### APPENDIX C

Health Assessment Report
Population Estimates & Projections
Reviewer Correspondence Re: May 17 2001 Application

T-632 P.030/032 F-643

PAGE Z1

2001-Way-17 20:58 Fram-NWB

- 13/31/2300 14:11

8679392256

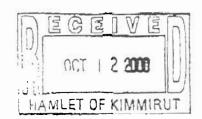


Department of Health & Social Services: Baffin

ארתאא ליססף ביצוריא אליים ורתאים אףיני Okca Kavamat Monakhikakvilikiot Olasilikiot Ministère de la Santé et des Services Sociaux P.O. Box 1000; NN 6 1 1000; C.P. 1000 Δ8-26. 202 XOA OHO igaluit, NU Phone: > 1 - Di: Fonia (887)979-7800 Fax 16 6 4 Fextor (887)979-7809

October 6, 2000

Tommy Akavak - AVSAO PO Box 120 Kimmirut, NU XOA ONO



Dear Tommy,

On the afternoon of October 3rd, 2000 I conducted an environmental health assessment of the Kimmirut Hamlet's public services. Miki, from the Hamlet, accompanied me during the inspection.

#### Community Water System

During this inspection the pump supplying water from the reservoir was not functioning. Water tucks were being filled directly from the reservoir and then bulk-chlorinated with bleach. While not ideal, this situation is satisfactory until the pump is repaired. In the meantime, ensure that the correct amount of bleach is added to every load of water so that the free chlorine residual is kept at a minimum of 0.2 mg/l. Once the supply pump is repaired you must ensure that daily free chigrine measurements are taken and recorded at the pumphouse. This practice allows you to monitor the amount of chlorine present in the drinking water and make adjustments as necessary to deliver the highest quality of water to the residents of Kimmirut.

Warning signs should be posted at the reservoir prohibiting trespassing, fishing, snow machines, camping etc because this area is a public water supply.

#### Sewage Lagoon

The existing lagoon is inadequate. Plans have been received for a new lagoon, which should be constructed as soon as possible.

#### Landfill Site

This site is also inadequate. There is little or no segregation of waste, burned material is not being covered with fill material, there is no becardous materials storage and a

29252454981-

8679392256

SE . EDA9

2001-May-17 20:50

~ 12/21/2302 14:11

+1-867-360-6340 From-NWB

T-632 P.031/032 F-643

PAGE 82

91:91 2002 02 555

lack of fencing allows garbage to blow around unchecked. Plans have been received for a new landfill site that should be constructed as soon as possible.

#### Akayak Centre

Both washing instituted at this location require a fair amount of work to bring them up to an acceptable sanitary standard. Many of the stall doors are missing as well as the toilet paper dispensers. There are holes in the walls that must be repaired and painted. The state of these washrooms has not appreciably changed since the previous Environmental Health inspection five months ago; none of the deficiencies have been repaired.

In the basement below the centre there is a storage room in the corner of the basement, upon entering there was a strong odour of spilled pop and vomit. Access to this room, and the rest of the basement, should be limited to Hamlet employees only. There were numerous empty pop cans strewn across the basement and it seems obvious that this location is a hangout for youths.

If you have any questions about this report please feel free to contact mo at (867) 070-7654.

Sincerely,

Shaun Mackle

Environmental Health Officer

200;-May-17 20:57

From-YWB

+1-367-360-8343

T-832 P.332/032 F-843



# Baffin Regional Health Services

To:

From:

Environmental Health Officer

Lab Date:

Baffin Regional Health & Social Services Board

PO Bag 200, Iqaluit, NT

XOA OHO

SUBMITTED WATER SAMPLE RESULTS KAMLET OF KIMMIKL

The bacteriological water samples listed below were analyzed and the results are as indicated.

Location of Sample	Total Collform	E. Coll	Acceptable Yes/No	Comments		
85-7 14.	0	D	Yes			
Interlench 105	0	0	405			
	-	-				
- Artista	-					
	_					
		The state of the s				

As you are aware, counts above zero require immediate re-sampling. If you have any problems or questions, please call us at (867)979-7655 (between 8:30AM - 5:00PM) or fax us at (867)979-7659.

Regards,

Environmental Health Officer



۵۵۶: ۵۵۰ کی مورز ۵۵،۵۰۰ کی و میرور ۵۵۰ کربی (۱۲۵ کی و میرور)

Nunavut: Community Population Estimates

Le Nunavut: Evaluation du nombre d'habitants par communautés

1997/1998/1999

Nunavut Bureau of Statistics

Bag 800 Iqaluit, Nunavut X0A 0H0 www.stats.gov.nu.ca

## Nunavut: Community Population Estimates

FULL	1997	1998	1999	
		A Source of the second for the	and the same	
Nunavut	25,947	26,429	27,039	
Arctic Bay	703	709	`716	
Arviat	1,635	1,640	1,642	
Baker Lake	1,427	1,445	1,439	
Bathurst Inlet	X	X	X	
Bay Chimo	53	51	X	
Cambridge Bay	1,386	1,412	1,387	
Cape Dorset	1,144	1,159	1,190	
Chesterfield Inlet	357	363	363	
Clyde River	726	733	752	
Coral Harbour	794	823	822	
Gjoa Haven	916	941	964	
Grise Ford	149	154	145	
Hall Beach	580	595	619	
gloolik	1,277	1,307	1,348	
qaluit	4,352	4,368	4,627	
Kimmirut	423	422	440	
Kugaaruk	511	526	568	
Kugluktuk	1,275	1,321	1,362	
Nanisivik	219	243	228	
Pangnirtung	1,384	1,429	1,475	
Pond Inlet	1,208	1,237	1,276	
Qikiqtarjuaq	499	495	508	
Rankin Inlet	2,126	2,211	2,230	
Repulse Bay	563	582	600	
Resolute Bay	202	218	241	
Sanikiluaq	680	682	680	
Taloyoak	749	762	783	
Whale Cove	317	317	308	

