



Incorporated Hamlet of Tuktoyaktuk P.O. Box 120 Tuktoyaktuk, NT X0E 1C0 August 5, 2021

Attention: Shawn Stuckey, Senior Administrator Officer

File Number: N5L3 - 0714

Type of Operation: TYPE B - MUNICIPAL

Dear Mr. Stuckey,

An inspection of the above noted operation was conducted on July 19, 2021 by Water Resource Officer, Lloyd Gruben. Enclosed is a copy of the Municipal Water Use Inspection Report.

Please note the following areas of concern that were identified during the inspection:

- Improper storage of batteries;
- Improper storage of Used/Waste Oil;
- Operation of a Hazardous Waste Storage Facility without required registration;
- Used Oil/Waste Fuel leak at the Hazardous Waste Storage Site;
- Unauthorized disposal of battery at the Solid Waste Disposal Facility;
- Uncontrolled access at the Solid Waste Disposal Facility;
- Failure to collect windblown litter during spring 2021;
- Failure to maintain segregated waste disposal areas;
- Failure to collect windblown litter from the water; and
- Failure to collect SNP samples during the discharge at SNP Sampling Station 0714-3.

It is the responsibility of the Incorporated Hamlet of Tuktoyaktuk to ensure that they are in compliance with the conditions of Water Licence N5L3-0714 and any associated *Acts* and/or *Regulations*.

Please extend my thanks to Wayne Cockney for his assistance and the information provided during the inspection.

Please contact me at (867) 678-6652, or the Regional Environmental Assessment Coordinator, Alicia McRae, at (867) 678-6653 if you have any questions or concerns with regard to the attached report. I look forward to working with the Hamlet in order to achieve voluntary compliance with licence conditions and any associated *Acts* and *Regulations*.

Sincerely,

Lloyd Gruben

Water Resource Officer

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Environment an Natural Resources

Inuvik, NT

Ph: (867) 678-6652 Cell: (867) 678-0623

Cc: Lila Voudrach , Manager, Wildlife & Environment – Environment & Natural Resources

Mardy Semmler, Executive Director - Inuvialuit Water Board

Bijaya Adhikari, Science and Regulatory Coordinator - Inuvialuit Water Board

Mayor and Council - Incorporated Hamlet of Tuktoyaktuk

Rick Walbourne - Water Management and Monitoring-Regulatory-ENR

Wendy Bidwell - Senior Water Resource Officer - ENR



LICENCE #:	N5L3 - 0714	EXPIRY DATE:	November 20, 2023	
LICENCEE:	Hamlet of Tuktoyaktuk	PREVIOUS INSPECTION:	June 26 , 2019	
COMPANY REP:	Shawn Stuckey	INSPECTION DATE:	July 19, 2021	

WATER SUPPLY

Source:	Kudlak Lake	Quantity Used:	N/I
Owner/Operator:	Hamlet of Tuktoyaktuk	Meter Reading:	N/I

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

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

Water Supply Comments:

- All records and logs at the Water Treatment Plant (WTP) were available at the time of inspecton and were up-to-date.
- The WTP interior is clean and well organized.
- The access road to the WTP is in good condition.
- The water truck fill station area is in good condition.
- It was recommended that both water delivery trucks utilize fill hose caps, and that the rear of the vehicles be cleaned more frequently in order to prevent potable water contamination.
- ENR recommends that the Hamlet Staff be trained in spill response and that the WTP be equipped with an industrial spill kit.
- The fuel tank located outsite the plant is double walled and in relatively good condition. Some corrosion was observed on the fuel lines; therefore, Hamlet staff must monitor regularly for signs of leaks, and replace when required.
- The Hamlet is currently staffed with one qualified WTP Operator. The Hamlet would benefit having additional operators to provide coverage and relief to the existing Operator.
- Chlorine and other treatment reagents are stored within a designated room in the WTP.
- Due to time contraints, the Kudlak Lake pump station was not inspected during the inspection. The Kudlak Lake pump station will be inspected at the next scheduled inspection.
- The potable water reservoir is fenced and secured at all times to prevent access by the public and wildlife.
- It was reported to the inspector that there are intermittent issues with turbidity that causes an alarm in the WTP to go off. When this occurs, the Operator switches the system to manual and addresses the issue. There are plans to switch to a green sand filtration system. The Hamlet of Tuktoyaktuk plans to have this completed within the next year.

