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April 13, 2007

Your file – Votre référence  
XXX-XXXX

Our File – Notre référence  
N7L1-1817

Sent by mail/e-mail:

Aurora Research Institute  
P.O. Box 1450  
Inuvik, NWT  
Canada X0E 0T0

**Attention: Andrew Applejohn, Director**

Dear Mr. Applejohn:

**RE: FEBRUARY 14, 2007 INSPECTION OF WATER LICENCE N7L1-1817  
MALLIK GAS HYDRATE RESEARCH PROJECT**

Please find the enclosed Inspection Report for your records. Note that this Inspection Report will replace the Inspection Report currently in your files with the misprinted date of February 9, 2007.

If you have any questions/concerns regarding the enclosed, and/or if additional information is required, please do not hesitate to contact Mr. Davies at (867) 777-3662.

Sincerely,

Conrad Baetz  
District Manager

JCD/cb

Enclosure: Industrial Inspection Report (3 pages)



## INDUSTRIAL WATER LICENCE INSPECTION REPORT

<b>DATE:</b>	February 14, 2007	<b>COMPANY REP:</b>	Mike DeVisser
<b>LICENSEE:</b>	Aurora Research Institute	<b>LICENCE #:</b>	N7L1-1817

### WATER SUPPLY

Source:	Swan Channel Mackenzie River	Quantity Used:	<500 m <sup>3</sup> /day	Meter Rdg:	Monitored by truckload
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**Indicate:**      **A - Acceptable**                      **U - Unacceptable**                      **N/A - Not Applicable**                      **N/I - Not Inspected**

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

### WASTE DISPOSAL

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

<b>Well Wastes:</b>	Drilling Sump:	N/A	Off-Site Removal:	A	Downhole:	N/A	Landsread:	N/A
<b>Sewage:</b>	Sewage Treat:	U <sup>1</sup>	Camp Sump:	N/A	Nat. Water Body:	N/A	Wetlands Treat.:	N/A
	Continuous:	N/A	Inter. Discharge:	N/A				
<b>Solid Waste:</b>	Open Dump:	N/A	Landfill:	A	Burn & Bury:	N/A	Underground:	N/A

Discharge Quality	U <sup>1</sup>	Conveyance Lines	U <sup>2</sup>	Disch. Meas. Dev.	A	Freeboard	N/A
Decant Structures	A	Sump Treatment	N/A	Dams, Dykes	N/A	Seepages	N/A
Sump Liners	N/A	Runoff Diversion	N/A	Erosion	N/A	Spills	U <sup>3</sup>

Effluent Discharge Rate:	N/A	SNP Samples Collected:	Samples being collected as per SNP requirements
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#### Concerns:

1. As of this inspection date, discharge quality of sewage effluent has not been met for 4 consecutive times at the Mallik site, consequently the treated sewage is being trucked to the Town of Inuvik Sewage Lagoon.
2. The conveyance lines are acceptable for the Mallik Site but there was sewage leaking (as frozen icicles) from the conveyance lines (Figure 1) and the sewage holding tank (Figure 2) at the Grubens Sleigh Camp. This was mentioned to Mike DeVisser and instructions were given to remove the frozen sewage, use drip trays and complete the necessary repairs. There was sewage spillage from the sewage holding tank at the Mallik site when it was being transferred to the vacuum truck. It was mentioned that the frozen spilled sewage was to be cleaned up and a drip tray was to be used during the transfer of sewage to the vacuum truck.
3. The spills around the site are being cleaned up as they occur. There were some drips noticed and pointed out to the Environmental Monitor and Mike DeVisser. It was observed that there was inefficient equipment used to clean up spills. The right kind of equipment was suggested to enable more efficient cleanup of spills throughout the site. When there are spills consistently coming from certain equipment, this equipment needs to be repaired. Drip trays and tarps can also be used to prevent further spills.

#### Notes:

- The spilled sewage at the Grubens Sleigh Camp needs to be entered into the Spill Log in addition to being cleaned up.

### GENERAL CONDITIONS

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

Maintenance	U <sup>1</sup>	Records & Reporting	U <sup>2</sup>	Surv. Net. Prog.(SNP)	A
Geotechnical Inspection	N/A	Posting, Signage	N/I	Contingency Plan	A
A & R Plan	N/A	Modifications	N/A	Fuel/Products Storage	A
Groundwater Discharge	N/A	Chemical Storage	N/I	Annual Report	N/A

#### Concerns:

1. Due to leaking sewage from the Conveyance Lines and the sewage holding tank at the Grubens Sleigh Camp there needs to be better maintenance of equipment like conveyance lines and sewage holding tanks. When there are spills consistently coming from certain equipment, this equipment needs to be better maintained.
2. There were records of water usage but there were not specific records pertaining to the areas (lease pad, access road to pad, camp use, rig and drilling use) covered by the Water Licence. In order to properly measure water usage there needs to be specific records kept and instructions were given to Mike DeVisser on the kind of water usage record expected. There was a

hand written Spill Log kept on site; instructions were given and an electronic version was suggested to assist with record keeping.

Notes:


- Weekly reporting was suggested to provide effective communication.

<b><i>Non Compliance / Violations of Act or License:</i></b>	<i>1. No Non-compliance/Violation of Act or Licence</i>
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General / Additional Inspection Comments:

1. Please ensure the 2007 Annual Report is submitted to the NWT Water Board and includes all information as per Part B1

Figures Below:	Yes	X	No	
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<b><i>Inspectors Name</i></b> <i>Jan Davies</i> <i>Water Resource Officer</i>	<b><i>Inspectors Signature</i></b> 
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## LIST OF FIGURES FOR INSPECTION REPORT

**Figure 1. Sewage leaking from conveyance lines at the Grubens Sleigh Camp.**



**Figure 2. Sewage leaking from the sewage tank at the Grubens Sleigh Camp.**

