



Hamlet of Paulatuk 1 Main Road Paulatuk, NT X0E 1N0 November 4, 2019

Attention:

Ray Ruben Sr., Mayor of Paulatuk

**File Number** 

N7L3-1691

Type of Operation

Type B - MUNICIPAL Water License

Location

Paulatuk

On July 16, 2019, I completed an inspection at the Hamlet of Paulatuk's landfill, sewage lagoon, garage and water treatment plant. I attached a copy of the Municipal Water License Inspection Report for your review.

During my inspection, I noted the following non – compliance issues:

- Section 1 of Part B of the Water License requires the Hamlet of Paulatuk to submit their annual report no later than April 30 of each year
- Leaving Water Treatment Plant unlocked when no water treatment operators available with toxic chemicals not under lock and key
- No segregation at landfill
- No signage at landfill
- No signage for sewage lagoon
- Water Treatment Plant sign weathered so bad, you can't make out what the sign state

I would like to commend the Hamlet of Paulatuk for the following:

SNP samples taken and analyzed before my inspection

Please contact me at the number below if you have any questions or concerns or if you require additional information.

Sincerely

Lloyd Gruben

Water Resource Officer

**Environment and Natural Resources** 

P. O. Box 2749

Inuvik, NT X0E 0T0

Ph: 867 - 678 - 6676



Cc:

Lila Voudrach:

Manager, Wildlife and Environment

Mardy Semmler:

Executive Director, Inuvialuit Water Board

Bijaya Adhikara:

Science and Regulatory Co - ordinator

Leigh Anne Williams – Jones:

**Regulatory Officer** 

John Holland:

Senior Administrative Officer, Hamlet of Paulatuk

Date: August 7, 2019 Licence #: N7L3 - 1619 Page No: 2



| LICENCE #:      | N7L3 - 1619        | EXPIRY DATE:            | Nov 20, 2020    |
|-----------------|--------------------|-------------------------|-----------------|
| LICENCEE:       | Hamlet of Paulatuk | PREVIOUS<br>INSPECTION: | August 11, 2015 |
| COMPANY<br>REP: | Mayor Ray Ruben Sr | INSPECTION DATE:        | July 16, 2019   |

#### WATER SUPPLY

| Source:         | New Water Lake     | Quantity Used: | Approx12,500m cubed |
|-----------------|--------------------|----------------|---------------------|
| Owner/Operator: | Hamlet of Paulatuk | Meter Reading: | N/I                 |

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

| Intake<br>Facilities | А | Storage<br>Structures | U | Treatment<br>Systems | A | Recycling     | N/I |
|----------------------|---|-----------------------|---|----------------------|---|---------------|-----|
| Flow Meas.<br>Device | А | Conveyance<br>Lines   | А | Pumping<br>Stations  | А | Chem. Storage | U   |
|                      |   |                       |   |                      |   | Modifications | N/A |

#### **Water Supply Comments:**

- Water Lake was clean looking with no floating debris and no obvious signs of human activity surrounding the lake other than the occasional ATV and snowmobile. Hamlet staff stated they are still educating the public, the Water Supply Facilities (WSF) are off limits
- Sign at the gate weathered so bad, that the sign cannot be read
- Water Treatment Plant and Water Supply Facilities are gated and locked during non-working hours
- WTP was generally clean and tidy at the time of inspection
- The Water Operator is maintaining daily logs and is meeting all record keeping requirements. Water analysis and routine checks are being conducted
- Two trained Water Treatment Operators which is good if one operator is not around
- No erosion by water truck refill station
- Fuel tank on good base, no stress on pipe entering building
- No Spill Kit at WTP
- Backup generator is rarely used. Recommended use periodically to ensure that it is functional
- Check generator and backup generator checked daily for leaks
- Water delivery truck seems to be new

## WASTE DISPOSAL - WELL WASTE

| Disposal<br>Method  |   | N/A              |   |                       |   |                         |   |       |   |
|---------------------|---|------------------|---|-----------------------|---|-------------------------|---|-------|---|
| Off-Site<br>Removal | N | Drilling<br>Sump | N | Downhole<br>Injection | N | Treat and<br>Landspread | N | Other | N |

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Indicate:

A - Acceptable

U - Unacceptable

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

| Sump Liners              | N/A | Sump<br>Treatment | N/A | Freeboard | N/A |
|--------------------------|-----|-------------------|-----|-----------|-----|
| Erosion                  | N/A | Construction      | N/A |           |     |
| SNP Samples<br>Collected | N/A | •                 |     | •         |     |

#### Well Waste Comments:

# WASTE DISPOSAL - SEWAGE

| Disposal Method           |   | Primary Treatment         |   |                       |     |                      |   |  |  |
|---------------------------|---|---------------------------|---|-----------------------|-----|----------------------|---|--|--|
| Mechanical                | N | Camp Sump                 | N | Natural Water<br>Body | N   | Wetland<br>Treatment | N |  |  |
| Continuous<br>Discharge   | N | Intermittent<br>Discharge | N | Seasonal<br>Discharge | N   | Land Spread          | N |  |  |
| Accelerated<br>Biological | N | Other                     |   |                       | ie. |                      |   |  |  |

Indicate:

A - Acceptable

U - Unacceptable

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

| Discharge  | Α      | Decant Process &                | Α     | Discharge             | Α  |
|------------|--------|---------------------------------|-------|-----------------------|----|
| Quality    |        | Structures                      |       | Measurement Device    |    |
| Freeboard  | Α      | Sludge Disposal Method          | N/A   |                       |    |
| Periods Of | Appea  | rs to discharge continuously, v | vater | SNP Samples Collected | No |
| Discharge  | levels | remain high                     |       |                       |    |
| Effluent   | Natura | al outflow into the wetland     |       |                       |    |
| Discharge  |        |                                 |       |                       |    |
| Rates      |        |                                 |       |                       |    |

#### **Sewage Comments:**

- SNP samples were collected prior to my inspection
- Regular SNP samples being conducted by Hamlet staff
- Dumping chute needs work, pallets holding chute up, Chute ready to drop if accidently hit by sewage truck backing up
- No smell from lagoon
- No signage. I did not know I was standing by the sewage truck chute as there was no signage
- Public waste in lagoon
- Good freeboard
- Access road in good shape
- Sewage truck pad in such poor condition, unsafe for workers

## **WASTE DISPOSAL - TAILINGS**

| r   |          |     |   |
|-----|----------|-----|---|
| - 1 | Disposal |     |   |
| - 1 | Disposar | a s | 1 |
| - 1 | Method   |     |   |
| - 1 | IVICTIOU |     |   |

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Indicate:

A - Acceptable

U - Unacceptable

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

| Conveyance<br>Lines     | Runoff Diversion | Dams, Dykes              |  |
|-------------------------|------------------|--------------------------|--|
| Freeboard               | Seepages         | Dyke<br>Inspection       |  |
| Erosion                 | Pond Treatment   | Construction             |  |
| Periods Of<br>Discharge |                  | SNP Samples<br>Collected |  |

## **Tailings Comments:**

#### WASTE DISPOSAL - MINING - OTHER

Indicate:

A - Acceptable

U - Unacceptable

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

| Ore & Waste Rock<br>Stockpiles | Chemical Storage     |
|--------------------------------|----------------------|
| Ground Water Discharge         | Mine Water Discharge |

# **Mining-Other Comments:**

#### WASTE DISPOSAL - SOLID WASTE

| Disposal M          | lethod       | Landfill |   |                 |   |             |   |
|---------------------|--------------|----------|---|-----------------|---|-------------|---|
| Open<br>Dump        | N            | Landfill | N | Burn & Landfill | N | Underground | N |
| Offsite<br>Removal  | N            | Other    |   |                 |   |             |   |
| Owner /<br>Operator | Hamlet of Pa | ulatuk   |   |                 |   |             |   |

Indicate:

A - Acceptable

U - Unacceptable

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

| Runoff A Diversion | SNP Samples Collected | А |
|--------------------|-----------------------|---|
|--------------------|-----------------------|---|

# **Solid Waste Comments:**

- Hamlet staff collected SNP samples prior to my inspection
- No Segregation of debris. Where do they drop off appliances, dead batteries, old tires, regular household garbage, empty propane bottles
- No signage of where to dump tires, appliances, batteries, paint, steel
- Foreman stated tried to do segregation but public still dumping all over

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- Empty propane bottles dumped with regular waste
- All waste and used oil brought to garage and poured into tote
- Lot of windblown material
- Contractors dumping all over, no control of what is brought out
- Liquids from vehicles, atv's and snowmobiles not drained