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N/A - Not Applicable N/I - Not Inspected



WATER USE INSPECTION REPORT

WASTE DISPOSAL - SEWAGE

A - Acceptable

Disposal Method Primary Treat		ment					
Mechanical	No	Camp Sump	No	Natural Water Body	Yes	Wetland Treatment	No
Continuous Discharge	No	Intermittent Discharge	Yes	Seasonal Discharge	No	Land Spread	No
Accelerated Biological	No	Other	N/A				

Discharge Quality	А	Decant Process & Structures	А	Discharge Measurement Device	N/I
Freeboard	Α	Sludge Disposal Method	N/A		
Periods Of Discharge	During	g Decant		SNP Samples Collected	No

U - Unacceptable

Effluent Discharge Rates

Indicate:

Sewage Comments:

- The north and south sewage disposal chutes were inspected and there appears to be some erosion on the gravel pad along the chutes (see Figure 1-3). The erosion will continue to occur until the ground settles so the Hamlet needs to maintain the gravel pad area to ensure the integrity of the chutes.
- There was some staining on the ground in front of the north sewage disposal chute (see Figure 4). The spill is minor, but clean-up is required. ENR recommends that the Hamlet assess the chutes and complete some required maintenance to prevent further leaks/spills.
- The access road is in good condition. However, the recently constructed berm requires some maintenance as there is some erosion occurring as the pad settles (see Figure 5 & 6).

WASTE DISPOSAL - SOLID WASTE

Disposal M	ethod	Landfill					
Open Dump	No	Landfill	Yes	Burn & Landfill	No	Underground	No
Offsite Removal	No	Other	N/A				
Owner / Operator	Hamlet of Tuktoyaktuk						

Indicate: A - Acceptable U - Unacceptable N/A - Not Applicable N/I - Not Inspect
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Runoff Diversion	N/A	SNP Samples Collected	Yes
Diversion			L

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Solid Waste Comments:

- In the August 1, 2019 inspection report it was incorrectly noted that the Hamlet did not accept any debris from the demolition of the Hotel Tuk Inn. It has come to the attention of ENR that the Hamlet did accept waste from the Hotel Tuk Inn demolition in 2019.
- ENR strongly recommends that the Hamlet of Tuktoyaktuk ensure that proof of Hazardous Waste removal be presented to the Hamlet prior to any acceptance of demolition waste at the facility. Otherwise, accepting unchecked demolition waste could potentially create liabilities for the Hamlet, and violate conditions of its licence and any associated *Acts* or *Regulations*.
- There is currently uncontrolled access at the Solid Waste Disposal Facility, which makes it difficult for the Hamlet to manage and control what is deposited at the facility. ENR recommends that a gate be erected and maintained as per Section 8 of Part B of Water Licence N5L3-0714, and an attendant accompany facility Users to ensure waste goes in the appropriate waste stream area. This will also prevent unauthorized waste deposits.
- Although there are signs posted for for various waste streams, they are not easily visible to the public. This makes it difficult to manage segregation within the SWDF. ENR recommends that the Hamlet invest in and post legible signage at the facility in order to better manage waste segregation as per Section 5 of Part B of Water Licence N5L3-0714.
- There is very little segregation within the SWDF. Copious mixed waste was noted and inappropriate wastes were noted in designated waste stream areas.
- ENR recommends that the signs be maintained and repositioned to ensure that they are visible to the public.
- During the inspection, the Hamlet could not confirm whether or not hazardous waste fluids were drained from the End-of-Life vehicles, or appliances. ENR strongly recommends the Hamlet inspect all End-of-Life vehicles and appliances to ensure all hazardous waste fluids are drained prior to acceptance and disposal.
- The fuel tanks are drained but not cleaned prior to disposal. ENR recommends that all fuel tanks be inspected prior to disposal.
- Heavy equipment, snowmobile bodies, a boat, and other metals are submerged in the Solid Waste Disposal Facility Lagoon contrary to Section 11 of the Waters Act (see Figure 15, 16, & 19). ENR recommends that the Hamlet develop a plan-in conjunction with the required Closure & Reclmation plan-to remove all metal waste from the waters as soon as is feasible.
- Windblown litter was observed along the perimeter of the SWDF Lagoon and is piling up along the the berm near SNP Sampling Station 0714-3 (see Figure 20). ENR recommends that the Hamlet collect all litter from the water's edge during the fall 2021 litter collection as per Section 35 of Part D of Water Licence N5L3-0714.
- The fence surrounding the domestic/household waste area has fallen over on the west side. Please ensure that this is repaired as soon as possible in order to prevent access by wildlife.
- Windblown litter surrounds the SWDF. More frequent cover and compaction of domestic/household waste would limit windblown litter at site, and reduce wildlife attractants.
 The Hamlet should budget for more frequent cover of wastes at the facility.
- There is currently no designated area for empty propane tanks propane tanks were visible throughout the SWDF.

