Government of Northwest Territories
Gouvernement des Territoires du Nord-Ouest

Telephone: 867-678-6671
Fax: 867-678-6699

September 27, 2017

Hamlet of Aklavik
P.O. Box 88
Aklavik, NT X0E 0A0

Attention: Fred Behrens, Senior Administrative Officer

File Number **N3L3 - 0570**
Type of Operation **CLASS B - MUNICIPAL**
Location

Dear Mr. Behrens,

An inspection of the above noted operation was conducted on by Water Resource Officer Lloyd Gruben and Environment Protection Officer, Alicia McRae on August 24, 2017. Enclosed is a copy of the Municipal Water Inspection Report.

There were a number of violations indentified as depicted during the inspection. Some of the violations relate to spillage of sewage at sewage disposal chute, empty engine oil containers, opened and spilled five gallon paint pails at the solid waste disposal site, open and spilled used engine oil at the local SWD, batteries disposed all over the site, flouresecent bulbs, propane bottles disposed all over the site. Overflowing used engine oil pails at the Hamlet shop.

Please note that it is the Hamlet responsibility to ensure compliance with all terms and conditions of its Water Licence. The Department of Environment and Natural Resources is available to assist you in achieving this goal.

A copy of this report will be sent to the Inuvialuit Water Board and Gwich'in Land and Water Board for their review and public records. If you have any questions/concerns regarding the enclosed, please do not hesitate to contact me at 867 678 6676.

«INSP_TYPE» WATER USE INSPECTION REPORT

Sincerely,

Lloyd Gruben
Water Resource Officer
Environment an Natural Resources
Inuvik Region

Cc:

Norman Snowshoe – A/Regional Superintendent – GNWT -ENR

Mardy Semmler – Executive Director, Inuvialuit Water Board

Bijaya Adhikara – Science and Regulatory Coordinator

Alecsandra MacDonald - Regulatory Specialist GLWB

Leonard Debastien – Executive Director = GLWB

Freda Wilson - IWB

«INSP_TYPE» WATER USE INSPECTION REPORT

LICENCE #:	**N3L3 - 0570**	**EXPIRY DATE:**	**November 30, 2019**
LICENCEE:	**Hamlet of Aklavik**	**PREVIOUS INSPECTION:**	**January 27, 2016**
COMPANY REP:	**Fred Behrens**	**INSPECTION DATE:**	**August 24, 2017**

WATER SUPPLY

Source:	Peel Channel – Mackenzir River	Quantity Used:	N/A
Owner/Operator:	Hamlet of Aklavik	Meter Reading:	N/I

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

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

Water Supply Comments:
Water intake from Peel Channel, Mackenzir River. Upstream, no activity noticed during inspection

WASTE DISPOSAL – WELL WASTE

Disposal Method									
Off-Site Removal	N	Drilling Sump	N	Downhole Injection	N	Treat and Landspread	N	Other	

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

Sump Liners		Sump Treatment		Freeboard	
Erosion		Construction			
SNP Samples Collected					

Well Waste Comments:

«INSP_TYPE» WATER USE INSPECTION REPORT

WASTE DISPOSAL – SEWAGE

Disposal Method		Primary Treatment					
Mechanical	N	Camp Sump	N	Natural Water Body	Y	Wetland Treatment	Y
Continuous Discharge	Y	Intermittent Discharge	N	Seasonal Discharge	N	Land Spread	N
Accelerated Biological	N	Other	N/A				

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

Discharge Quality	N/I	Decant Process & Structures	N/A	Discharge Measurement Device	N/I
Freeboard	N/I	Sludge Disposal Method	N/A		
Periods Of Discharge	Continuous			SNP Samples Collected	Y
Effluent Discharge Rates	Natural outflow into the wetland and occasional decants				

Sewage Comments:

