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July 13, 2005

xxx-xxxx

Sent by mail and e-mail:

N7L3-0714 (Renewal)

Incorporated Hamlet of Tuktoyaktuk  
P.O. Box 120  
Tuktoyaktuk, NT  
Canada X0E 1C0

**Attention: Debbie Raddi, Senior Administrative Officer**

Dear Ms. Raddi:

**RE: JULY 5, 2005 INSPECTION OF WATER LICENCE N7L3-0714  
INCORPORATED HAMLET OF TUKTOYAKTUK**

As you are aware, Kevin Glowa, Water Resources Officer, conducted an inspection at the Hamlet of Tuktoyaktuk (the 'Hamlet') on July 5, 2005. Specifically, the Hamlet's water supply and waste disposal facilities were inspected under Water Licence N7L3-0714 (Renewal). Enclosed is a copy of the Inspection Report (4 pages) for your review and records. Also attached are water sample results (11 pages) collected in 2004 from SNP stations 0714-1, 2, and 3 for your review and records.

Unfortunately there were a number of violations as depicted on page two (2) of the Inspection Report. If the violations have already been addressed please contact Kevin Glowa at your earliest convenience. Further, please review the concerns as depicted throughout the Inspection Report.

As indicated throughout the inspection report many of the violation are re-occurring from previous years and are clearly not being addressed. INAC recognizes the concern when issuing violations year after year for the same re-occurring issues. We look foreword to the Hamlet one day receiving no violations on their Water Licence and look foreword to working with the Hamlet as much as possible to achieve this.

Lastly, On July 5<sup>th</sup>, 2005 a meeting was conducted to discuss issues pertaining to Kudlak Lake Spill 04-572. As brought forth and discussed please make Kudlak Lake your priority. INAC understands the urgency and, even though important, the various violations as depicted throughout the Inspection Report can be dealt with in the near future (next couple of months).

Pending your review, a copy of this report will be sent to the Northwest Territories Water Board on **July 25, 2005** for their review and/or public records. If no response is received by this date we will assume you have no concerns.

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

Sincerely,

Rudy A. Cockney  
District Manger

KRG/rc

Enclosure:      Municipal Inspection Report (4 pages)  
                     2004 Water Sample results (11 pages)



MUNICIPAL WATER LICENCE INSPECTION REPORT

DATE:	July 5, 2005	COMPANY REP:	Dave Krengnektak (Acting Foreman)
LICENSEE:	Incorporated Hamlet of Tuktoyaktuk	LICENCE #:	N7L3-0714 (Renewal)

WATER SUPPLY – Figures 1-6 below

Source:	Kudlak Lake	Quantity Used:	Refer to Annual Reports	Meter Rdg:	Does not work
Owner/Operator:	Incorporated Hamlet of Tuktoyaktuk				

Indicate:		A - Acceptable		U - Unacceptable		N/A - Not Applicable		N/I - Not Inspected	
Intake Facilities	U <sup>1</sup>	Storage Structures	A	Treatment Systems	A	Chem. Storage	U <sup>2</sup>		
Flow Meas. Device	U <sup>3</sup>	Conveyance Lines	N/I	Pumping Stations	U <sup>4</sup>	Modifications	N/A		

Concerns:

- 1. Spill 04-572 clean up still in progress (figure 1-4).
- 2. Bag of chemical above the doorwell and should be stored in appropriate area (figure 5).
- 3. Water meter at the time of inspection did not work.
- 4. Relating to spill 04-572 pumping facilities at Kudlak Lake (figure 1) and water treatment facility (figure 13) are unacceptable. Specifically this relates to fuel storage and Spill 04-572 which has still not been cleaned up and remediated.

Notes:

- GNWT Health Bob Mellett was present on this inspection.
- Incorporated Hamlet of Tuktoyaktuk meeting regarding the Kudlak Lake spill 04-572 occurred at 1:00 pm. Attendees were Debbie Raddi, John Picek, Bob Mellett, Mervin Gruben, Kyle Sherwin, Peter Nogasak, Barry Jacobson, Robert Gruben, Marylyn Cockney, and Sara Dando (by telecom).
- Water Treatment Plant was secure.

