



DIAND Nunavut District  
Box 100  
Iqaluit, NT  
XOA OHO

Your file    Votre référence

Our file    Notre référence

September 11, 1997

B9545-5-N7L3-1661

Mr. Elwood Johnston  
Senior Administrative Officer  
Hamlet of Taloyoak  
Taloyoak, NT  
X0E 1B0



Dear Mr. Johnston;

**Water Management Inspection - 14 August, 1997**

1. Attached for your information is a copy of the inspection report prepared as a result of the water management inspection carried out on the Hamlet of Taloyoak, NT on August 14, 1997.
2. There are a number of issues that must be addressed. Specifically, the Hamlet must obtain a water licence. Attached is a 2-page application. There is a supplemental questionnaire that the Nunavut Water Board will ask the Hamlet to complete once they have received the application. As discussed in our post inspection meeting, the supplemental questionnaire is significantly reworked from the one supplied previously by the Board.
3. Other operational issues that must be addressed relate to the water and waste disposal facilities.

For the water supply, the following improvements are recommended:

- ☐ where the water lake is immediately to the community, a fence and warning signs should be placed.

For the solid waste disposal site, the following improvements are recommended:

- ☐ the dump needs to be fenced;
- ☐ warning signs should be posted, and;
- ☐ additional cover material should be placed on the site.

.../2

For the sewage disposal site, the following improvements are recommended:

☐ warning signs should be posted.

4. The results of water samples collected will be provided once the analysis has been completed.

5. If you have any questions with respect to the inspection report or the water licence application, please do not hesitate to contact this office at the above address or by phone at (819)-979-4405.

Sincerely,



Paul Smith  
Water Resources Officer  
Nunavut District

cc. - Nunavut Water Board, Gjoa Haven  
- DIAND Water Resources, YK  
- RMO, DIAND, Kugluktuk  
- MACA, Cambridge Bay (Kojo Kumi)  
- Public Health, YK (Bob Phillips)

**NUNAVUT WATER BOARD  
LICENCE APPLICATION FORM**

Application for licence, amendment to licence, or renewal of licence

<b>APPLICATION/LICENCE NO:</b> (Amendment or renewal only)													
<b>1. NAME AND MAILING ADDRESS OF APPLICANT</b>    Phone: _____ Fax: _____	<b>2. ADDRESS OF HEAD OFFICE IN CANADA IF INCORPORATED</b>    Phone: _____ Fax: _____												
<b>3. LOCATION OF UNDERTAKING</b> (describe and attach a map, indicating watercourse and location of any proposed waste deposits)    Latitude: _____ Longitude: _____													
<b>4. DESCRIPTION OF UNDERTAKING</b> (describe and attach plans)    													
<b>5. TYPE OF UNDERTAKING</b>  <table><tr><td><input type="checkbox"/> Industrial</td><td><input type="checkbox"/> Power</td><td><input type="checkbox"/> Agricultural</td></tr><tr><td><input type="checkbox"/> Mining and Milling</td><td><input type="checkbox"/> Conservation</td><td><input type="checkbox"/> Recreation</td></tr><tr><td><input type="checkbox"/> Municipal</td><td></td><td></td></tr><tr><td colspan="3"><input type="checkbox"/> Other (describe): _____</td></tr></table>		<input type="checkbox"/> Industrial	<input type="checkbox"/> Power	<input type="checkbox"/> Agricultural	<input type="checkbox"/> Mining and Milling	<input type="checkbox"/> Conservation	<input type="checkbox"/> Recreation	<input type="checkbox"/> Municipal			<input type="checkbox"/> Other (describe): _____		
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<input type="checkbox"/> Municipal													
<input type="checkbox"/> Other (describe): _____													
<b>6. WATER USE</b>  <table><tr><td><input type="checkbox"/> To obtain water</td><td><input type="checkbox"/> Flood control</td></tr><tr><td><input type="checkbox"/> To cross a watercourse</td><td><input type="checkbox"/> To divert water</td></tr><tr><td><input type="checkbox"/> To modify the bed or bank of a water</td><td><input type="checkbox"/> To alter the flow of, or store, water</td></tr><tr><td colspan="2"><input type="checkbox"/> Other (describe): _____</td></tr></table>		<input type="checkbox"/> To obtain water	<input type="checkbox"/> Flood control	<input type="checkbox"/> To cross a watercourse	<input type="checkbox"/> To divert water	<input type="checkbox"/> To modify the bed or bank of a water	<input type="checkbox"/> To alter the flow of, or store, water	<input type="checkbox"/> Other (describe): _____					
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<input type="checkbox"/> Other (describe): _____													
<b>7. QUANTITY OF WATER INVOLVED</b> ( litres per second, litres per day or cubic metres per year, including both quantity to be used and quantity to be returned to source.)   													
<b>8. WASTE DEPOSIT</b> (quantity, quality, treatment and disposal)   													

