



Aboriginal Affairs and  
Northern Development Canada

<http://www.aandc-aadnc.gc.ca>

Affaires autochtones et  
Développement du Nord Canada

<http://www.aadnc-aandc.gc.ca>

North Mackenzie District  
P.O. Box 2100  
Inuvik, NT X0E 0T0

Telephone: 867-777-8900  
Fax: 867-777-2090

March 29, 2014

Northwest Territories Water Board  
P.O. Box 2531  
Inuvik, NT X0E 0T0

**Attn: Freda Wilson, Office and Finance Administrator**

**RE: INDUSTRIAL Water Use N7L1-1817  
CLASS B – INDUSTRIAL  
Mallik  
Swan Channel - Mackenzie River**

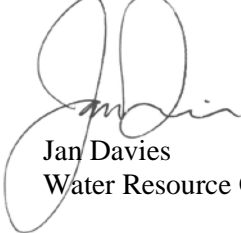
Dear Ms. Wilson,

Please find the enclosed Inspection Report for your review and records.

An electronic copy (un-editable Adobe pdf.) has also been provided by e-mail.

If you have any questions or concerns regarding the enclosed, and/or if additional information is required please contact me at (867) 777-8909.

Sincerely,



Jan Davies  
Water Resource Officer

Cc: Conrad Baetz, District Manager, North Mackenzie District, Inuvik, NT

Enclosure: Industrial Water Use Inspection Report and Cover Letter (4 pages)



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March 29, 2014

Aurora Research Institute  
Box 1450  
Inuvik, NT X0E 0T0

**Attn: Pippa Seccombe-Hett**

**RE: INDUSTRIAL Water Use N7L1-1817  
CLASS B – INDUSTRIAL  
Mallik  
Swan Channel - Mackenzie River**

Dear Ms. Seccombe-Hett,

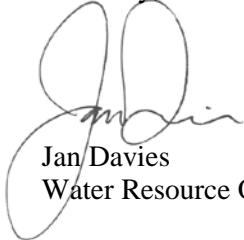
An inspection of the Aurora Research Institute Water Licence N7L1-1817 (expiry on November 30, 2016) was conducted on August 26, 2013. The operation under the above mentioned Industrial Water Use was inspected to assess compliance and ensure that the terms and conditions were met. Enclosed is a copy of the Inspection Report (3 pages) for your review and records.

There were no violations identified during the course of this Inspection. Please review and address the concerns and other items throughout the Inspection Report.

Please note that it is the Licensee's responsibility to ensure compliance with all of the terms and conditions of its Water Licence. A copy of this report will be sent to the Northwest Territories Water Board for their review and public records.

If you have any questions regarding the enclosed and/or if additional information is required, please do not hesitate to contact me at (867) 777-8900.

Sincerely,



Jan Davies  
Water Resource Officer

Cc: Conrad Baetz, District Manager, North Mackenzie District, Inuvik, NT

Enclosure: Industrial Water Use Inspection Report (3 pages)



## INDUSTRIAL WATER USE INSPECTION REPORT

<b>LICENCE #:</b>	<b>N7L1-1817, Mallik</b>	<b>EXPIRY DATE:</b>	<b>November 30, 2016</b>
<b>LICENCEE:</b>	<b>Aurora Research Institute</b>	<b>PREVIOUS INSPECTION:</b>	<b>October 02, 2012</b>
<b>COMPANY REP:</b>	<b>Pippa Seccombe-Hett</b>	<b>INSPECTION DATE:</b>	<b>August 26, 2013</b>

### WATER SUPPLY

Source:	Swan Channel - Mackenzie River	Quantity Used:	N/A
Owner/Operator:	Aurora Research Institute	Meter Reading:	N/A

**Indicate:**      **A - Acceptable**                  **U - Unacceptable**                  **N/A - Not Applicable**                  **N/I - Not Inspected**

Intake Facilities	N/A	Storage Structures	N/A	Treatment Systems	N/A	Recycling	N/A
Flow Meas. Device	N/A	Conveyance Lines	N/A	Pumping Stations	N/A	Chem. Storage	N/A
						Modifications	N/A

**Water Supply Comments:**

N/A

### WASTE DISPOSAL – WELL WASTE

Disposal Method	Off - Site Removal								
Off-Site Removal	Y	Drilling Sump	N	Downhole Injection	N	Treat and Landsread	N	Other	N/A

**Indicate:**      **A - Acceptable**                  **U - Unacceptable**                  **N/A - Not Applicable**                  **N/I - Not Inspected**

Sump Liners	N/A	Sump Treatment	N/A	Freeboard	N/A
Erosion	N/A	Construction	N/A		
SNP Samples Collected	N/A				

**Well Waste Comments:**

- Subsidence similar to before.
- Ponding occurring in subsided areas.
- Large cracks present on 2002 camp sump.

### WASTE DISPOSAL – SOLID WASTE

Disposal Method	Landfill							
Open Dump	N	Landfill	Y	Burn & Landfill	N	Underground	N	
Offsite Removal	N	Other	N/A					
Owner / Operator	Aurora Research Institute							

**Indicate:**      **A - Acceptable**                  **U - Unacceptable**                  **N/A - Not Applicable**                  **N/I - Not Inspected**

Runoff Diversion	N/A	SNP Samples Collected	N/A
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## INDUSTRIAL WATER USE INSPECTION REPORT

**Solid Waste Comments:**

- Site clean of debris.
- It looks like there is some garbage that washed up onto the site. If on site it would be prudent to remove.

**GENERAL CONDITIONS/REPORTS/PLANS**

**Indicate:            A - Acceptable                    U - Unacceptable                    N/A - Not Applicable                    N/I - Not Inspected**

C &R Plan	N/A	Records & Reporting	N/I	Final Report	N/A
Geotechnical Inspection	N/A	Posting, Signage	N/A	Contingency Plan	N/A
Restorations Activities	A	Spills	A	O&M Plan	N/A
Maintenance	N/A	Modifications	N/A	Annual Report	N/I

**General Condition Comments:**

- Subsidence on camp sump had some restoration and borehole sampling work done back in August 2009.
- Sumps look similar, compared to before.
- 10-20% vegetation cover on most sumps, slow vegetation growth.
- Very little bare soil due to disturbance.
- Area appears to have little influence from the Mallik Gas Hydrate Research project.
- No sumps were used for the Mallik 2006-08 Gas Hydrate Production Research Project, however there were commitments to monitor the other drilling sumps Mallik 2L-38 and Mallik 3L/4L/5L-38 in the area.

**NON-COMPLIANCE/VIOLATIONS OF ACT OR LICENCE**

N/A

Inspector's Signature:



## INDUSTRIAL WATER USE INSPECTION REPORT

**Inspection Images:**

**Figure 1**  
1998 Flare Pit at northend, subsidence present.



**Figure 2**  
1998 Camp Sump subsidence and ponding at east end.



**Figure 3**  
1998 Drill Sump subsidence and ponding at east end and throughout.



**Figure 4**  
March 2, 2007 cuttings spill area. No cuttings seen and no sign of impacts.



**Figure 5**  
2002 Camp Sump subsidence at southend.



**Figure 6**  
2002 Drill Sump subsidence at southend.