There was evidence of sewage being discharged outside of the sewage lagoon, near the discharge pad of the Sewage Disposal Facilities (SDF). Operator must ensure that all sewage is discharged into the sewage lagoon as authorized under the Water Licence. During inspection, sewage was noticed under the sewage discharge chute. Under further inspection, hole was noticed in the discharge chute causing sewage leakage during discharge. Discharging excess or buildup of sewage directly onto the ground is considered an unauthorized discharge of hazardous wastes and cannot continue. If excess sewage cannot be discharged in the chute then it must be contained in a sealed container until it can be discharged properly

There is evidence of erosion at the sewage disposal chute currently in use. The Chute has a hole causing pooling of sewage below the chute and damaging the pad.

Sewage is being spilled around and beneath the sewage chute. Operator must ensure that all sewage is discharged in the chute and any spilled sewage is being contained. Recommend adding a catchment basin which can be emptied in the chute when at capacity or on a daily basis.

Area will need to be monitored during the spring and summer that any spilled during the offload will drain into the lagoon or into batchment basin.

Recommend stabilizing sewage disposal site for safety reasons as pad is sinking and potholes

Empty engine oil containers noticed by the Sewagse Disposal Site

«INSP_TYPE» WATER USE INSPECTION REPORT

WASTE DISPOSAL - TAILINGS

Disposal Method		N/A					
Tailings Pond	N	Natural Lake	N	Underground	N	Other	

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

Conveyance Lines	N/A	Runoff Diversion	N	Dams, Dykes	N
Freeboard	A	Seepages	N	Dyke Inspection	N
Erosion	N	Pond Treatment	N/I	Construction	N
Periods Of Discharge				SNP Samples Collected	ENR

Tailings Comments:

WASTE DISPOSAL – MINING – OTHER

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

Ore & Waste Rock Stockpiles	N/A	Chemical Storage	N/A
Ground Water Discharge	N/A	Mine Water Discharge	N/A

Mining-Other Comments:

WASTE DISPOSAL – SOLID WASTE

Disposal Method							
Open Dump	N	Landfill	Y	Burn & Landfill	N/I	Underground	N
Offsite Removal	N	Other	N/A				
Owner / Operator	Hamlet of Aklavik						

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

Runoff Diversion	N/A	SNP Samples Collected	No

Solid Waste Comments:

«INSP_TYPE» WATER USE INSPECTION REPORT

During inspection, five gallon pail of paint was noticed spilled over and all around

Open five gallon pails of used engine oil filled to the brim and leaking all over. Sheen of oil noticed all over pools of water

Batteries disposed of all over the solid waste site, not segregated

Empty propane bottles disposed all over, no segregation

Appliances dumped all over, not dumped in appropriate place where signage notes appliances

No fencing, lot of wind blown debris all over. Blown into creek and area around the solid waste site

FUEL STORAGE

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

Owner:	Hamlet of Aklavik	Operator:		Condition of tanks:	A
Berms & Liners	A	Water within Berm:	None	Evidence of Leaks:	None

Drainage Pipes	N/A	Pump Station and Catchment Berm	N/A	Runoff Diversion	N/A
Pipeline Condition	N/A				

Fuel Storage Comments:
Inspected all fuel storage areas. All Hamlet buildings have new double walled tanks in place with good padding. No stress on pipes.

DAM – STRUCTURAL CONDITION OF DAM

Dam	

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

Required Freeboard									
Crest	Cracking		Subsidence		Heaving		Wave Erosion		Brushing Required	
Upstream Face	Cracking		Surface Erosion		Gullying		Wave Erosion		Brushing Required	
Downstream Face	Cracking		Surface Erosion		Gullying		Wave Erosion		Brushing Required	

Structural Condition Of Dam Comments:

«INSP_TYPE» WATER USE INSPECTION REPORT

DAM – SPILLWAYS and DISCHARGE STRUCTURES

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

Intake Structures		Discharge Structures	
Seepage		Erosion	
Downstream Discharge		Stage Discharge Curves	
Forebay Level		Tail Race Level	
Flow rate (Power House)			
Flow rate (Spillway)			
Power Production			
Forebay Max Level			
Forebay Min Level			