9. **OTHER PERSONS OR PROPERTIES AFFECTED BY THIS UNDERTAKING** (give name, mailing address and location; attach if necessary)

10. **PREDICTED ENVIRONMENTAL IMPACTS OF UNDERTAKING AND PROPOSED MITIGATION**

11. **CONTRACTORS AND SUB CONTRACTORS** (name, address and functions)

12. **STUDIES UNDERTAKEN TO DATE** ( list and attach copies)

13. **INSURE THE FOLLOWING INFORMATION IS ALSO INCLUDED**

Land Use Permit ☐ Yes ☐ No Date Expected \_\_\_\_\_

Supplementary Questionnaire ☐ Yes ☐ No Date Expected \_\_\_\_\_

Inuktitut Summary of Project ☐ Yes ☐ No Date Expected \_\_\_\_\_

MAP @ 1 : 250,000

(with camp, drill sites, etc.) ☐ Yes ☐ No Date Expected \_\_\_\_\_

14. **PROPOSED TIME SCHEDULE**

Start Date: \_\_\_\_\_ Completion Date: \_\_\_\_\_

\_\_\_\_\_  
Name (Print)

\_\_\_\_\_  
Title (Print)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**APPLICATION FEE** Amount: \$ \_\_\_\_\_

Receipt No.: \_\_\_\_\_

**WATER USE DEPOSIT** Amount: \$ \_\_\_\_\_

Receipt No.: \_\_\_\_\_

MUNICIPAL WATER USE INSPECTION FORM

14 August 1997 COMPANY REP.: Elizabeth Johnstone (SAO)  
LICENSEE: Hamlet of Taloyoak LICENCE #: Unlicensed (NIL3-1661 assigned)

WATER SUPPLY

Source (s): Water Lake Quantity Used (to date): 44 m³/day  
Owner/Operator: Hamlet (estimate or actual)

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

Intake Facilities: A Storage Structure A Treatment Systems A Chem. Storage A  
Flow Meas. Device A Convey. Lines A Pumping Stations A

Comments:

WASTE DISPOSAL

Sewage Sewage Treatment System (primary, secondary or tertiary) at least secondary  
Natural Water body Continuous Discharge (land or water)  
Seasonal Discharge Wetlands Treatment yes Trench

Solid Waste: Owner/Operator: Hamlet  
Landfill Burn & Landfill note 1 Other

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

Disch. Quality N/A Decant Structure A Erosion A  
Disch. Meas. Dev. N/A Dyke Inspection N/A Seepages @ dump + lagoon  
Dams, Dykes N/A Freeboard N/A Spills N/A  
Construction Note 2 O & M Plan nil A & R Plan nil  
Periods of Discharge: Summer Effluent Discharge Rate: Unknown

Comments:

FUEL STORAGE

Owner: Operator Condition of Tanks  
Berms & Liners Water within berm: Evidence of Leaks:  
Drainage Pipes Pump Station and Catchment Berm  
Pipeline Condition Not Applicable: ✓

SURVEILLANCE NETWORK PROGRAM

Samples Collected: (Hamlet)  
(DIAND) Raw water + dump leachate  
Signs Posted: SNP N/A Warning Required @ water lake, dump  
Record & Reporting N/A + Sewage lagoon

Geotechnical Inspection: N/A

Non-Compliance of Act or Licence: Hamlet applied for licence

Page 2 attached Yes No

Licensee Representatives Title

Not Available

Licensee Representatives Signature

Paul Smith  
Inspectors Name

Paul Smith  
Inspectors Signature

## Inspection Report

Hamlet of Taloyoak  
Unlicensed

August 14, 1997

**Water Supply** - The only problem with the water supply is that it is located so close to town. The Northern Stores complex is on the shore of the lake. Consideration should be given to erecting a fence, with appropriate warning signs, to safeguard the supply from wind blown garbage.

