



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

NWB File: 1BR-LOR0813  
CIDMS #: 449646

Feb 21, 2011

**Re: 1BR-LOR0813 – Cape Christian Long Term Monitoring Plan –  
Contaminated Sites Program – Indian and Northern Affairs Canada  
(INAC).**

Please be advised that the Indian and Northern Affairs Canada (INAC) Water Resources Division has completed a review of the Long Term Monitoring Plan for Cape Christian prepared by Indian and Northern Affairs Canada's Contaminated Sites Division for water license 1BR-LOR0813. The Nunavut Water Board (NWB) circulated the Long Term Monitoring Plan for comments on January 21, 2011. All documents related to the application posted on the NWB ftp site under 1BR-LOR0813 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) 975-4282 or by email at [Ian.Parsons@inac.gc.ca](mailto:Ian.Parsons@inac.gc.ca).

Sincerely,

*Original signed by*

Ian Parsons  
Regional Coordinator

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

Peter Kusugak, District Manager – Indian and Northern Affairs Canada,  
Nunavut Regional Office



## **Technical Review Memorandum**

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

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

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**Re: 1BR-LOR0813 – Cape Christian Long Term Monitoring Plan –  
Contaminated Sites Program – Indian and Northern Affairs Canada.**

### **Background**

Cape Christian is located 16 km to the Northeast of Clyde River on Baffin Island, Nunavut. Cape Christian is a former United States Coast Guard Long Range Navigation Communications Station. The Station was abandoned in 1975 without being decommissioned.

INAC took responsibility of the site and between 2008 and 2010 the site was remediated according to INAC Contaminated Sites document titled “Abandoned Military Site Remediation Protocol”.

Part of the Abandoned Military Remediation Site Protocol (AMSRP) is to not only clean-up abandoned military sites but also to ensure that the remedial work has been effective by setting up a long term monitoring plan. Part K Item 11 of the Water License 1BR-LOR0813 also requires the proponent to submit a long-term monitoring plan as a condition of their water license 1BR-LOR0813.

### **Recommendations/Comments**

The proposed Long Term Monitoring plan for Cape Christian is well done.

However, INAC Water Resources has a couple of comments.

The submitted plan is inconsistent in its classification of contaminated soils. Section 2.0: Monitoring Program, states that “Due to the small amounts of metals and PCB contaminated (TIER II) soils at the site...” and subsection 2.1.2: Post-closure Monitoring of the Non-Hazardous Waste Landfill (NHWL), references TIER I soils.



INAC recommends a clarification of the level/ classification of contaminated soils at Cape Christian, as there are different restrictions, remedial activities and monitoring requirements associated with the different categorized soils.

Also under Part K – Conditions applying to the Monitoring Program, Item 11, Table 1: Distant Early Warning Line Clean-Up Criteria (It is stated that this table is from INAC AMSRP) of the licence, Mercury is listed as a test parameter. However, in the submitted Long Term Monitoring Plan it is not included in the listed parameters that are routinely monitored.

INAC Water Resources recommends that Mercury be included as a parameter to be tested in the project's Long Term Monitoring Plan. If testing Mercury concentrations in soils is not necessary, INAC Contaminated Sites should submit a licence amendment application with the necessary supporting documentation to remove this parameter from licence condition Part K, Item 11.

As well, under section 2.1.1, Baseline Monitoring subsection Soil Monitoring, it is stated that a minimum of four (4) samples be taken around the perimeter of the proposed landfill, however in the AMSRP it is stated that a minimum of five (5) samples should be taken per area.

INAC recommends that the proponent follow the guidelines stipulated in the AMSRP, as this is the document that the proponent has referenced as following for the Long Term Monitoring Program.

In addition, INAC reminds the proponent that they must also follow any and all Parts of Water License 1BR-LOR0813 that pertain to monitoring, most notably Parts D and K.

INAC recommends that the proponent provide, to the NWB, all outstanding information, mentioned above, pertaining to the Long Term Monitoring Plan for Cape Christian Water License 1BR-LOR0813 before the plan is approved by the NWB.

Cc. Jim Rogers, Manager of Water Resources  
Peter Kusugak, Manager of Field Operations