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Nunavut, Field Operations P.O. Box 100 Iqaluit, NU X0A 0H0

Tel.: (867) 975-4298 Fax.: (867) 979-6445

September 30, 2003

NWB3GR1 Unlicenced

Grise Fiord
Robert Sheaves, Senior Administrative Officer
Hamlet of Grise Fiord
Box 77
Grise Fiord, NU, X0A 0J0

Nunavut Water Board

APR 28 2004

Public Registry

RE: July 31, 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 <u>Municipal Water Use Inspection Report</u> performed on July 31, 2003. During the inspection the following observations were noted.

# Water Supply:

The Municipality was instructed by the WRO in 2001 and 2002 to install a fence around the Water Supply Recharge Intake, this has not been done (photo 2). The WRO observed vehicle tracks on the recharge area within 30 meters of the Water Supply Intake (photo 6). A sign shall be posted indicating to all residents that the area is off limits to all traffic and that the area is the recharge area for the potable water supply. The water intake sump is less than 1 meter deep. The area should be made deeper to allow a minimum of 1 meter from the bottom and top of the recharge area. There was considerable garbage within 10 meters of the Water Intake (photo 3 & 4), this area should be cleaned. A fence in this area would assist in keeping the area clean of debris. There are light towers associated with the operation of the air strip located within 50 meters of the water supply intake (photo 5 & 6). The water treatment facility had drainage water entering the building (photo 8). The water treatment facility had chemicals and oil improperly stored at the facility (photo 9 & 10).

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### Sewage Disposal:

The sewage lagoon was in good condition (photo 11). There was some accumulated seepage observed down slope of the sewage lagoon (photo 12). There was sufficient freeboard to accommodate the rest of the season. No notification was given to the WRO with respect to the decanting of the sewage lagoon.

## Solid Waste Disposal:

Waste oil was stored in and around a creek (photo 17). The WRO instructed the municipality to relocate the waste oil drums to a location with no flowing water (photo 18). Drums should be consolidated in a area that is flat and dry. All storage drums shall be free of damage, with all bungs in place. Any contaminated ground will be removed and stored in accordance with NWB authorization. The Nunavut Power Corporation was instructed to remove all drums of solvent, oil and transformers from within 30 meters of the ordinary high water mark (photo 19 & 20). The dump is poorly segregated with excessive surface water draining through it (photo 15 & 16). Waste batteries are not properly stored in a sea lift or similar container (photo 13 & 14). Bulky metal waste is scattered throughout the dump.

## Fuel Storage:

The fuel distribution facility was not locked allowing uncontrolled access (photo 21). Drums of fuel were stored within 1 meter of a electrical panel, a potential fire hazard (photo 22). Drums of fuel were improperly stored on uneven ground well within 30 meters of the high water mark of the adjacent stream (photo 23 & 24).

## Non-Compliance of Licence:

At the time of Inspection the hamlet of Grise Fiord did not hold a Water Licence as required under both the *Nunavut Land Claims Agreement* and the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* for the use of water and disposal of waste. The municipality was instructed by the WRO in 2001 to place a fence around the water intake. No attempt to comply with this direction was forthcoming by the municipality. The municipality was instructed by the Inspector to remove all drums of waste oil and fuel presently stored in and adjacent to the airport creek.

If there are any concerns or questions in regards to this inspection please contact me at (867) 975 4298 or <a href="mailto:bodykevichc@inac.gc.ca">bodykevichc@inac.gc.ca</a>

Sincerely,

Constantine Bodykevich

Water Resources Officer (WRO)

INAC, Nunavut District

cc. -Nunavut Water Board, Gjoa Haven (Jim Wall)

-CG&T, Iqaluit (Doug Sitland)

- Baffin Health & Social Services, Iqaluit (Bruce Trotter)

- EC Environmental Protection, Yellowknife (Anne Wilson)

- INAC Water Management, Iqaluit (Michelle Mc Christie)

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September 15, 2003

Robert Sheaves, Senior Administrative Officer Hamlet of Grise Fiord P.O. Box 77 Grise Fiord, NU, X0A 0J0

# Deposit of Waste in Contravention of Nunavut Waters and Nunavut Surface Rights Tribunal Act

#### Inspector's Direction

I, Constantine Bodykevich; duly designated Inspector pursuant to subsection 85 (1) Nunavut Waters and Nunavut Surface Rights Tribunal Act, conducted an inspection on July 31, 2003 of Grise Fiord.

At the time of the drafting of this letter Grise Fiord was in contravention of subsection 12 of the Nunavut Waters and Nunavut Surface Rights Tribunal Act. The Water Resources Officer observed drums of oil, solvent and transformers stored at Grise Fiord Nunavut Power Corporation facility. These production chemicals were stored well within the minimum 100 foot distance from the ordinary high water mark.

As a stipulated in subsection 12 (1) Except in accordance with the conditions of a licence, no person shall deposit or permit the deposit of waste in any other place under conditions in which the waste, may enter waters in Nunavut.

