Indian and Northern Affairs | Affaires indiennes et du Nord

Northern Affairs Program
P.O. Box 100
Iqaluit, NWT
XOA OHO

DEC [illegible] 1992
WATER RESOURCES
DIVISION — [illegible]
NWT

December 4, 1992

Your file | Votre référence

Our file | Notre référence
B9545-5-H6

Hall Beach
IW
WB

Mrs. Marie Kringuk
Senior Administrative Officer
Hamlet of Hall Beach
Hall Beach, NWT
XOA OKO

Dear Mrs. Kringuk;

Re: Water Management
Hamlet of Hall Beach, NWT
Inspection Report - 1 & 2 August, 1992

1. Please find the above noted report by Mr. Paul Smith, Water Resources Officer.

2. The inspection report has identified a number of concerns which you will wish to note - please refer to paragraph 12 and 13 of the report.

3. The results of the water samples taken are included. No concerns are noted with water quality.

4. Please find enclosed a bilingual (Inuktitut/English) explanation of the parameters tested.

5. Please feel free to contact our District Office if you have any questions or comments on this report.

Sincerely,

J.M.A. Theriault
District Manager
Baffin District

cc: Municipal Co-ordinator
Water Resources
DIAND NAP/NWT Region

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INSPECTION REPORT

WATER MANAGEMENT

HAMLET OF HALL BEACH

31 JULY - 01 AUGUST 1992

BY

PAUL SMITH

INSPECTOR UNDER THE NORTHERN INLAND WATERS ACT

INDIAN AND NORTHERN AFFAIRS CANADA

NORTHERN AFFAIRS PROGRAM

IQALUIT, NWT

DATE: 17 SEPTEMBER 1992
WATER REGISTER: N/A - UNLICENCED COMMUNITY

INSPECTION REPORT

Water Supply

1. Water continues to be drawn from the reservoir that serves both the North Warning System (Hall Beach station), Fox-Main, and the community of Hall Beach. No concerns were noted. The water reservoir is posted in all four corners by the NAADM/NWS Station personnel.

Waste Disposal

Sewage

2. The sewage lagoon, 1.5 km north of the community, has been enlarged. The lagoon is built on granular material. Consequently, there is no "runoff" from the lagoon, but rather there is subsurface drainage. The lagoon was practically empty with about 2 m of freeboard. No concerns were noted.

Bagged Sewage

3. A pit for bagged sewage has been constructed across the road from the lagoon. It too was practically empty. It had a freeboard of approximately 1.5 m. Some garbage had blown into the pit, including a 205 l drum.

Domestic

4. There were several separate areas where garbage had been disposed. The main disposal area was well burnt, but requires better granular coverage. Hall Beach is blessed with a plentitude of gravel, so keeping the dump covered should not be a problem.

5. Other areas have been used as disposal sites, from time to time. These areas should be cleaned up and restored. All waste disposal materials should be consolidated in one main area.

Waste Metal

6. This area is well organized and neatly kept. This area consists of several hundred 205 l drums and many old vehicles.

Waste Oil

7. There were ten drums of waste oil in one area by the waste disposal site. None appeared to be leaking.

Fuel Storage

8. The NTPC fuel storage facility was inspected. A fuel spill (92-130) was in the final stages of being cleaned up. The sewage truck was used to remove all the water from the steel berm. This water was dumped into the sewage lagoon. Absorbent material was then used to remove the remainder of the oil. The contaminated absorbent material was burned at the dump. There was no sheen of oil within the sewage lagoon. In the future, it would be advisable that the steel berm that surrounds the tank be drained of water as it accumulates.

Warning Signs

9. There are no warning signs at either the dump or at the sewage disposal areas.

Records

10. Records keeping practices could not be verified, as the Senior Administrative Officer (Marie Kringuk) was not in Hall Beach at the time of the inspection.

Surveillance Network Program

11. Water quality samples were collected at the following locations:

HB-01	Water Reservoir (raw water)
HB-02	Treated water - Hall Beach hotel

Other Concerns

12. There are a series of streams and ponds behind the NTPC plant. Littering the edges of these ponds are many 205 l drums. Other garbage sits in the water. In one smaller pool was the rear portion of a decomposing walrus. Serious health risks could manifest themselves if this is not cleaned up.

Discussion/Concerns

13. a. Unfortunately, Marie Kringuk, the SAO, was out of town at the time of the inspection;

b. the Hamlet was in the midst of a very large community clean-up campaign. Many garbage bags of windblown and other garbage had been collected and were placed along the road to the dump and were awaiting transport. Bags of garbage had also been collected from in town. It appeared that the next area that was to be tackled was that area behind town along the series of ponds. The people working at cleaning up had done a super job, and judging by the amount of garbage that had been collected, a great deal of effort had been invested, and;

c. the Hamlet is requested to place warning signs at both the dump and sewage disposal sites.

d. the Hamlet is requested to consolidate the separate dumps.

