

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

Affaires Indiennes et du Nord Canada

www.ainc.gc.ca

Telephone: (867) 777-3361

Fax:

(867) 777-2090

COPY BOARD

G. W.

E. A.

FILE

W. RES. **NMDO**

JM 1

PUPI

November 2, 2007

Northwest Territories Water Board P.O. Box 1326 Yellowknife, NT X1A 2N9

Attn: Vicki Losier, Executive Assistant

RE: Municipal Water Licence (N7L3-0714)

Dear Ms. Losier,

Please find the enclosed Inspection Report for your review and/or 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 867-777-3662.

Sincerely,

Jan Davies

Water Resource Officer

Cc:

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

Inuvik Sub-District

Enclosure:

Water Licence Inspection Report (3 pages)

Municipal Solid Wastes Suitable for Open Burning Document



DATE:	August 2, 2007	COMPANY REP:	Peter Nogosak		
LICENCEE:	Incorporated Hamlet of Tuktoyaktuk	LICENCE #:	N7L3-0714		

WATER SUPPLY

Source:	Kudlak Lake	Quantity Head:	Unknown due insufficat accept
Bource.	Rudiak Luke	Quantity Used:	Unknown due insuffient reports

Owner/Operator: Hamlet of Tuktoyaktuk

Indicate: A	 Acceptable 	U - Unaccep	table	N/A - Not Applicat	ole N	/I - Not Inspected	
Intake Facilities	N/I	Storage Structures	A	Treatment Systems	A	Chem. Storage	A
Flow Meas. Devic	e A	Conveyance Lines	N/I	Pumping Stations	N/I		

Comments:

Note:

- Intake Facilities, Conveyance Lines, Pumping stations located at Kudluk Lake were not inspected. The Conveyance Lines, Pump Station located at the Raw Water Reservoir and Truckfill Station were inspected and found to be Acceptable.
- Water meter is broken but use flow meter on pipe at roof level and records are being kept.
- There has been adequate clean up and remediation of Spill 04-572 to date.
- Due to the spill that occurred in 2004 at the Kudluk Lake water intake and pump station there are a number of measures being used. A propane motor is being used to run the pump and there is a diesel backup. The Raw Water Resevoir is filled over a 3 week period during which time there is a 24hr watch of the pump station a Kudluk Lake and it is checked 3 times a day.

WASTE DISPOSAL

Sewage	Sev	wage Treatmen	t Sys	tem (primary, second	ary, or tertiary)	prin	nary lagoon			
	Natural Water Body A			Continuous Discharge (land or water)		N/A				
	Sea	asonal Disch.	A		Wetlands Treatn	nent	N/A		Trench	N/A
Solid Was	Waste Owner/Operator: Hamlet of Tuktoyal				ctuk					
		Landfill		$U^{1,4,5}$	Burn & Landfill		Conditionally accepta	able	Other	N/A

Indicate: A - A	cceptab	le U - Una	cceptable	N/A - Not Applic	able	N/I - Not Inspected	
Discharge Quality	A	Construction	N/A	Disch. Meas. Dev.	Α	Freeboard	U^4
Decant Structures	U^7	O&M Plan	U^6	Dams, Dykes	$U^{2,\cdot}$	Seepages	A
Dyke Inspections	N/A	A&R Plan	N/A	Erosion	U^2	Spills	U^3
Periods of Discharge	I	Late Fall	Eff	luent Discharge Rate		Equal to pump rate	

Comments:

Concerns

- 1. Signage was present at the Solid Waste Disposal Site however, additional signage is needed to further increase public guidance and waste segregation. Signs should be posted for but not limited to the following areas: domestic garbage, waste tires, waste appliances(washers/dryers, etc.), wood waste, bulky metal wastes, empty drums, honey bag pit, and hazardous waste(waste oil, batteries etc.).
- 2. There was visible erosion on the southside of the Sewage Lagoon and will need to be dealt with before greater erosion and damage to the dyke occurs. (see figure 1)
- 3. There was oil staining present at the sewage dump off in addition to the dyke surrounding the Sewage Lagoon. There is potential for this to contaminate water in the area. This contaminated soil needs to be removed and sent to a proper disposal facility. Leaks from vehicles need to be repaired to prevent further problems. (see figure 2)
- 4. There is less than 0.5 metres of freeboard maintained at the Solid Waste Lagoon. The dyke needs to be built up to ensure there is a proper freeboard. A freeboard limit of 0.5 metres shall be maintained at all times at all dykes and earthfill structures.(see figure 3)
- 5. There was a burn bin located on the north side of the Soild Waste Disposal Facilities. Burning of non-segragated Municipal Solid Waste(MSW) remains an unacceptable option for the management of MSW. Municipal Solid Wastes that are conditionally suitable for open burning are paper products, paperboard packaging and untreated wood wastes according to the document from the GNWT Department of Environment and Natural Resources titled 'Municipal Solid Wastes Suitable for Open Burning' (Please see enclosed document). (see figure 4)
- 6. A draft O&M Plan was submitted in October 2005 for the Solid Waste Disposal Facilities. There is no indication

