



Hamlet of Aklavik
Box 88, Aklavik, NT X0E 0A0

Ph: 867-978-2351
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Bijaya Adhikari
Inuvialuit Water Board
PO Box 2531
Inuvik, NT
X0E 0T0

Nov. 26, 2018

Dear Mr. Adhikari;

Re: N3L3-0570 Hamlet of Aklavik 2017 Annual Report.

Firstly, I must apologize for taking so long to reply to your letter. I hope the following will be able address the items listed.

1. Part B item 1e: unfortunately, we have not provided sampling for the 570-3 site.
2. Part B, item 1g, during the 2017-2018 year staff did not do training.
3. Accompanying this letter is all info from the EHO.
4. Also included
5. In August of 2018 we covered the solid waste site with river silt as well as compacted the material and have segregated waste.

Thank you for your patience.

Yours Truly

Fred Behrens
SAO Aklavik

«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 Sewage 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
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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	
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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:

Date:		Licence #:		Page No:	4
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«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	
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Surveillance Network Program Comments:

Had to find area of where samples 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:  _____



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 *	Qualifier
<u>organics - Nutrients</u>						
biochemical Oxygen Demand		2	mg/L		SM5210:B	105
<u>organics - Physicals</u>						
solids, Total Suspended	< 3	3	mg/L	09-Sep-17	SM2540:D	
<u>microbiology</u>						
coliforms, Fecal		1	CFU/100mL		SM9222:D	105
<u>organics</u>						
hexane Extractable Material		2.0	mg/L		EPA1664A	16

Report Date: Monday, September 11, 2017
Print Date: Tuesday, September 12, 2017



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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 QUALIFIERS -

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



Environmental Health Inspection Report

Name of Facility or Operation	Solid Waste Disposal Site	Date (d/m/y)	February 14, 1999
Mailing Address	P.O. Box 88 XOE OAO		
Physical Address	AKLAVIK, NT		
Type of Inspection	<input checked="" type="checkbox"/> G.N.W.T. General Sanitation Regulation <input type="checkbox"/> Tobacco <input checked="" type="checkbox"/> Other: <input type="checkbox"/> Routine <input type="checkbox"/> Complaint <input type="checkbox"/> Follow-up		

Under authority of the Public Health Act and/or Tobacco Control Act, an inspection of the above listed facility/operation was conducted and the following observations and/or Orders are made. Required Correction Dates are listed.

Item Number	Observations and Corrective Actions	Correction Date (if applicable)
*	Space where large metal wastes are being stored is getting close to capacity.	
*	Improvement needed regarding: <ul style="list-style-type: none"> - Covering of waste - Segregation of waste, including segregation of hazardous wastes. 	
	Will discuss with Hamlet its plans for short-term and long-term management of wastes.	
	acting SAO Roxanne John	
	Report reviewed with Hamlet plant operator , Ketty Arey , in the absence of Hamlet foreman and SAO.	

Public Health Officer's Name (print)	Shawn Hardy	Public Health Officer's Signature	<i>Shawn Hardy</i>	Date (d/m/y)	Feb 14/99
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Owner/Operator (please print)	X Roxanne John	Owner/Operator's Signature	<i>Roxanne John</i>	Date (d/m/y)	Feb. 14. 99
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ENVIRONMENTAL HEALTH INSPECTION
REPORT CONT'D

Sewage Lagoon
P.O. Box 88
Aklavik, NT X0E 0A0

Re: Inspection under the GNWT General Sanitation Regulation

- 2 off loading chutes present, only one in regular use.
No leaks or issues observed.
- Observable freeboard appeared acceptable.

Overall no issues observed at time of inspection.

Person in Charge: Fred Behrens
Signature: Fred Behrens

EHO: Shawn Hardy
Signature: Shawn Hardy

Date: December 20, 2017





ENVIRONMENTAL HEALTH INSPECTION
REPORT CONT'D

Solid Waste Disposal Site
P.O. Box 88
Aklavik, NT X0E 0A0

Re: Inspection under the GNWT General Sanitation Regulation

- Signs posted to indicate areas to segregate different wastes. Large metal (vehicles) wastes currently kept near lagoon.
- = Overall good segregation. Piles of household wastes will need better coverage.
- = No barriers or fencing currently being used to enclose the site.
- = Hamlet is giving consideration to future plans for the site as it approaches capacity.

No other issues noted at time of inspection.

Person in charge: X Fred Behrens
Signature:

EHO: Shawn Hardy
Signature:

Date: December 20, 2017



Name of Facility or Operation	Sewage Lagoon	Date (d/m/y)	February 14, 2018
Mailing Address	P.O. Box 88 XOE OAO		
Physical Address	AKLAVIK, NT		
Type of Inspection	<input type="checkbox"/> Tobacco <input checked="" type="checkbox"/> Other: GNWT General Sanitation Regulation <input checked="" type="checkbox"/> Routine <input type="checkbox"/> Complaint <input type="checkbox"/> Follow-up		

Under authority of the Public Health Act and/or Tobacco Control Act, an inspection of the above listed facility/operation was conducted and the following observations and/or Orders are made. Required Correction Dates are listed.