As a stipulated in subsection 12 (3) Where waste is deposited in contravention of this section, every person who owns or has the charge, management or control of the waste, or who caused or contributed to the deposit, shall, subject to the regulations, without delay report the deposit to an inspector.

As such, under the authority vested in me pursuant to subsection 87 (1) (ii) of the Nunavut Waters and Nunavut Surface Rights Tribunal Act, I hereby direct, Robert Sheaves Senior Administrative Officer Grise Fiord to immediately:



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- Immediately insure that any 45 gallon drums of oil, fuel, solvent and capacitors are placed at least 100 feet from the ordinary high watermark.
- Immediately insure that any 45 gallon drums of waste oil, fuel and solvent presently located in and adjacent to the airport stream are consolidated and properly stored in an upright position with all bungs in place on level ground with no visible signs of leakage. All drums are to be stored within the municipal Solid Waste Disposal Facilities in Grise Fiord on dry ground.
- Insure that no drums of waste oil, waste fuel or other associated waste products from industrial sources ( Nunavut Power Corporation ) are deposited to the municipal waste facilities of Grise Fiord.

Failure to comply fully or in part with an Inspector's Direction constitutes a offence under subsection 90 (1) of the Nunavut Waters and Nunavut Surface Rights Tribunal Act and entails, upon summary conviction, a fine of \$100,000 or to imprisonment for a term of one year, or both. Further pursuant to subsection 90 (4) of the Nunavut Waters and Nunavut Surface Rights Tribunal Act, each day on which the Inspector's Direction is not complied with shall be considered a separate offence.

If you have any questions or concerns, please do not hesitate to contact me at (867) 975-4298 or <a href="mailto:bodykevichc@inac.gc.ca">bodykevichc@inac.gc.ca</a>.

Sincerely,

Constantine Bodykevich

Water Resources Officer,

INAC - Nunavut District

P.O. Box 100, Iqaluit, NU, X0A 0H0

# **Grise Fiord Inspection 2003**



Photo 1. Arial photo of Water Treatment Plant.



Photo 2. Potable Water recharge Intake, water sample N 76.2563.3 W 82.5317.4.



Photo 3. One of the main streams suppling water to drinking water recharge sump.



Photo 4. Garbage observed in drinking water recharge area.



Photo 5. Airport light tower in potable water supply recharge area.



Photo 6. Vehicle tracks through drinking water recharge stream.

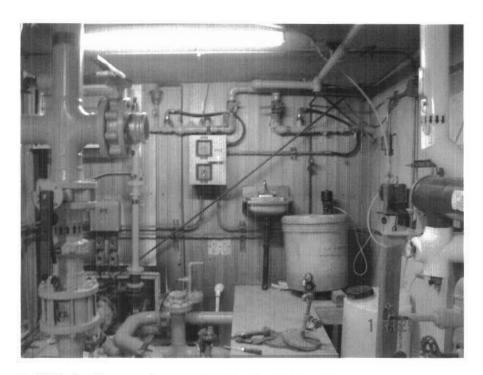


Photo 7. Chlorination system and water tank transfer valving.

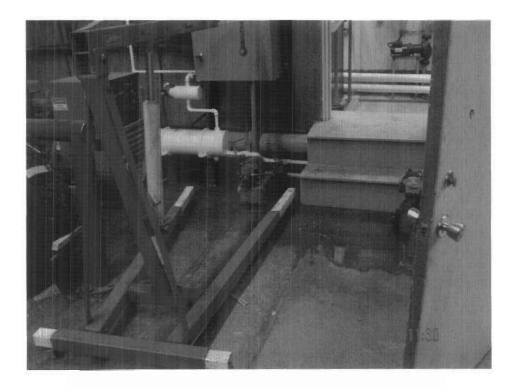


Photo 8. Drainage water noted leaking into water treatment plant.



Photo 9. Water treatment chemicals improperly stored at treatment plant.



Photo 10. Drums of production chemical and waste improperly stored at Water Treatment Plant.

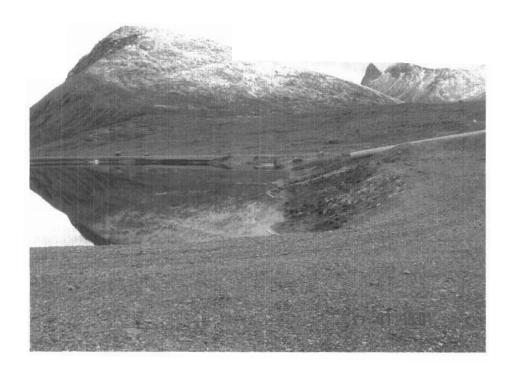


Photo 11. Sewage lagoon truck discharge station. Sufficient freeboard for rest of season.



Photo 12. Sewage lagoon seepage located 30 metres down slope from sewage lagoon. Sewage lagoon seepage N 76.2535.1 W 82.5513.7



Photo 13. Solid Waste Disposal Facility, improperly stored waste batteries.