The metal storage tank in the truckfill pump house has been replaced with a fibreglass one. The treatment/truckfill station was neat and tidy. The community of 700 people uses ca. 44 m<sup>3</sup> of water per day (which is 16,000 m<sup>3</sup>/year). A water sample was collected from the water lake.

### Waste Disposal

#### Note 1

**Solid Waste Disposal** - The perimeter of the site is well defined because fence posts are in place and garbage has been pushed to this limit, but no fence has been erected. The garbage is stacked about 4 feet high at the edge. Portions of the dump towards the access road are covered with granular material, but the fan shaped area beyond this area is not. The dump should be both fenced and covered with a layer of granular material. A warning sign is also necessary at the dump. A water sample was collected in the area immediately below the dump.

**Waste Metal** is reasonably well separated from burnable waste, although because of the 'open' nature of the dump, waste is being deposited along the access road.

**Waste Oil** is kept in drums (which are stored upright) at the waste disposal site.

**Sewage Disposal** - With the exception of the bagged sewage disposal area which is nearly full and a lack of warning signs, no other concerns were noted at this site. Two sewage disposal chutes are well positioned to allow the discharge of sewage under various wind conditions. A new bagged sewage pit should be considered within the next year or so.

Given the large volume and surface area of the twin-lobed pond into which sewage is disposed and the gently sloped and heavily vegetated nature of the discharge route of this pond, sewage treatment is most likely very good in the summer. In the winter, sewage would accumulate within the pond. It is a most acceptable treatment facility.

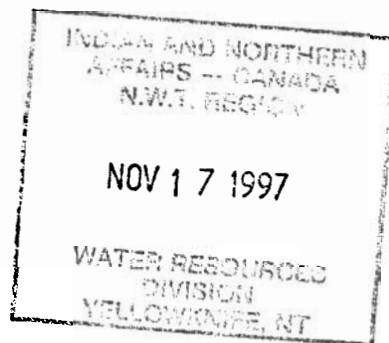
**Other** - An abandoned waste disposal site was inspected. It was covered with sandy soil. Run-off from the surrounding high ground has resulted in some rutting and erosion which is exposing once buried waste. A number of sink holes were also noted. The area is partially revegetated with grasses, but due to the nature of the cover, plant reestablishment has been limited to relatively few plant species.

