



MUNICIPAL WATER USE INSPECTION FORM

DATE:	October 2, 2003	COMPANY REP:	Paul Nogasak (foreman)
LICENSEE:	Hamlet of Tuktoyaktuk	LICENCE #:	N7L3-0714

WATER SUPPLY – Figures 1-3 attached

Source:	Kudlak Lake	Quantity Used:	Refer to Annual Reports
Owner/Operator:	Hamlet of Tuktoyaktuk		

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

Concerns:

- Treatment Facility (Tuk. Truckfill Station) (figure 1) diesel fuel storage container (figure 2) has no double containment and has corroded transfer line (figure 3). In addition the transfer line is not protected. Careful inspection of the line and use of a double contained container should be considered. There is potential for a fuel spill. If fuel spill does occur fuel will travel south east and enter a pond approximately 25 m away. Currently this pond does not serve any particular use.
- Old 200 L drum (figure 2) should be removed and disposed of at an appropriate area.

Comments:

- Water Reservoir was filled in September.
- Dave Krengnekak takes care of the Water Treatment Facility. Dave samples 2x per week from the distribution trucks.
- Water meters are working properly.
- Records in good order.
- Area is fully secure.

WASTE DISPOSAL – Figures 4-16 attached

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

Solid Waste	Owner/Operator:	Hamlet of Tuktoyaktuk					
	Landfill:		Burn & Landfill:	✓	Other;		

Indicate:		A - Acceptable	U - Unacceptable	N/A - Not Applicable	N/I - Not Inspected		
Discharge Quality:	U ¹	Construction	N/A	Disch. Meas. Dev.	N/A	Freeboard:	A
Decant Structures:	A	O&M Plan:	Incomplete	Dams, Dykes:	U ⁸	Seepages:	None Reported
Dyke Inspections:	A	A&R Plan:	N/A	Erosion:	A	Spills:	None Reported

Periods of Discharge:	Sewage Lagoon was decanted at the end of October. SWDS pond was decanted in October.		Effluent Discharge Rate:	Equal to pump rate.
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Concerns:

- Discharge of the Sewage Lagoon (figures 4-7) was requested on August 26, 2003. Approval of the discharge was rejected due to high pH levels that could potentially harm aquatic ecosystems (above pH 9). As per our letter dated October 22, 2003 fall emergency decant was authorized to maintain structural integrity of the containment berm (Figure 4,5) and thus Sewage Lagoon. All other parameters were sampled on time and met license effluent quality standards. After review of previous year’s analytical results this trend was not seen. In the future, industrial discharges to this lagoon will be discouraged until the Hamlet can meet their License Discharge criteria. As a note the Hamlet was diligent and made every effort, through sampling and delaying discharge, to meet discharge criteria.
- Currently there is no disposal area for old lead acid batteries. This issue should be addressed.
- Oil and fluids in old vehicles disposed of at the metal waste storage area (figure 12, 13) are not drained and removed. It is a matter of time before this material escapes causing contamination of ground and/or surface water.
- Many propane and Freon bottles in bulk metal wastes storage area as well as old fridges and stoves. It is recommended that these materials be separated.
- Fence around the SWDS needs repair. There are various areas that show damage.
- Like many communities the waste oil and hazardous materials area (Figure 14, 15) 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. It is only a matter of time before spills occur and this becomes a liability. It is understood that there is a plan to dispose of this material at Grubens. However, there is no timeline. Plans should be made to address this issue and should be addressed in the O&M Plan.
- Hazardous waste storage area (figure 14, 15) needs to be designed appropriately.

8. Solid waste Disposal Site (SWDS) North West containment berm (figure 16) needs repair. This is an area of potential failure. As indicated during the inspection there are plans to fix the berm at this location.
9. O&M plan was submitted in September 2001. Upon consultation with the board this plan has not been accepted because of outstanding information required by the Hamlet.