Spillways and Discharge Structures Comments:

SURVEILLANCE NETWORK PROGRAM

Samples Collected Licencee	
Samples Collected ENR	Samples taken as per water licence

Signs Posted: SNP	None	Warning	

Surveillance Network Program Comments:

Had to find area of where sdamples to be taken

GENERAL CONDITIONS/REPORTS/PLANS

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

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

General Condition Comments:

During inspection of Hamlet shop, five gallon pails overflowing with oil and water

«INSP_TYPE» WATER USE INSPECTION REPORT

ADDITIONAL COMMENTS/REMARKS

MATTERS FOR FOLLOW UP

Sewage Disposal Site needs repairs in the chute as holes were noticed causing leakage during offload

Sewage disposal pad cracking and potholes need repairs done.

Solid Waste Site needs more signage and segregation.

Fencing needed to catch all wind blown debris

NON-COMPLIANCE/VIOLATIONS OF ACT OR LICENCE

Annual reporting needs to be in by April 30 of every year

Inspector's Signature: Lloyd Sink

Taiga Environmental Laboratory
4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9
Tel: (867)-767-9235 Fax: (867)-920-8740

Taiga Batch No.: 170823

- CERTIFICATE OF ANALYSIS -

Client Sample ID: AK Sewage Lagoon **Taiga Sample ID:** 001

Client Project:
Sample Type: Water
Received Date: 28-Aug-17
Sampling Date: 24-Aug-17
Sampling Time:
Location:
Report Status: **Final**

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
Inorganics - Nutrients						
Biochemical Oxygen Demand		2	mg/L		SM5210:B	105
Inorganics - Physicals						
Solids, Total Suspended	< 3	3	mg/L	09-Sep-17	SM2540:D	
Microbiology						
Coliforms, Fecal		1	CFU/100mL		SM9222:D	105
Organics						
Hexane Extractable Material		2.0	mg/L		EPA1664A	16

ReportDate: Monday, September 11, 2017
Print Date: ***Tuesday, September 12, 2017***

Taiga Environmental Laboratory
4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9
Tel: (867)-767-9235 Fax: (867)-920-8740

Taiga Batch No.: 170823

- CERTIFICATE OF ANALYSIS -

Client Sample ID: Water Intake **Taiga Sample ID:** 002

Client Project:
Sample Type: Water
Received Date: 28-Aug-17
Sampling Date: 24-Aug-17
Sampling Time:
Location:
Report Status: **Final**

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
Inorganics - Nutrients						
Biochemical Oxygen Demand		2	mg/L		SM5210:B	105
CBOD		2	mg/L		SM5210:B	105
Inorganics - Physicals						
Solids, Total Suspended	89	3	mg/L	09-Sep-17	SM2540:D	
Microbiology						
Coliforms, Fecal		1	CFU/100mL		SM9222:D	105
Organics						
Hexane Extractable Material	< 2.0	2.0	mg/L	28-Aug-17	EPA1664A	

ReportDate: Monday, September 11, 2017
Print Date: ***Tuesday, September 12, 2017***

Taiga Environmental Laboratory
4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9
Tel: (867)-767-9235 Fax: (867)-920-8740

Taiga Batch No.: 170823

- CERTIFICATE OF ANALYSIS -

Client Sample ID: Water Intake **Taiga Sample ID:** 002

- DATA QUALIFERS -

Data Qualifier Descriptions:

105 *Samples received past hold time; analysis not possible.*

16 *Test requested but no sample bottle received*

*** Taiga analytical methods are based on the following standard analytical methods**

SM - Standard Methods for the Examination of Water and Wastewater

EPA - United States Environmental Protection Agency

ReportDate: Monday, September 11, 2017

Print Date: ***Tuesday, September 12, 2017***