End

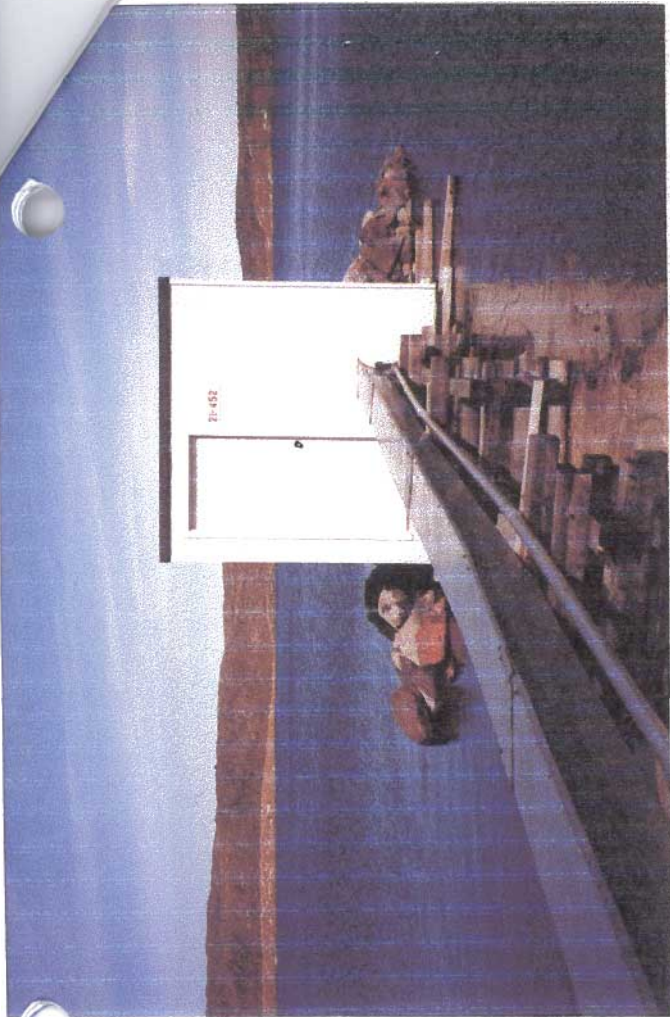
Taloyoak - August 14, 1997

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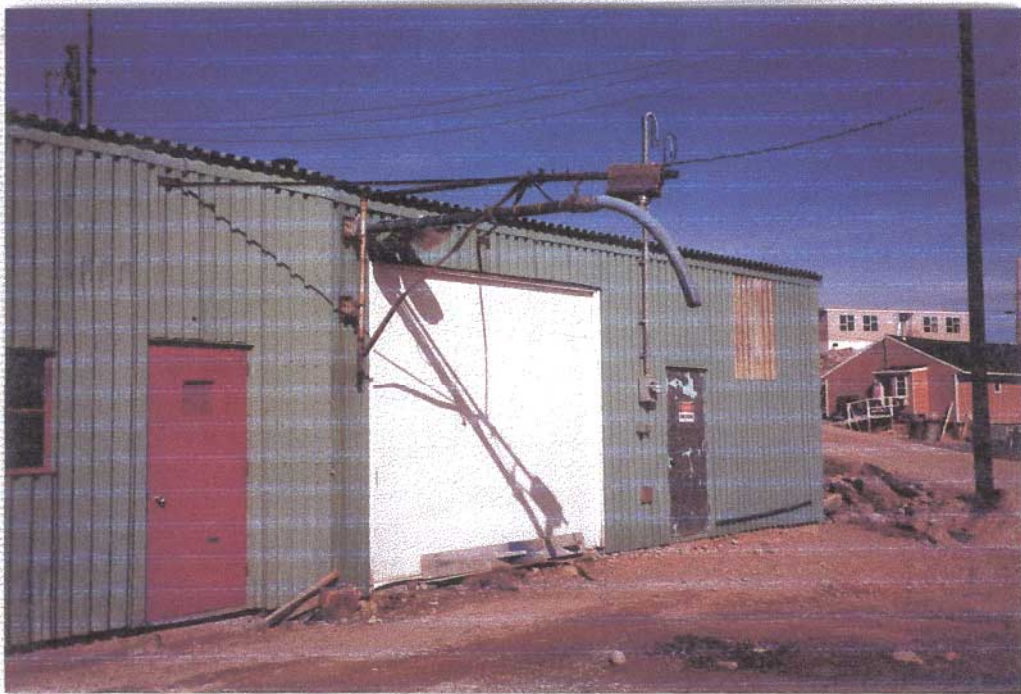
1. Pumphouse on water lake.
2. Community is immediately adjacent to water lake.
3. Truckfill station. Inside building are 2 large fiberglass storage tanks to give emergency supply.
- 4-5. Aerial view of sewage disposal area. "A" is sewage input area. "B" is outflow. Note greenery in photo #5.
6. Aerial view of solid waste disposal site. Site also shown in photo #5.
- 7-8. Sewage discharge point. Note 2 chutes to allow for safe discharge in varied wind conditions.
9. Bagged sewage disposal area (located at truck disposal area).
- 10-11. 2 views of dump perimeter and location of where a water sample was collected.
- 12-15. Panoramic view of waste metal and solid waste disposal site.
16. Waste oil storage.
- 17-18. Abandoned waste disposal site. Note erosion and materials coming back up to the surface.







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Taloyoak  
August 14, 1997