Hazardous Waste Storage Facility:

- Used oil and batteries are accepted at the Temporary Hazardous Waste Containment Facility.
- In their Annual Report dated March 18, 2021, the Incorporated Hamlet of Tuktoyaktuk reported a list of hazardous waste from their 2019 inventory. The Hamlet must register as a hazardous waste storage facility if they intend to store hazardous waste for a period of 180 days of more as per the *Hazardous Waste Management Guideline*.
- ENR recommends that the Hamlet start the process to register as a storage facility, or ship the stockpiled hazardous waste to a registered Receiver as soon as possible.

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- ENR recommends that the Hamlet seek funding to assist with the costs of the containment and shipment of hazardous waste. Please contact ENR's Waste Reduction Advisor, Michelle Hannah at 867-767-9236 ext. 53201 for details about ENR's Waste Reduction and Recycling Initiative funding program.
- Batteries are currently piled on the ground within the fenced area. ENR reminds the Hamlet that they are required to store used batteries on pallets, not on the bare ground.
- There were seven 45 gallon drums being stored outside of the fenced area, one of which was leaking anti-freeze onto the ground. The spill must be cleaned-up and any contaminated material is to be stored and disposed of appropriately. All seven drums are in poor condition, therefore the contents of these drums are to be transferred into a container(s) manufactured for the purpose of the storage of petroleum products in accordance with Section 5.(1) of the Used Oil and Waste Fuel Management Regulations. The Hamlet was told that each of the drums are to be individually labeled as used oil or waste fuel in accordance with Section 5.(2) of the Used Oil and Waste Fuel Management Regulations.
- There were twelve 5 gallon oil pails and one black tote container being stored inside the fenced area. The oil pails are not properly sealed and three of them were knocked on their sides which may cause oil leaks. The contents of those oil pails must be transferred into containers in accordance with Section 5.(1) of the Used Oil and Waste Fuel Management Regulations and in accordance with Section 4.2 of the Guideline for Hazardous Waste Management. In the meantime, the oil pails should be labeled and properly sealed.

N/A - Not Applicable N/I - Not Inspected

FUEL STORAGE

Indicate:

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			Hamlet of	

U - Unacceptable

Owner:	Hamlet of Tuktoyaktuk	Operator:	Hamlet of Tuktoyakt uk	Condition of tanks:	А
Berms & Liners	N/A	Water within Berm:	N/A	Evidence of Leaks:	No

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

Fuel Storage Comments:

- The fuel tank at the Water Treatment Plant is in good condition.
- Some corrosion on pipes was noted and require regular monitoring, and replacement if need be.
- The fuel tank is located on the bare ground. ENR recommends the Hamlet consider installing a concrete berm under the fuel tank.

SURVEILLANCE NETWORK PROGRAM

A - Acceptable

Samples Collected Licencee	Yes
Samples Collected ENR	Yes, samples were collected from SNP 0714-1; 0714-2; and 0714-3.

Signs Posted: SNP	Yes/No	Warning	No
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Surveillance Network Program Comments:

- No sign for SNP 0714-1 and 0714 2.
- There is a sign for SNP 0714-3.
- The Hamlet did not collect SNP samples from SNP sampling station 0714-3 during the August 27, 2020 to September 1, 2020 discharge as per *Section A of Annex A of the Water Licence* and condition 3 of decant approval letter dated August 24, 2020.
- ENR reminds the Hamlet of Tuktoyaktuk that the water at SNP Stations 0714-2 and 0714-3 are to be sampled prior to and during each discharge (decant) as per Section 2 of Part B of Water Licence N5L3-0714.
- The Hamlet of Tuktoyaktuk staff were not aware that the water sample jars require three rinses before samples are collected. ENR requests that the Hamlet ensure all staff are trained to collect samples according to written procedure. ENR can provide SNP sample training to Hamlet staff as well.

GENERAL CONDITIONS/REPORTS/PLANS

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

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

General Condition Comments:

- Closure and Reclamation Plan (C & R) none submitted
 - The Licensee was reminded in a letter, from the Inuvialuit Water Board, dated
 November 20, 2018 that they are to submit a C & R plan at least six months prior to closure.
- There are signs but they are blended in with the waste making them difficult to see. ENR recommends that the Hamlet invest in and post legible signage in order to better manage and control segregation within the SWDF.
- The Spill Contingency Plan requires updating as per Inuvialuit Water Board's letter dated November 20, 2018
- Minor Spill at the Hazardous Waste Storage Site requires clean-up.
- The Sewage Disposal Facilities Operation and Maintenance Plan requires updating as per Inuvialuit Water Board's letter dated November 20, 2018.
- The Solid Waste Disposal Facilities Operation and Maintenance Plan requires updating as per Inuvialuit Water Board's letter dated November 20, 2018.

