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Nunavut District Office  
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Nunavut Water	
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Tel.: (867) 975-4298  
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Your file - Votre référence

Our file - Notre référence

November 29, 2002

Scotty Edgerton  
Senior Administrative Officer (SAO)  
Hamlet of Taloyoak  
P.O. Box 8  
Taloyoak, NU X0E 1B0

Unlicensed

NWB3TAL-Original

## RE: August 22, 2002 Municipal Water Use Inspection - Report

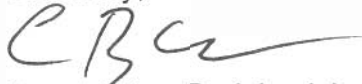
The Water Resources Officer (WRO), appreciates the assistance provided during the tour of the Hamlet's water use and waste disposal facilities. Enclosed for your records, is a copy of the Municipal Water Use Inspection Report performed on August 22, 2002. During the inspection the following observations were noted.

- ☐ **Water Supply:** The Water Intake Facility although adjacent to the community was not fenced. Little garbage was noted in the area around Water Lake. The Water Intake Facility, seemed to be well maintained (Photo 1 & 2). The Water Treatment Plant and Storage Facility were very clean. Storage tanks were new, chlorination system was operational and well maintained (Photo 3 & 4). Enclosed analysis of samples taken from Water Lake Water Intake Facility indicate that Colour (<5 TCU vs 15 TCU), pH (8.00 vs 6.5-8.5) and Nitrate + Nitrite (<0.008 mg/L vs 3.2 mg/L) were found to be within the *Guidelines for Canadian Drinking Water*.
- ☐ **Sewage Disposal:** The sewage lagoon had sufficient freeboard at the time of the inspection (Photo 10). The old Honey Bag disposal area, adjacent to the Sewage Lagoon contained a variety of garbage including old waste batteries and drums. The sewage effluent travels through an extensive wetland area before discharging to the ocean. Enclosed analysis of effluent from the Sewage Lagoon indicate that Total Suspended Solids (167 mg/L vs 120 mg/L) is in excess of the *Municipal Wastewater Effluent Quality Guidelines* Maximum Allowable Concentration.

- ☐ **Solid Waste Disposal:** The Solid Waste Disposal Facility is not fenced, but fence posts are located around the general refuse portion of the dump. The dump consists of a bulky metal waste area, waste oil storage area and a general refuse area (Photo 8). Overturned and leaking drums, should be stored in such a way as to reduce the possibility of further contamination. Areas of contaminated soil were noted in the waste oil storage area. The WRO recommends that any contaminated soil be removed and taken to the land farm for remediation. Burning of refuse is practiced on a regular basis at the dump (Photo 7). Contaminated soil is remediated at the Land Farm soil containment area. Contaminated soil is placed on a liner, some soil is covered with a poly material to reduce water infiltration (Photo 5 & 6).
  
- ☐ **Non-Compliance of Licence:** At the time of inspection, the Hamlet of Taloyoak did not hold a Water Licence as required under both *Nunavut Land Claims Agreement* and the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* for the use of water and disposal of waste. The WRO suggests that fencing be installed around the Solid Waste Disposal Facility and around Water Lake, to assist in keeping garbage out of the water supply. Sewage Lagoon effluent exceeds *Municipal Wastewater Effluent Quality Guidelines* Maximum Allowable Concentration for Total Suspended Solids.

If there are any concerns or questions in regards to this inspection, please contact me at (867) 975 4298 or [bodykevichc@inac.gc.ca](mailto:bodykevichc@inac.gc.ca).

Sincerely,



Constantine Bodykevich  
Water Resources Officer (WRO)  
INAC, Nunavut District

- cc.
- Nunavut Water Board, Gjoa Haven (Jim Wall)
  - CG&T, Rankin Inlet (Don Forsyth)
  - Keewatin Health & Social Services, Rankin Inlet (Robert Phillips)
  - EC Environmental Protection, Yellowknife (Anne Wilson)
  - INAC Water Management, Iqaluit (Michelle Mc Christie)



MUNICIPAL WATER USE INSPECTION REPORT

Date: August 22, 2002 Licensee Rep. (Name/Title): Scotty Edgerton/ SAO  
Licensee: Hamlet of Taloyoak Licence No.: Unlicenced

WATER SUPPLY

Source(s): Water Lake Quantity used: 29998.24  
Owner:/Operator: Hamlet of Taloyoak

Indicate: A - Acceptable U - Unacceptable NA - Not Applicable NI - Not Inspected  
Intake Facilities: A Storage Structure: A Treatment Systems: A Chemical Storage: A  
Flow Meas. Device: A Conveyance Lines: NA Pumping Stations: A

Comments: The Water Intake Facility was operating properly with up to date log book on site. The Water Treatment and Storage Facility is a very well maintained and clean. The water storage tanks are new as is the operating chlorination system that is in use.