Item Number	Observations and Corrective Actions	Correction Date (if applicable)
-	2 off-loading chutes present, only one in use. No issues noted with the active chute.	
-	No obvious issues noted with freeboard and terms. Limited visual inspection due to snow cover.	
*	Note: A black plastic barrel (appearing to be used to store liquid) was observed close to the off-loading chute on the right. A white plastic bucket (flipped upside down) was observed on top of the barrel and seemed to cover a funnel and pink-colored liquid (which would have been poured into the barrel). Will discuss with the Hamlet the nature of this barrel and its contents.	
	No additional issues noted at time of inspection.	
	Report reviewed with acting SAO Roxanne John, water plant operator , Kelley Aray , in absence of the Hamlet Council & SAO.	

Public Health Officer's Name (print)	Shawn Hardy	Public Health Officer's Signature	<i>Shawn Hardy</i>	Date (d/m/y)	Feb 14/18
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Owner/Operator (please print)	X Roxanne John	Owner/Operator's Signature	<i>Roxanne John</i>	Date (d/m/y)	Feb 14/18
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Yellowknife Ph: (867) 669-8979 Fax: (867) 669-7517	Inuvik 4840 Ph: (867) 777-7250 / 777-7220 Fax: (867) 777-3255 4842	Hay River Ph: (867) 874-7261 Fax: (867) 874-7211	Page 1 of
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Community	Aklavik	Circuit Rider Trainer(s)	Jaime Goddard
Date	Feb 14, 2018	Plant Operator(s)	Kelly Arey
Weather	-40, sun	Other Attendees	Shawn Hardy (EHO)

Activities Since Last Circuit Rider Trip:

Replacement of damaged inline chlorine meter.
 Electrician replaced electronics for valves that were burned out due to power fluctuations.
 Repair of leak at treated water tank (seems to be an ongoing issue)

Activities During Circuit Rider Trip:

Reviewed sampling requirements
 Discussed backup operator certification
 Reviewed recent maintenance activities
 Landfill and lagoon inspection

Planned Future Activities

Hamlet is looking into surge protection for the WTP building to protect electronics, as they have had frequent problems.

Records Review (e.g. Log sheets, O&M checklists, etc.)

Ok

Training Delivered

Review of sampling requirements with Kelly. The two backup operators were not present.

Safety

Eye Wash	Not checked
Fire Extinguishers	Present
PPE	Not checked

MSDS	Not checked
Daily Safety Meetings	Not checked
Other	Not checked

Raw Water System	
Source	Peel River
Pump Status (duty/stand-by/spare)	Have issues with organic material that clogs the pumps from time to time, no current problems.
Heat Trace	Not checked
Water Quality	Good
Issues	None
Last Inspected	Not checked

Truckfill	
Flow Meter	Not checked
Heat Trace	Not checked
Pump Status (duty/stand-by/spare)	Not checked
Issues	None noted

Chlorine System/Disinfection	
Type	Chlorine
Usage	Not checked
Storage	Not checked
Last UV bulb change	n/a
Other	n/a

Filtration	
Pressure Readings	Not checked
Filter Condition	Good. Tank was cleaned in January.
Extra Filter Media	Not checked
Alarm Status	Ok
Backwash Cycle	Not checked
CIP	n/a
Other	Working well.

Coagulation	
Type	Not checked

Dose	Not checked
Aluminum Level	Ok
pH	Ok
Storage	Ok. Recent pipe leak at tank repaired. All operators know this should be checked frequently as there have been leaks in the past.
Other	n/a

Treated Water Storage	
Turbidity	Ok
Capacity/Level	Not checked
Chlorine Level	Ok
Fire Storage	Not checked
Last cleaned/Inspected	Not checked
BacT sample history	Ok. Expired reagents disposed of and replaced by EHO.
Usage Demand (days of storage and capacity)	Not checked
Other	n/a

Building Systems	
Heating type	Not checked
Fuel Level	Not checked
Last serviced	Not checked

Backup Generator	
Generator Hours	Not checked
Last serviced	Not checked

Other comments from operator:

Backup operator attendance is improving. An additional backup has recently been hired and is being trained.

The new chlorine meter has been working well. Kelly is looking at a filter that the manufacturer suggests to go ahead of the meter.

Noted challenges for Operator:

Power fluctuations cause issues with valves and pumps.

Suggested improvements:

Continued training of backup operators to provide coverage when Kelly is away.

Conclusion:

Plant is running well, need to keep up with ongoing maintenance including leaks.

Other comments:

Work needed at the landfill to improve segregation and maximize use of space – the SAO is looking into some improvements and has been in touch with Gerald Enns at MACA.

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 Landsread	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:

Date:		Licence #:		Page No:	1
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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:

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