Photo 14. Waste batteries and paint not properly stored.



Photo 15. Drums of waste stored in dump and in stream.



Photo 16. Metal dump, some segregation of refuge shown.

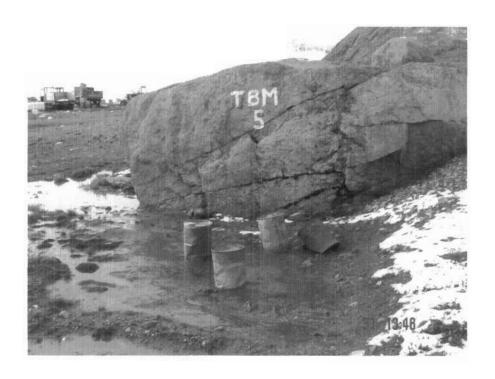


Photo 17. Waste drums stored in flowing water.



Photo 18. Drums of waste stored in and around stream.

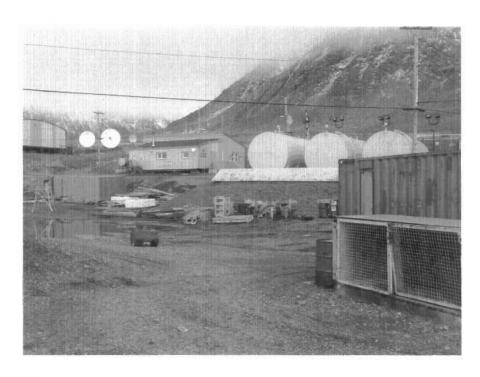


Photo 19. Drums of production products lactated by Nunavut Power Corporation Facility.



Photo 20. Drums of production chemicals and transformers located well within the 30 metre minimum distance to high water mark.



Photo 21. Fuel distribution facility not locked.

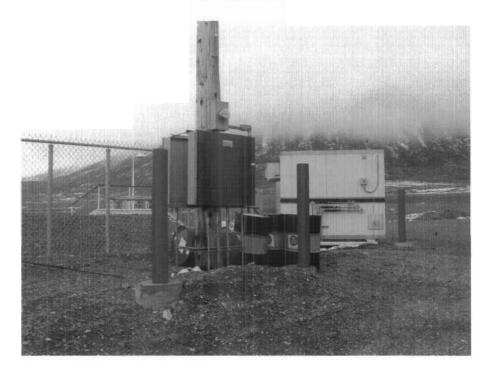


Photo 22. Drums of fuel stored within 1 metre of power junction box.



Photo 23. Drums of fuel stored out of flue storage area.



Photo 24. Drums of fuel stared adjacent to creek, well within 30 metre minimum setback. Drums poorly stored some on the side others on uneven ground next to stream.



## MUNICIPAL WATER USE INSPECTION REPORT

Date: July 31, 2003 Licensee Rep. (Name/Title): Robert Sheaves/ SAO Licensee: Hamlet of Grise Fiord Licence No.: Unlicenced

WATER SUPPLY

Source(s): Water Lake Quantity used: not metered

Owner:/Operator: Hamlet of Grise Fiord

Indicate: A - Acceptable U - Unacceptable NA - Not Applicable NI - Not Inspected
Intake Facilities: U Storage Structure: A Treatment Systems: A Chemical Storage: A

Flow Meas. Device: NA Conveyance Lines: NA Pumping Stations: A

Comments: The potable water intake was not fenced as was requested in 2001. There was considerable garbage located in the potable water recharge area. There was signs of vehicle traffic over the recharge area. The Water Treatment and Storage Facility had drainage water inside. well maintained, with chlorination system operating. Questions wit regards to frequency for cleaning water storage tanks at municipal locations (Municipal-Territorial responsibility).

WASTE DISPOSAL

Sewage: Sewage Treatment System (Prim./Sec/Ter.): Secondary; over land to ocean.

Natural Water Body: X Continuous Discharge (land or water): water

Seasonal Discharge: X Wetlands Treatment: X Trench:

Solid Waste: Owner/Operator: Hamlet of Grise Fiord

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: NIL Dyke Inspection: NA Seepages: A

Dams, Dykes: A Freeboard: A 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 had not been discharged for the 2003 season. The flow path of discharge extends some several hundred meters down slope from the sewage lagoon. Considerable vegetation is noted along the lagoon discharge path. There was excessive seepage noted emitting from the toe of the sewage lagoon. The oil and waste fuel storage area across the street from the Solid Waste Disposal Facility is not in compliance with regulations. Lab analysis will be forwarded once received by the Inspector.

#### **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 Grise Fiord 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 municipality was instructed by the WRO to remove all drums of waste oil and fuel from the current storage location adjacent to the stream emitting from the airport.

Constantine Bodykevich	CBC
Inspector's Name	Inspector's Signature
Peter Kusugak	Oskur
Field Operations Manager Name	Manager's Signature