WASTE DISPOSAL

Sewage: Sewage Treatment System (Prim./Sec/Ter.): Secondary; discharge to wetland prior to ocean.  
Natural Water Body: X Continuous Discharge (land or water): water  
Seasonal Discharge: X Wetlands Treatment: extensive Trench:  
Solid Waste: Owner/Operator: Hamlet of Taloyoak  
Landfill: Burn & Landfill: X Other:

Indicate: A - Acceptable U - Unacceptable NA - Not Applicable NI - Not Inspected  
Discharge Quality: Sampled Decant Structure: NA Erosion: A  
Discharge Meas. Device: NA Dyke Inspection: NA Seepages: A  
Dams, Dykes: NA Freeboard: NA Spills: NIL  
Construction: NA O&M Plan: NA A&R Plan: NA  
Periods of Discharge: A Effluent Discharge Rate: Not Measured

Comments: The Sewage Lagoon discharges to a large shallow wetland area prior to entering the ocean. There is considerable vegetation in this area that assists in the breakdown of the sewage nutrient load. It is recommended that the Honey bag disposal area be cleaned of any waste batteries or other hazardous materials and decommissioned after consulting with the Nunavut Water Board. The Solid Waste Disposal Facility is segregated into several sections, bulky metal waste, waste oil and general garbage. The waste oil storage area has had some contaminated soil removed and taken to the Land Farm. The drums in this area should have all lids and bungs secured to reduce further contamination.

FUEL STORAGE

Owner/Operator:  
Indicate: A - Acceptable U - Unacceptable NA - Not Applicable NI - Not Inspected  
Berms & Liners: NI Water within Berms: NI Evidence of Leaks: NI  
Drainage Pipes: NI Pump Station & Catchment Berm: NI  
Pipeline Condition: NI Not Applicable: NI Condition of Tanks: NI

SURVEILLANCE NETWORK PROGRAM (SNP)

Samples Collected Hamlet: NIL  
INAC: potable water, sewage effluent  
Signs Posted SNP: NIL Warning: None Observed  
Records & Reporting: Not Applicable  
Geotechnical Inspection: Not Applicable

Non-Compliance of Act or Licence: At the time of inspection the Hamlet of Taloyoak did not hold a Water Licence as required under both Nunavut Land Claims Agreement and the Nunavut Waters and Nunavut Surface Rights Tribunal Act for the use of water and disposal of waste. Waste drums and waste batteries should be removed from old Honet Bag disposal area

Constantine Bodykevich  
Inspector's Name

  
Inspector's Signature



## Global Positioning System Coordinates for Municipality of Taloyoak 2002

*Your file - Votre référence*

*Our file - Notre référence*

### **Taloyoak-1**

Taloyoak Pot Water-1

N69.19166 W93.18583

### **Taloyoak-2**

Taloyoak Land Farm-2

N69.19180 W93.20351

### **Taloyoak-3**

Taloyoak Solid Waste Disposal Facility-3

N69.19209 W93.20588

### **Taloyoak Rankin Inlet-4**

Taloyoak Sewage Lagoon-4

N69.19233 W93.21108

## Taoloyoak Inspection Pictures 2002



Photo # 1 Water Intake Facility interior piping for water truck filling.

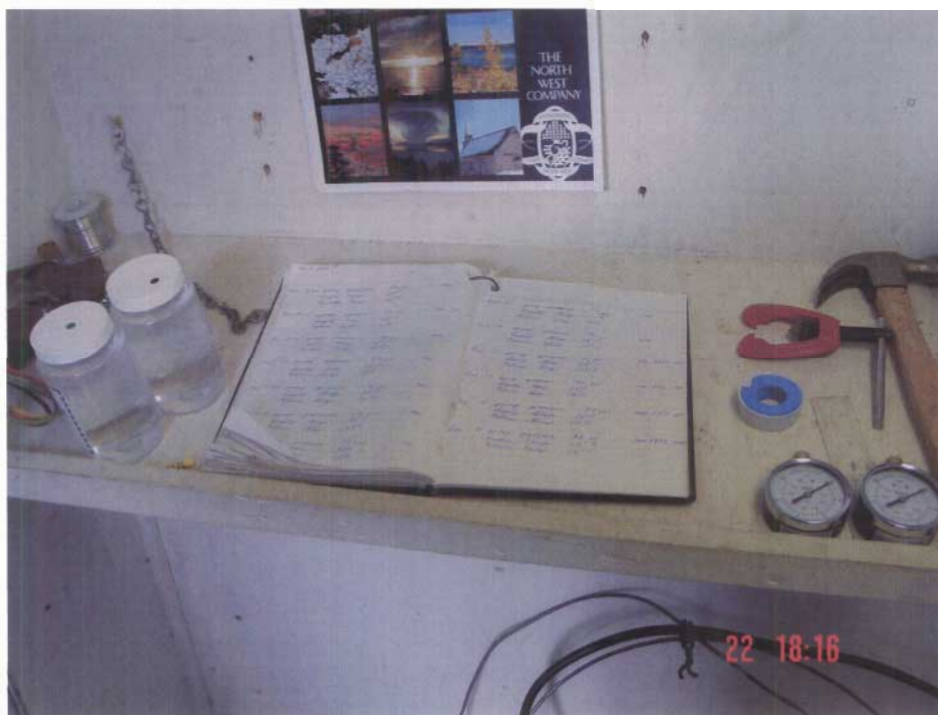


Photo # 2 Log book at Water Intake Facility.





