area. Since this time contaminated soils from the First Air cargo building have been transferred to the land treatment unit (refer to the 2008 Annual Report). It is unsure if the contaminated soils excavated from the First Air cargo building apply to the licence.

4. Estimated Time Frame

As stated in Part I, Item #1 of the licence, an estimated time frame for carrying out the abandonment and restoration of the Iqaluit Airport Project should be provided in a stand alone Abandonment and Restoration Plan. This information was not included in the submitted document. It should be noted that this time frame is dependent on the scope of the project. The lifespan of the land treatment unit should be confirmed and renovations/ modifications performed when necessary based on operations and maintenance findings (e.g., liner material may not be appropriate for actual project requirements).

5. Reference Maps and As-built Drawings

As stated in Part I, Item #1 of the licence, the project’s Abandonment and Restoration Plan should reference applicable maps. The submitted document did not reference any maps. It is recommended that a site map and as-built drawings for the two land treatment unit cells that were constructed in 2006 be included in the project’s Abandonment and Reclamation Plan. The site map should be set to an appropriate scale and identify the project area, areas excavated of petroleum

hydrocarbon contaminated soil, site infrastructure including the land treatment unit, nearby water sources, and contour levels.

Prepared by David Abernethy