



DIAND Nunavut District
Box 100
Iqaluit, NT
XOA OHO

Your file Votre référence

Our file Notre référence

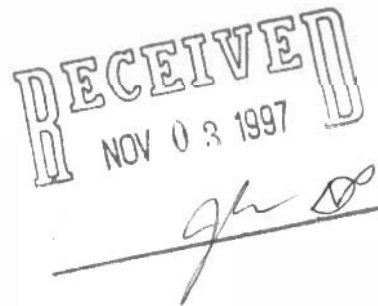
October 21, 1997

B9545-5-A11

Mr. Cecil Marshall
Senior Administrative Officer
Hamlet of Arctic Bay
Arctic Bay, NT

Dear Mr. Marshall;

Water Management Inspection - October 14, 1997



1. Please find attached a copy of the inspection report prepared as a result of the inspection carried out on the water and waste management activities of the Hamlet of Arctic Bay, NT on October 14, 1997.
2. There are several issues which we discussed prior to and after the inspection.
3. Foremost is the requirement for the Hamlet of Arctic Bay to be in possession of a water licence. This is a requirement of the NWT Waters Act and the Nunavut Water Board. A copy of an application was provided to you and when completed should be returned to the Nunavut Water Board. Their address is Box 119, Gjoa Haven, NT, XOE IJO
4. With respect to the new truck fill station, the warning sign that was in place at the old fill point should be relocated to the new site.
5. There is little constructive that I can offer about the waste disposal site that you are not already keenly aware of. The sewage lagoon is greatly undersized and frozen sewage accumulates well outside the lagoon perimeter. Also of concern is the sprawling nature of the waste metal site and the solid waste disposal site which is unfenced and nearing capacity.

.../2

6. If you have any questions with respect to the inspection report, please do not hesitate to contact me at the address above or by phone at (867)-979-4405.

Sincerely,



Paul Smith
Water Resources Officer
Nunavut District

cc. - Nunavut Water Board, Gjoa Haven
- DIAND Water Resources, YK
- MACA, Iqaluit (Capital Projects Officer)
- Public Health, Iqaluit (Nicole Ritchie)

MUNICIPAL WATER USE INSPECTION FORM

DATE: Oct. 14, 1997 COMPANY REP.: Cecil Marshall/Sam Willie
LICENSEE: Hamlet of Archa Bay LICENCE #: Unlicensed

WATER SUPPLY

Source (s): Marcel Lake Quantity Used (to date): ~21,000 m³ / year
(estimate or actual)

Owner/Operator: GNWT/Hamlet

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

Intake Facilities: A Storage Structure N/A Treatment Systems A Chem. Storage A

Flow Meas. Device A Convey. Lines N/A Pumping Stations A

Comments: A new truck fill station has been built. In operation this summer. See continued comments next page

WASTE DISPOSAL

Sewage Sewage Treatment System (primary, secondary or tertiary) Undersized lagoon
Natural Water body _____ Continuous Discharge (land or water) glaciated below lagoon

Seasonal Discharge ✓ to ocean Wetlands Treatment some Trench _____

Solid Waste: Owner/Operator: GNWT/Hamlet
Landfill _____ Burn & Landfill ✓ Other _____

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

Disch. Quality Unknown Decant Structure note 1 Erosion U Note 1

Disch. Meas. Dev. Nil Dyke Inspection Nil Seepages N/A

Dams, Dykes note 1 Freeboard U note 1 Spills N/A

Construction Nil O & M Plan Nil A & R Plan Nil

Periods of Discharge: Summer Effluent Discharge Rate: unknown

Comments: At present there are plans being prepared to establish a new waste disposal site.

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) N/A

(DIAND) _____

Signs Posted: SNP N/A Warning At dump

Record & Reporting N/A

Geotechnical Inspection: N/A

Non-Compliance of Act or Licence: Hamlet is unlicensed. An application form was provided to Mr. Marshall (SAO)

Page 2 attached Yes ✓ No _____

Licenses Representative's Title

Not Available

Licenses Representative's Signature

Inspectors Name

Inspectors Signature

Inspection Report

Hamlet of Arctic Bay

October 14, 1997

Page 2

Water Supply

Comments continued...

The truckfill station was to have been supplied power from the community. However, this is several kilometres away and at some point in the planning/construction phase a decision was made to use the stand-by power generator as the primary power supply for the facility. Both Mr. Marshall (SAO) and Mr. Sam Willie (Hamlet Foreman) expressed their concern over this decision, but it is understood that until the Arctic Bay airport is expanded to the point where power is required, no improvements can be anticipated. This could be in several years. The threat is if the generator fails during the winter and the facility cannot be accessed that it will freeze up, forcing the community to revert back to the practice of maintaining a hole in the ice of the water lake.

As it is now, the establishment of the truckfill station at the west end of the lake (closer to the community) has meant that the cycle time of the trucks has been reduced by about 15 minutes. This means that each of the two trucks can make an extra run each day (and this has reduced evening call outs).

Waste Disposal

Note 1

The primary concern the last several years has been the undersized lagoon. Because of its size and unengineered construction, it always washes out at the outflow area. As Mr. Willie said, even if repairs were made now, the lagoon would be overflowing by December. Sewage glaciates in the area below the lagoon.

I was told of plans that would see a new waste disposal facility constructed next year. It would be built in the hills behind the present site. Apparently there is a large flat area suitable for a sewage lagoon with a capacity to meet the growth of the community for the next 15 years and that depending on the location of the decant structure, effluent would flow either towards the sea at Arctic bay or towards Victor Bay. Either way, sewage would flow overland approximately 2 km prior to entering the sea. Both MACA and DPW representatives have viewed the site with this intention.

The main concern that Mr. Marshall expressed with respect to licensing is that the licence would legally bind the Hamlet to certain requirements (sewage discharge limits as one example) from facilities that they do not legally own nor have control of funds to make necessary improvements. The practices of the NWT Water Board and the Nunavut Water Board with respect to this issue was discussed, but as the NWB has yet to issue a municipal licence, no assurances could be offered.



Paul Smith
Water Resources Officer
Nunavut District