WASTE DISPOSAL – Figures 7-12 below

Sewage	Sewage Treatment System (primary, secondary, or tertiary):		Primary Lagoon		
	Natural Water Body:	✓	Continuous Discharge (land or water):		
	Seasonal Discharge:	✓ Fall Decant	Wetlands Treatment:		Trench:

Solid Waste	Owner/Operator:	Incorporated Hamlet of Tuktoyaktuk			
	Landfill:	✓	Burn & Landfill:	No Longer Permitted	Other:

Indicate:	A - Acceptable	U - Unacceptable	N/A - Not Applicable	N/I - Not Inspected			
Discharge Quality:	N/I <sup>See notes</sup>	Construction:	N/A	Disch. Meas. Dev.	A	Freeboard:	A - >50cm
Decant Structures:	A	O&M Plan:	U <sup>3</sup>	Dams, Dykes:	A	Seepages:	A
Dyke Inspections:	A	A&R Plan:	N/A	Erosion:	A	Spills:	U <sup>4</sup> – 04-572

Periods of Discharge:	-Sewage Lagoon was decanted in October 2004. -Last decant of the Solid Waste Disposal Facilities (SWDF) Lagoon was in October 2003.	Effluent Discharge Rate:	Equal to pump rate.
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Concerns:

- 1. As indicated in the 2003 and 2004 Inspection Reports the old/historic Solid Waste Disposal Facilities (SWDF) waste oil and hazardous materials area (Figure 10-12) are becoming permanent storage areas. It is recommended that every effort be made to dispose of these materials at a certified disposal facility. Long term/permanent storage of this material is not recommended. As indicated in the 2004 Inspection Report it is only a matter of time before spills occur. This in fact is now the case as various materials in and around the area have escaped included a large area where pooled oil was found (figure 12). Lastly, it seems that there is no designated area for these materials. It is assumed that these materials are being deposited in the domestic garbage disposal area which eventually make their way to the SWDF Lagoon (figure 9)
- 2. As indicated in the 2004 Inspection Report there are no signs seen for waste segregation at SWDF. Signs should be posted for various areas including but not limited to: domestic garbage, tires, appliances, wood, bulky metals, and hazardous wastes (oils, paints, lead-acid batteries) if accepted. It is understood that signs are being made and will be placed in and around the SWDF shortly. This was also flagged in the Tuktoyaktuk Landfill Condition Assessment Report submitted July 14, 2004.
- 3. As indicated in the 2003 and 2004 Inspection Reports the O&M plan was deemed incomplete by the NWT Water Board. September 2000 Drafts as prepared by UMA engineering have been received at this office. As per the new “Renewed” Water Licence Part H1 this Plan is Due October 1, 2005.
- 4. Spill 04-572 clean up still in progress (figure 1-4).
- 5. Currently unclear as to the location of the bagged toilet wastes disposal area (Part D8). Upon conversation with Dave it seems that there is no disposal location for honey bags.

Notes (Waste Disposal):

- No leaks found at the Sewage and SWDF Lagoon containment berms.
- No decant from Sewage Lagoon after the last inspection period. The last decant occurred in October 2004. An assessment will be made in the next Inspection Report. The 2004 Inspection report indicated high pH levels above MAC criteria.

FUEL STORAGE – Figures 13 below

Owner:	Hamlet	Operator:	Hamlet	Condition of Tanks:	Poor
Berms & Liners	N/A	Water within Berm:	N/A	Evidence of Leaks:	**Yes**
Drainage Pipes:	N/A	Pump Station and Catchment Berm:	None		
Pipeline Condition:	N/A	Distribution lines:	Corroded and leaking		

Concerns:

- As indicated in the 2003 & 2004 Inspection Report there is a small fuel spill at water treatment plant (figure 13). Fuel tank and distribution/conveyance lines badly corroded.

Notes:

- The Hamlet is aware of the poor condition of this tank and the distribution lines both in 2003 and 2004.