Photo # 3 Chlorination system in Water Treatment Plant.



Photo # 4 One of 2 storage tanks for potable water in Water Treatment Plant.



Photo # 5 Land Farm remediation area for contaminated soil.



Photo # 6 Land Farm area adjacent to Solid Waste Disposal Facility.





Photo # 7 Solid Waste Disposal Facility tipping face; fencing posts around general garbage section of dump.

↑ ?



Photo # 8 Waste oil and drum storage area section of Solid Waste Disposal Facility

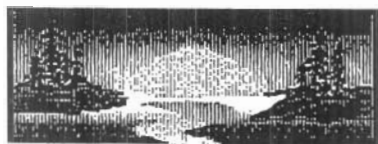




Photo # 9 Old honey bag disposal area, waste batteries and other garbage scattered throughout.



Photo # 10 Sewage Lagoon, sewage truck discharge structure.



**Taiga Environmental Laboratory**  
4601-52nd Ave., Box 1500, Yellowknife, NT, X1A 2R3

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## - CERTIFICATE OF ANALYSIS -

**Prepared For:** DIAND Nunavut District Office

**Attn:** Constantine Bodykevi

**Sample ID:** Taloyoak

**Taiga Sample ID:** 222518

**Client Project:**

**Sample Type:** potable

**Received Date:** 26-Aug-02

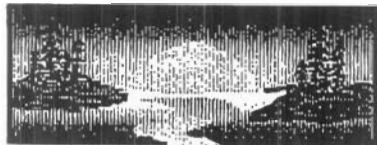
**Location:** Taloyoak

**Sampling Date:** Aug-

**Report Status:** Final

**Approved by:** \_\_\_\_\_

Test Parameter	Result	Units	Detection Limit	Analysis Date
<b><u>Physicals</u></b>				
Alkalinity	76.7	mg/L	0.3	16-Sep-02
Colour	<5		5	16-Sep-02
Conductivity, Specific	204	µS/cm	0.3	16-Sep-02
pH	8.00	pH units	0.05	16-Sep-02
Solids, Total Dissolved	143	mg/L	10	16-Sep-02
Solids, Total Suspended	<3	mg/L	3	16-Sep-02
<b><u>Nutrients</u></b>				
Ammonia as N	<0.005	mg/L	0.005	02-Sep-02
Nitrate+Nitrite as N	<0.008	mg/L	0.008	05-Sep-02
Organic Carbon, Total	2.9	mg/L	0.5	07-Oct-02
Phosphorous, Total	0.058	mg/L	0.004	04-Sep-02
<b><u>Major Ions</u></b>				
Calcium	18.1	mg/L	0.05	29-Aug-02
Chloride	15.1	mg/L	0.2	06-Sep-02
Hardness as CaCO <sub>3</sub>	81.7	mg/L	0.17	29-Aug-02



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**- CERTIFICATE OF ANALYSIS -**

**Prepared For:** DIAND Nunavut District Office

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**Sample ID:** Taloyoak

**Taiga Sample ID:** 222518

Magnesium	8.85	mg/L	0.02	29-Aug-02
Potassium	1.01	mg/L	0.03	28-Aug-02
Silica, Reactive	0.74	mg/L	0.02	12-Sep-02
Sodium	8.29	mg/L	0.02	28-Aug-02



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## - CERTIFICATE OF ANALYSIS -

**Prepared For:** DIAND Nunavut District Office

**Attn:** Constantine Bodykevi

**Sample ID:** Taloyoak

**Taiga Sample ID:** 222519

**Client Project:**

**Sample Type:** sewage

**Received Date:** 26-Aug-02

**Location:** Taloyoak

**Sampling Date:** Aug

**Report Status:** Final

**Approved by:**

Test Parameter	Result	Units	Detection Limit	Analysis Date
<b>Physicals</b>				
Solids, Total Dissolved	756	mg/L	10	16-Sep-02
Solids, Total Suspended	167	mg/L	3	16-Sep-02
Turbidity	58.6	NTU	0.1	17-Sep-02
<b>Nutrients</b>				
Ammonia as N	0.218	mg/L	0.005	02-Sep-02
Nitrate+Nitrite as N	0.065	mg/L	0.008	05-Sep-02
Organic Carbon, Total	120	mg/L	0.5	07-Oct-02
Phosphorous, Total	4.46	mg/L	0.004	04-Sep-02





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