ADDITIONAL COMMENTS/REMARKS

- The Hamlet of Tuktoyaktuk would greatly reduce unauthorized disposal of hazardous waste (used batteries, used oil) if they controlled access to the Solid Waste Disposal Facility.
- Inspectors and other ENR expert staff are available to provide advice and answer any questions that the Hamlet may have with regard to proper management of their waste disposal facilities.

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MATTERS FOR FOLLOW UP

- Spill kits required at the Water Treatment Plant and Temporary Hazardous Waste Containment Facility.
- Minor spill clean-up required at the Temporary Hazardous Waste Containment Facility.
- Used Oil/Waste Fuel is to be transferred into containers manufactured for the purpose of storing and transporting hydrocabons.
- Used Oil/Waste Fuel is required to be individually labeled.
- The used batteries are to be moved onto pallets for storage until shipped to a registered Receiver.
- All stockpiled Hazardous Waste needs to be shipped to a registered Receiver as soon as possible to avoid spills and increased risk/liability.
- Blocking for the south and north sewage disposal chutes require leveling as there is evidence of erosion in these areas.
- Ground packing is required on the recently contructed berm at the Sewage Disposal Facility as there is some erosion on both sides of the berm.
- Grizzly Bears have been sighted near the community in June 2021. ENR strongly recommends covering the domestic/household waste with granular material in order to reduce attractants and to prevent windblown litter.
- SNP signs are required for SNP 0714 2 and 0714 1.
- Updated Solid Waste Disposal Facility signage is required.
- ENR strongly recommends controlled access to prevent unauthorized disposal of hazardous waste, and to implement better waste segregation within the SWDF.
- ENR strongly recommends continuous segregation and maintenance within the SWDF.

NON-COMPLIANCE/VIOLATIONS OF ACT OR LICENCE

- Improper storage of hazardous waste, namely used batteries and waste fuel/used oil.
- Long-term storage of hazardous waste.
- Improper disposal of battery at the solid waste site.
- Improper disposal of used oil at the solid waste site.
- Failure to collect windblown litter within the Solid Waste Disposal Facility Lagoon.
- Failure to collect windblown litter during spring 2021.
- Failure to maintain segregation within the SWDF.
- Failure to collect and analyze SNP samples from SNP 0714-3 during the August 2020 discharge (decant).
- Failure to erect and maintain a gate with controlled access to prevent unauthorized deposits of waste (Section 8 of Part B of Water Licence N5L3-0714).

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REFERENCE MATERIAL

- Municipal Water Licence N5L3-0714:
 https://www.inuvwb.ca/sites/default/files/181204 n5l3-0714 hamlet of tuk wl pkg final.pdf
- Water Sampling Instructions
 https://www.enr.gov.nt.ca/sites/enr/files/water_sampling instructions.pdf
- Waters Act: https://www.justice.gov.nt.ca/en/files/legislation/waters/waters.a.pdf
- Used Oil and Waste Fuel Management Regulations: https://www.justice.gov.nt.ca/en/files/legislation/environmental-protection/environmental-protection.r3.pdf
- Guideline for Hazardous Waste Management: https://www.enr.gov.nt.ca/sites/enr/files/resources/128-hazardous_waste-interactive_web_0.pdf

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Inspector's Signature:

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INSPECTION PHOTOS



Figure 1 - South Sewage Disposal Chute



Figure 2 - South Sewage Disposal Chute



Figure 3 - South Sewage Disposal Chute showing signs of erosion



Figure 4 - Staining on the ground in front of North Chute



Figure 5 - Sewage Waste Disposal Facility berm (SWDF berm)



Figure 6 - Signs of erosion - SWDF berm

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Figure 7 - Unauthorized deposit of hazardous waste (used battery) Figure 8 - Unauthorized deposit of hazardous (used oil)



Figure 9 - Domestic/household waste includes other waste.



Figure 10 - Domestic/household waste



Figure 11 - SKIDOOS waste stream area



Figure 12 - WOOD waste stream area

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Figure 13 - Vehicles and ATV waste stream area



Figure 14 - Vehicles and ATV



Figure 15 - Heavy Equipment submerged in water



Figure 16 - Metal waste submerged in water



Figure 17 - TIRES waste stream with sign



Figure 18 - Appliances waste stream area with sign

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Figure 19 - Waste submerged in water



Figure 20 - SWDF berm lined with windblown litter



Figure 21 - Temporary Hazardous Waste Containment Facility



Figure 22 - 45 ga drums stored outside the fenced area



Figure 23 - Hydrocarbon staining on the ground in front of tote



Figure 24 - Anti-freeze leaking from 45 ga. drum

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Figure 25 - Uncontrolled access to hazardous waste storage area.

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