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

NWB#: 8BR-KRK0609
CIDMS#: 398433

April 24, 2010

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

**Re: Renewal, Kugaaruk Landfarm Project (NWB#: 8BR-KRK0609),
Government of Nunavut – Department of Community and Government
Services**

Please be advised that Indian and Northern Affairs Canada (INAC) has completed a review of the Government of Nunavut's application for a renewal of Water License #8BR-KRK0609, Kugaaruk Landfarm Project located in the Kitikmeot Region of Nunavut. All associated documents related to this license posted on the Nunavut Water Board (NWB) ftp website under 8BR-KRK were included in my review (please see attached technical memo for recommendations).

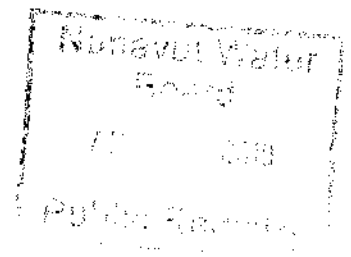
Should you have any questions or comments, please do not hesitate to contact me at (867) 975-4738 or by email at Andrea.Cull@ainc-ianc.gc.ca

Yours truly,

Original Signed By

Andrea Cull
Water Management Specialist

Cc: Lou-Ann Cornacchio, Water Resources Manager, INAC
Peter Kusugak, Field Operations Manager, INAC



Canada



Technical Review Memo

To: Phyllis Beaulieu, Manager of Licensing, NWB

From: Andrea Cull, Water Management Specialist, INAC

**Re: Renewal, Kugaaruk Landfarm Project (NWB#: 8BR-KRK0609),
Government of Nunavut – Department of Community and Government
Services**

BACKGROUND:

On September 9, 2009, the NWB received a renewal application for water licence #8BR-KRK0609 for water use and waste disposal associated with landfarming activities in the Kitikmeot region of Nunavut.

INAC HAS REVIEWED THE FOLLOWING DOCUMENTS:

- Cover letter dated September 15, 2009
- Water Licence Application Form
- Project Summary (English and Inuktitut)
- GN-CGS Authorization letter for Wardrop to act dated Dec 9, 2009
- Signed and Stamped Drawing 022880805-SKT-V0002, received February 26, 2010
- QAQC Plan, received February 26, 2010
- Soil Remediation Landfarm 2006-2008 Annual Report, received February 26, 2010
- Interim Abandonment and Reclamation Plan, received February 26, 2010
- Spill Contingency Plan, received February 26, 2010
- Operations and Maintenance Manual, received February 26, 2010

All associated documents related to this license posted on the NWB ftp website under 8BR-KRK were included in my review.

INAC recommends that the Board impose applicable standard conditions to this new water license. In addition, the following comments/ recommendations are provided for your consideration in the licence approval process.



RECOMMENDATIONS/ COMMENTS:

In August 2008 and July 2009 the supporting documentation suggests that water from the retention cell was released to the environment without any sampling done as required by the licence.

In September 2009, Wardrop Engineering installed five groundwater monitoring wells and took soil and water samples required by the licence. During this time a water sample was taken from the water remaining in the retention cell and from 3 of the monitoring wells, they showed no traces of petroleum contamination. The water sample results suggest that the water that was pumped out in August 2009 was likely not to be contaminated. As the sample results were not provided for this review it is not possible to confirm whether the discharge water was released in accordance with the criteria provided in the water licence.

While it is true that the soil remediation work at the site is of an overall environment impact it is difficult to comment on whether the management of the leachate/remediation water is being done in an appropriate manner due to the lack of discharge information from a quality and quantity perspective.

1. Monitoring Program

The current Water Licence (NWB# 8BR-KRK0609, Part I, Item 15) states that the licensee shall include summaries all of the data and information required by the "Monitoring Program" in the Licensee's Annual Report, as required per Part B, Item 1.

2. Annual Report

The current Water Licence (NWB# 8BR-KRK0609, Part B, Item 1) states that the Licensee shall submit an Annual Report to the NWB for approval no later than March 31st of the year following the calendar year reported. Soil Remediation Landfarm 2006-2008 Annual Report was received by the NWB on February 26, 2010. The 2009 Annual Report has not been submitted to the NWB, it should have been submitted with the application for renewal along with the other outstanding information noted in section 1 (above) to facilitate a proper review of the application.

3. Waste Disposal

The NWB should set effluent criteria similar to those in other licences with landfarms. For example all water discharged from the landfarm sump shall



analyse for total pH, suspended solids, oil and grease, ammonia-N, lead, benzene, toluene and ethyl benzene. Water samples shall be taken prior to discharge and weekly during discharge. The volume shall also be monitored daily during periods of discharge. Monitoring flow rates may also be considered during discharge periods.

4. Spill Contingency Plan

NWB# 8BR-KRK0609, Part G, Item 5:

The Spill Contingency Plan should make reference to the Nunavut Spill Report Line and include a copy of the Nunavut Spill Report Form. This form can be obtained from the Nunavut Water Board public registry at <http://www.nunavutwaterboard.org>. Please note that the 24-hour Spill Report Line telephone number is (867) 920-8130 and facsimile number is (867) 873-6924. Furthermore, INAC requests the proponent report all spills to Peter Kusugak, INAC Manager of Field Operations, phone: 867-975-4295, fax 867 975-6445 as well as the Nunavut Spill Report Line.

Prepared by: Andrea Cull, Water Management Specialist, INAC

Cc: Lou-Ann Cornacchio, Water Resources Manager, INAC
Peter Kusugak, Field Operations Manager, INAC