SERVELLANCE NETWORK PROGRAM (SNP) – Figures 14-16 below

Samples Collected (Hamlet)	-Hamlet collected various samples from SNP 0714-2 in 2004 as per SNP Part B1.		
(DIAND)	-Samples taken at SNP 0714-1, 2, &3 (all single composite grab samples). -Sample taken of ocean water at north east most end of town (boat launch). -All results pending. <b>Initial results indicated that pH is below 9.</b> -2004 sample results (attached) are summarized below. <ul style="list-style-type: none"><li>0714-1 – No concerns;</li><li>0714-2 – High pH (9.34) and above limit for discharge. Ammonia relatively low; and</li><li>0714-3 – Elevated parameters. As a result of elevated calcium, magnesium, sodium, potassium and chloride the increase is likely a result of ocean influence.</li></ul>		
Signs Posted: SNP	Yes but SNP 0714-2 and 3 are in wrong locations. Please see SNP, concern 1 in the 2004 Inspection Report.	Warning	No Warnings seen.
Records & Reporting:	-2003 and 2004 Annual Reports not received. -Sewage Lagoon Discharge Assessment received May 24, 2005. Please unsure the outstanding components as described in Part D9 are submitted before February 1, 2006. -Condition Assessment Report of Tuktoyaktuk Sewage Lagoon submitted August 11, 2004. - Tuktoyaktuk Landfill Condition Assessment Report submitted July 14, 2004.		
Geotechnical Inspection	Please see Condition Assessment Report of Tuktoyaktuk Sewage Lagoon submitted August 11, 2004 and Tuktoyaktuk Landfill Condition Assessment Report submitted July 14, 2004.		

Concerns:

- SNP 0714-1 needs to be re-painted (figure 14).
- SNP 0714-2 & 3 signs (figures 15&16 respectively) posted but should be relocated. Please see SNP, concern 1 in the 2004 Inspection Report.

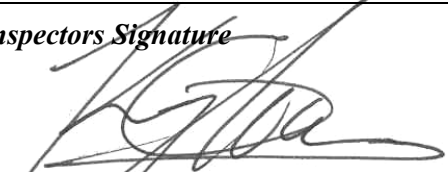
Notes:

- As a reminder please note that any discharge from the SWDF lagoon must occur between September 15 and October 31 (Part D12) upon receipt of an Inspectors Approval (Part D11). Also see conditions for discharge (Part D13-D18).

Non compliance / Violations of Act or License:	<div>1. Part B, section 1. 2003 Annual Report not submitted.</div> <div>2. Part B, section 1. 2004 Annual Report not submitted.</div> <div>3. Part B, section 4. Water meter not functioning.</div> <div>4. Part B, section 5. SNP signage not maintained to the satisfaction of an inspector.</div> <div>5. Part C, section 2. As a result of not receiving the Annual Report the Annual Water usage is unknown.</div> <div>6. Part H, section 1. No board approved O&amp;M plan. Please unsure this is completed by October 1, 2005.</div>
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General / Additional Inspection Comments: No additional Comments.

Figures Below:	Yes	X	No	
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Inspectors Name Kevin R. Glowa (M.Sc.,R.P. Bio.) Water Resource Officer	Inspectors Signature 
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LIST OF FIGURES FOR INSPECTION REPORT

Figure 1. Water Supply. Kudlak Lake 050524 spill 04-572. Investigation Pending.



Figure 2. Water Supply. Kudlak Lake 050524 spill 04-572. Investigation Pending.



Figure 3. Water Supply. Kudlak Lake 050628 spill 04-572. Investigation Pending.



Figure 4. Water Supply. Kudlak Lake 050628 spill 04-572. Investigation Pending.



Figure 5. Water Supply. Water Treatment Building.



Figure 6. Water Supply. Water Reservoir.



Figure 7. Waste Disposal. Sewage Lagoon containment berm.



Figure 8. Waste Disposal. SWDF Lagoon containment berm.





LIST OF FIGURES FOR INSPECTION REPORT CONTINUED

Figure 9. Waste Disposal. SWDF general south view.



Figure 10. Waste Disposal. SWDF waste oil and hazardous wastes area.



Figure 11. Waste Disposal. SWDF waste oil and hazardous wastes area.



Figure 12. Waste Disposal. SWDF waste oil and hazardous wastes area and pooled/spilled oil.



Figure 13. Fuel Storage. Fuel storage at water treatment plant.



Figure 14. SNP. SNP 0714-1 Water Reservoir.



Figure 15. SNP. SNP 0714-2 Effluent Discharge structure at the Sewage Lagoon.



Figure 16. SNP. SNP 0714-3 at North east Solid Waste Lagoon.

