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NWB3HAL0308
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September 17, 2003

Jim Wall
Technical Advisor
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU, X0E 1J0

Via email

**Re: The Hamlet of Hall Beach
Decommissioning of Old Sewage Lagoon**

Indian and Northern Affairs Canada (INAC) acknowledges and thanks Community, Government, and Transportation (CG&T) for their September 5, 2003 response to our concerns expressed to the Nunavut Water Board (NWB) regarding the decommissioning of the old Hall Beach sewage lagoon in a letter of the same date. Further these communications, INAC wishes to reiterate the requirements for the decommissioning of the old Hall Beach sewage lagoon as delineated by the guidelines of Hall Beach water licence NWB3HAL0308, drawing particular attention to the following:

1. Part E, Item 1 of the existing water licence states that the Licensee is required to submit to the NWB "*design drawings stamped by a qualified engineer registered in Nunavut prior to the construction of any dams, dykes, or structures intended to contain, withhold, divert or retain water or wastes.*". The proposed cover and containment of the sludge in the old Sewage Lagoon would therefore require these documents to be submitted and approved by the NWB prior to initiation of any such activities.
2. Part G, Item 1 of the existing water licence outlines the information to be included by the Licencee in a complete abandonment and reclamation (A&R) plan. INAC suggests that the following supplemental information in the associated sections of Part G, Item 1 would be of benefit in the assessment of a submitted A&R plan for the decommissioning of the Hall Beach Sewage Lagoon:
 - iv. The Licensee identify any sites in the vicinity of the lagoon that have been affected by waste spills, the remediation that has previously occurred at each of these sites, and plans for the completion of any outstanding remediation activities to accompany final lagoon decommissioning.

v. The Licensee provide a description of the potential for leachate, including the modeling of anticipated sludge freezing dynamics, and of anticipated volumes of water drainage into and out of the lagoon prior to the complete incorporation of sludge into the permafrost.

viii. The Licencee provide plans, potentially in conjunction with Point 1 listed above, of the surface and subsurface drainage patterns for the decommissioned lagoon, and include designs for the contouring of the cover material.

xi. The Licencee conduct a comprehensive assessment of hazardous materials in the decommissioned Sewage Lagoon site. This should include a characterization of the remaining sludge for hazardous constituents including but not necessarily exclusive to hydrocarbons, chlorinated organics, and metals. Such analysis should include sampling throughout the lagoon and through vertical cores of sludge to identify the degree and extent of archival contamination. In these analyses the total depth, and consequently volume, of sludge should be determined and the total hazardous material load calculated. These determinations are important in determining any required remediation and/or subsequent long-term site liability and monitoring.

At present INAC is unaware of any submissions by the Licencee to the NWB that address the aforementioned items, and consequently cannot provide technical comment and/or support for any decommissioning or A&R activity at the Hall Beach old Sewage Lagoon site. We do, however, encourage the installation of non-disruptive monitoring equipment that may be otherwise technically unfeasible if not conducted prior to winter freezing.

Please do not hesitate to contact me if there are any further questions or concerns.

Best regards,

Original signed by:

Stephanie Hawkins

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