#### **FUEL STORAGE**

Indicate: A - Acceptable U - Unacceptable N/A - Not Applicable N/I - Not Inspected Hamlet of Condition of Hamlet of Owner: Operator: Α Paulatuk Paulatuk tanks: Berms & Water within Evidence of N N Α Liners Berm: Leaks: **Pump Station** Drainage **Runoff Diversion** Α and Catchment **Pipes** Berm Pipeline Α Condition

## **Fuel Storage Comments:**

- Tanks in good order, no leaks
- No stress on pipes
- Fuel tanks bermed and lined
- Fuel tanks on good, stable pad to prevent shifting

#### DAM - STRUCTURAL CONDITION OF DAM

| Dam                   |                |                         |  |                       |                      |  |
|-----------------------|----------------|-------------------------|--|-----------------------|----------------------|--|
| Indicate:             | A - Acceptable | U - Unacce <sub>l</sub> | otable N/A - No  | ot Applicable N/I - I | Not Inspected        |  |
| Required<br>Freeboard |                | 1.00.000                | or the state of th |                       |                      |  |
| Crest                 | Cracking       | Subsidence              | Heaving  | Wave<br>Erosion       | Brushing<br>Required |  |
| Upstream<br>Face      | Cracking       | Surface<br>Erosion      | Gullying   | Wave<br>Erosion       | Brushing<br>Required |  |
| Downstrea<br>m Face   | Cracking       | Surface<br>Erosion      | Gullying   | Wave<br>Erosion       | Brushing<br>Required |  |

# **Structural Condition of Dam Comments:**

## **DAM - SPILLWAYS and DISCHARGE STRUCTURES**

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

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| Intake Structures       | Discharge Structures   |  |
|-------------------------|------------------------|--|
| Seepage                 | Erosion                |  |
| Downstream<br>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<br>Licensee | Yes |
|-------------------------------|-----|
| Samples Collected ENR         | No  |

| Signs Posted: | SNP | Yes                                     | Warning | No |
|---------------|-----|---|---------|----|
| 0.8           |     | 1 |         |    |

## **Surveillance Network Program Comments:**

- Spring melt SNP samples taken by Hamlet of Paulatuk prior to me arriving for inspection

# **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<br>Inspection | Posting, Signage    | Contingency Plan |  |
| Restorations Activities    | Spills              | O&M Plan         |  |
| Maintenance                | Modifications       | Annual Report    |  |

## **General Condition Comments:**

Weather: +20, clear, sunny, light winds

## ADDITIONAL COMMENTS/REMARKS

# MATTERS FOR FOLLOW UP

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- Place spill kit at WTP
- Sewage dumping station and chutes require lot of work to prevent chute from being knocked off pallet padding, foundation
- WTP to be locked at all times when no one around as chemicals located in WTP building
- Landfill requires lot of cleanup, segregation and signage

# **NON-COMPLIANCE/VIOLATIONS OF ACT OR LICENCE**

- Part B, Section 1, of General Conditions states "The Licensee shall file an Annual Report with the Inuvialuit Water Board not later than April 30 of each year
- The 2018 Annual Report was submitted to the IWB on May 23, 2019. On May 22, 2019, the IWB sent a letter as an annual report reminder
- On the dates July 3 and 4, 2019, the IWB sent a letter for additional information request regarding the 2018 Annual Report
- In the future, would like to see the annual report submitted to the IWB prior to the April 30 deadline

Inspector's Signature:

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# **INSPECTION IMAGES**



Figure 1 No Segregation

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|--|---|
|--|---|





Figure 2 No Segregation



Figure 3 Batteries disposed on ground, not on pallets. Battery acid leaked onto the ground

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Figure 4 No Segregation, appliances dumped with other trash



Figure 5 Unsafe Sewage Truck Chute, Poor Foundation

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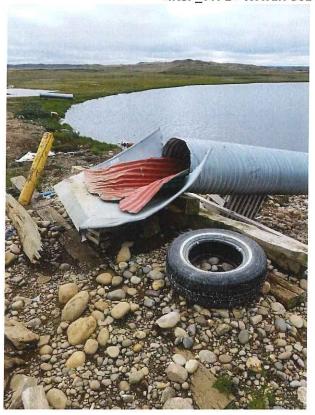


Figure 6 Unsafe sewage dump chute

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