WATER RESOURCES DIVISION, YELLOWKNIFE, NORTHWEST TERRITORIES 6/11

RESULTS OF LABORATORY ANALYSIS

LICENSEE/ PROJECT Hamlet of Hall Beach	LICENCE NUMBER Nil		LOCATION Hall Beach, NT
DATE SAMPLED 31 July 92 01 Aug 92	DATE RECEIVED 05 Aug '92		DATE COMPLETED Sept 15/92 we

STATION NUMBER		HB-01	HB-02 01 Aug 92		
LABORATORY NUMBER		920795	920796		
ANALYSIS REQUIRED		✓	✓	✓	
pH (units)		✓ 8.38	✓ 7.85	Aug 5/92	ML
Conductivity (µmho/cm)		✓ 530	✓ 130	Aug 5/92	ML
Dissolved Oxygen					
Turbidity (NTU)		✓ 1.3	✓ 0.64	Aug 5/92	ML
Colour (colour U.)		✓ 10	✓ <5	Aug 5/92	ML
Suspended Solids		✓ <3	✓ <3	Aug 7/92	MH
TDS, Residue		✓ 304	✓ 57	Aug 7/92	MH
Calcium		✓ 30.2	✓ 16.0		
Magnesium		✓ 11.2	✓ 3.3	Aug 20/92	KR
Tot. Hardness ($CaCO_3$)		✓ 122	✓ 54		
Tot. Alkalinity ($CaCO_3$)		✓ 89	✓ 48	Aug 14/92	
Sodium		✓ 60.7	✓ 5.8	Aug 6/92	ZA
Potassium		✓ 4.0	✓ 0.8		
Chloride		✓ 93.7	✓ 8.7	Aug 15/92	ZA
Sulphate		✓ 10	✓ 3		
Total Coliform (count/100 ml)					
Fecal Coli.					
Fecal Strep.					
Std. Plate Cnt (cnt/ml)					
BOD_5					
COD					
Carbon, IC					
Carbon, TOC					
Ammonia Nitrogen (as N)					
Nitrate + Nitrite (as N)		✓ <0.01		Aug 6/92	CC
Total Kjeldahl N (as N)					
Phosphorus O-P (as P)					
Phosphorus Tot (as P)		✓ 0.010		Aug 7/92	CC
Silica Reac. (as SiO_2)					
Total Cyanide		✓ 0.037	✓ 0.026	Aug 25/92	CC
Available Cyanide (WAD)					
Sulphide					
Oil & Grease					
Phenols					
Arsenic	T (µg/L)	✓ <0.5	✓ <0.5	Aug 12/92	KP
	D (µg/L)				
Cadmium	T (µg/L)	✓ 0.2	✓ <0.2	Aug 21/92	KP
	D (µg/L)				
Copper	T (µg/L)	✓ 2	✓ 43	"	
	D (µg/L)				
Iron	T (µg/L)	✓ 62	✓ 40	"	
	D (µg/L)				
Lead	T (µg/L)	✓ 1	✓ 2	"	
	D (µg/L)				
Mercury	T (µg/L)	✓ 0.03	✓ 0.02	we	Aug 30/92
	D (µg/L)				
Nickel	T (µg/L)	✓ <1	✓ 1	Aug 21/92	KP
	D (µg/L)				
Zinc	T (µg/L)	✓ 6	✓ 8	"	
	D (µg/L)				
Chromium	T (µg/L)	✓ 2	✓ 4	"	
	D (µg/L)				

Results are expressed in mg/L, except as indicated. T and D refer to Total & Dissolved Metals

EPARTMENT OF INDIAN AFFAIRS AND N HE DEVELOPMENT
ATER RESOURCES DIVISION, YELLOWKNIFE, NORTHWEST TERRITORIES

FIELD SAMPLING AND DATA

LICENSEE/PROJECT Hamlet of Hall Beach	LICENCE NO. N:1	LOCATION Hall Beach, NT
DATE SAMPLED 31 July 92	SAMPLED BY Paul Smith	

ANALYSIS	SAMPLE VOLUME	PRESERVATIVE	STATION NUMBER					
			HB-01	HB-02				
			BOTTLE NUMBER					
MISC. & ARSENIC	1 LITRE	NONE ✓	"	"				
HEAVY METALS	250 ~~500~~ ML	3.5mL 3.5:1 ~~2 ML 1:1~~ HNO_3	"	"				
CYANIDE	500 ML	About 6 pellets ✓ NaOH to pH 12	"	"				
MERCURY	250 ML	2 ML 1:1 HNO_3 ✓ + 2 ML 5% $K_2Cr_2O_7$	"	"				
NUTRIENTS	250 ML	NONE ✓	"					
BACTERIA	500 ML	✓ NONE						
OIL AND GREASE	1 LITRE (GLASS)	4 ML 1:1 H_2SO_4						
				1 Aug 92				
Time of Sampling			1:10	2:45				
Air Temperature			10°C	—				
Water Temperature			—	—				
Rate of Flow			—	tap				
Ice Thickness			—	—				
Depth of Sampling			Surface	—				
pH			—	—				
Conductivity			—	—				
Dissolved Oxygen			—	—				

HB-01 Water Reservoir - Wind was blowing 40-45 N
mixing water along shore where I took
this sample.
HB-02 Tap water - let run a few minutes before sampled
Samples refrigerated shortly after collection.