Comments:

- Work was done to sewage lagoon containment berm this year (July). In general fill material was placed on berm to fix erosion that had occurred in previous years. Berm is now in good condition.
- Sewage Lagoon was a nice green color at the time. There was ~0.75” of ice on the surface.
- No signs posed indicating sewage lagoon and SNP station 0714-2.
- Good signage for areas of disposal (domestic garbage, animal pit, honey bag pit, metal wastes).
- No recycling programs as logistics make it difficult.
- ~7 monitoring wells around SWDS. These have not been tested in the last few years.
- As per our letter dated October 3, 2003 the SWDS Lagoon was approved for discharge. The last time this lagoon was discharged was ~ 5 years ago. Hamlet did take sample as per permit conditions. All parameters were acceptable for discharge. As an additional check INAC took a ten part composite around the perimeter of the lagoon. Results pending.
- Currently the landfill does not accept hazardous wastes (used oil, batteries, etc). Currently used oil is disposed of at Grubens and is incinerated. Public does not drop off used oil at this facility.

FUEL STORAGE – Please see concerns under “Water Supply” above.

SURVEILLANCE NETWORK PROGRAM – No figures attached.

Samples Collected	(Hamlet)	-Hamlet collected ~5 samples prior to decanting the Sewage Lagoon in 2003. -Hamlet collected a sample at the SNP 0714-3 prior to discharge in October 2003.	
	(DIAND)	-Samples taken at SNP station 0714-1, 2, 3. -Also a ten part composite sample was taken at the SWDS pond at various locations. -All results pending.	
Signs Posted:	SNP	-No sign posted for Sewage Lagoon. -No sign posed for SNP station 0714-2 and 3. -No sign for SWDS at south (active) entrance. A sign was posted at the north entrance.	Warning No warnings seen.
Record & Reporting:	-All Annual Reports have been received. -As indicated by the board the O&M plan submitted in 2001 is incomplete. -Unclear if supplement to O&M plan for “Operation and Maintenance of Waste Disposal Facilities...” was submitted to the board. -Terms of reference for “Assessment of the Effects of Sewage Discharge on the Waters of Kugmallit Bay” have not been received by the board. The final report is Due December 01, 2003.		
Geotechnical Inspection	Apart of the O&M plans.		

Concerns:

1. SNP stations at 0714-2 and 3 are not posted. This was also reported in 2001.

General Comments:

- The Water License expires April 29, 2005. Please make the necessary plans to send an application some time in 2004, at least 6 months prior to the expiry date.

Violations/ Non-Compliance of Act of Licence:	1. Part D, section 9. Terms of reference for Kugmallot Bay report not received by Board. This was due Jun 1, 2001. 2. Part B, section 5. SNP stations 0714-2 and 3 not posted. 3. Part B, section 6. Sewage Lagoon not posted. No warning 4. Part B, section 6. SWDS not posted. A sign should be at the main entrance. 5. Part D, section 2. pH Effluent Quality Standards not met. See concern #1 under “Waste Disposal”
Inspectors Name Kevin R. Glowa Water Resource Officer	Inspectors Signature



List of Figures for Municipal Water Licence Inspection Report

Date: October 2, 2003

Company Rep: Paul Nogasak (foreman)

Licencee: Hamlet of Tuktoyakyuk

Licence #: N7L3-0714

Figure 1. Water Supply. Water treatment plant and transfer station



Figure 2. Water Supply. Fuel storage at water treatment plant.



Figure 3. Water Supply. Fuel storage at water treatment plant. Corroded/exposed pipe.



Figure 4. Waste Disposal. Sewage lagoon (south west end) at containment berm.



Figure 5. Waste Disposal. Sewage lagoon (south west end) at containment berm.



Figure 6. Waste Disposal. Sewage lagoon (south west end) discharge location.



Figure 7. Waste Disposal. Sewage lagoon intake structure.



Figure 8. Waste Disposal. Landfill domestic garbage disposal area.





Figure 9. Waste Disposal. Landfill general north view.



Figure 10. Waste Disposal. Landfill north view with metal waste (bulk) storage area in distance.



Figure 11. Waste Disposal. Landfill north view.



Figure 12. Waste Disposal. Landfill north west view with metal waste storage area in background.



Figure 13. Waste Disposal. Landfill east view with metal wastes storage area in background.



Figure 14. Waste Disposal. Landfill waste oil and hazardous wastes area.



Figure 15. Waste Disposal. Landfill waste oil and hazardous wastes area.



Figure 16. Waste Disposal. Landfill north west containment berm.