- anere has seen adequate elemi up and remediation of spin o 1 5 /2 to date.
- Only the Sewage Lagoon was decanted in 2006, while both the Sewage Lagoon and Solid Waste Lagoon were decanted in 2005
- Used oil goes to E-Grubens Transport
- More signs were present on site at one time but some have been damaged.
- Groundwater monitoring wells all around the Solid Waste Disposal Facility should be properly maintained. Monitoring wells should be covered and locked to preven contamination of groundwater and future samples.

FUEL STORAGE

Owner:	Hamlet of Tuktoyaktuk		Operator:		Hamlet of Tuktoyaktuk	Condition of tanks:		Good
Berms & Liners	iners N/A		Water within Berm:		N/A	Evidence of Leaks:		None detected during inspection
Drainage Pipes N/A			Pump	Station and Cate	hment Berm	N/A		
Pipeline Condition Corroded detected		, no leaks	Not Applicable:			N/A		

Comments:

Notes

- It would be advisable to replace the corroded pipe from the fuel storage tank to eliminate the possibility of a spill.
- Since fuel is stored at the intake facilities it is recommended to have spill kits on site to respond to any spills that might occur.

SURVEILLANCE NETWORK PROGRAM

Samples Collected	Ham	ollected samples						
	DIA	ND Sa	Samples collected from SNP 0714-2 by Water Resources					
Signs Posted: SNP	Signs posted and correctly located	d W	arning	More signage needed throughout facilties. Need to identify the landfill and also where chemicals are stored.				
Record & Reporting	2001-2006 Annual Reports not submitted							
Geotechnical Inspection N/A								
Non-Compliance of	1. Part B, section 1. 2	2002-2006 Annual Reports not submitted.						
Act or Licence:	2. Part B, section 4. V	Water meter is broken and not working.						
3. Part C, section 2. As a result of not receiving the Annual Report the Annual usage is unknown.								
	980	A freeboard limit of 0.5 metres is not being maintained at all times at all dykes.						
	***	Water shall be removed from the Solid Waste Lagoon using a floating intake.						
	6. Part E, section 2. Written approval from the board is needed for a modification							
	i t	he Decar	e Decant Process and Structure.					
			No board approved O&M plan for the Solid Waste Disposal Facilities.					

Inspector's Signature:

Date: August 2, 2007 Licence #: N7L3-0714

Inspection Images:

Figure 1
Erosion present on dyke on the south side of the Sewage

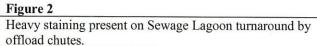






Figure 3
Less than 0.5 metres of freeboard maintained at the Solid Waste Lagoon.

Figure 4
Burn bin located on the north side of the Solid Waste Disposal Facilities.





Municipal Solid Wastes Suitable for Open Burning

Municipal solid wastes (MSW) that are conditionally suitable for open burning are paper products, paperboard packaging and untreated wood wastes only.

Conditions for this burning are:

- * The principle of source reduction should be utilized to reduce, reuse and recycle materials otherwise bound for landfill.
- * The appropriate materials are segregated and burned in a controlled manner and site which is separate from the working landfill so that the fire cannot spread. Standard burning conditions shall apply to burning such as on days where winds are light, blowing away from the community, in manageable volumes so that fires do not get out of control, having applicable permits and managed by an authorized, qualified person from the community. These are conditions also recommended in the Municipal and Community Affairs Solid Waste Modified Landfill Guidelines.
- * Building demolition wastes should not be burned unless they have been sorted to remove non-wood wastes such as roofing materials, electrical wire, plastics, asbestos and other non-wood wastes.
- * Waste wood treated with preservatives such as creosote, pentachlorophenol or heavy metal solutions shall not be burned. Examples of treated wood materials include railroad ties, telephone/hydro poles, pilings, cribbing and foundations.
- * Following a review of the specific landfill location, additional local conditions or controls may be applied.

Where geographic conditions do not allow for the proper operation of a modified landfill, such as because of limited availability of cover materials and unsuitable ground conditions, communities may have to assess other alternatives of MSW management ie: balefill, incineration. The open burning of non-segregated MSW remains an unacceptable option for the management of MSW. Continuation of this practise should not be allowed unless a site-specific assessment fails to identify a feasible and practical alternative. At that point some form of segregation will be required.