and the second s

Notes: Population estimates produced by Statistics Canada and the Nunavut Bureau of Statistics include people in the population who are residents of Nunavut and do NOT have a home elsewhere in Canada from which they are temporarily absent. Therefore, temporary residents such as construction crews,

residents in mining camps, etc. are not included in the population estimates.

Data are suppressed for (a) communities with a population of 50 or less and (b) 'unorganized areas' -- but they are included in the Nunavut total.



۵۵۶: ۵۵۰، کوئی کی در کی وجرا کی در کی د

Nunavut: Community Population Projections

Le Nunavut: Projections pour la population par communautés

2000 - 2020

**Nunavut Bureau of Statistics** 

Bag 800 Iqaluit, Nunavut X0A 0H0 www.stats.gov.nu.ca

### Nunavut: Community Population Projections

No. West Co. and Appear to the Control of the Contr	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
of Carlos Carlos College & Constant	and the same same same same	in a description of the column	and the same	Sear Marin & Local Co.		علقامة فداء المائد			4.,	a tank alambana	and and another services
Nunavut	27,688	28,410	29,154	29,885	30,601	31,317	32,036	32,774	33,530	34,311	35,114
Arctic Bay	730	747	763	782	801	819	837	855	876	894	916
Arviat	1,690	1,736	1,784	1,833	1,883	1,929	1,982	2,033	2,088	2,142	2,198
Baker Lake	1,470	1,501	1,534	1.563	1,594	1,624	1,655	1,683	1,712	1,745	1,777
Bathurst Inlet	Х	X	X	X	X	X	X	X	X	X	X
Bay Chimo	X	X	X	X	X	X	X	X	X	X	X
Cambridge Bay	1,418	1,449	1,484	1,517	1,550	1,581	1,609	1,642	1,679	1,715	1,752
Cape Dorset	1,213	1,240	1,268	1,298	1,327	1,354	1,382	1,412	1,441	1,471	1,501
Chesterfield Inlet	372	382	391	401	409	420	431	443	452	465	476
Clyde River	771	789	812	830	848	867	890	913	937	959	982
Coral Harbour	845	865	888	911	933	955	978	1,003	1,024	1,049	1,078
Gjoa Haven	984	1,005	1,023	1,045	1,063	1,084	1,102	1,117	1,136	1,154	1,173
Grise Ford	145	146	147	146	146	147	149	151	151	153	155
Hall Beach	635	656	677	696	714	734	754	771	790	810	829
lgloolik	1,379	1,417	1,456	1,495	1,529	1,562	1,594	1,627	1,660	1,701	1,736
Iqaluit	4,762	4,930	5,108	5,278	5,438	5,606	5,768	5,936	6,108	6,289	6,477
Kimmirut	450	461	474	485	496	506	519	530	546	560	573
Kugaaruk	582	601	616	631	648	664	682	701	719	737	756
Kugluktuk	1,389	1,422	1,456	1,490	1,522	1,556	1,585	1,618	1,653	1,686	1,720
Nanisivik	230	225	224	226	225	223	222	220	221	221	220
Pangnirtung	1,506	1,539	1,575	1,613	1,651	1,687	1,722	1,756	1,792	1,831	1,870
Pond Inlet	1,314	1,361	1,405	1,443	1,489	1,532	1,574	1,624	1,668	1,714	1,761
Qikiqtarjuaq	522	537	551	566	582	599	614	629	641	654	668
Rankin Inlet	2,277	2,327	2,376	2,432	2,483	2,527	2,576	2,629	2,683	2,734	2,791
Repulse Bay	615	630	648	664	682	702	720	738	757	777	797
Resolute Bay	243	246	247	249	251	253	252	255	257	260	263
Sanikiluaq	702	722	740	758	776	796	816	834	853	873	896
Taloyoak	804	825	847	866	886	904	925	947	968	992	1,016
Whale Cove	312	321	328	336	344	351	358	367	378	388	397

Notes: Population projections produced by Statistics Canada and the Nunavut Bureau of Statistics include people in the population who are residents of Nunavut and do NOT have a home elsewhere in Canada from which they are temporarily absent. Therefore, temporary residents such as construction crews, residents in mining camps, etc. are not included in the population projections.

Data are suppressed for (a) communities with a population of 50 or less and (b) 'unorganized areas' -- but they are included in the Nunavut total.

### Nunavut: Community Population Projections

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
	and an analysis		e i rapa paragenta	and the second second				againe agains such	e i regio retori		and of the separate
Nunavut	35,114	35,937	36,773	37.619	38,471	39,335	40,217	41,106	42,001	42,904	43,824
Arctic Bay	916	939	960	980	1,003	1,019	1,033	1,049	1,065	1,078	1,094
Arviat	2,198	2,256	2,320	2,381	2,449	2,517	2,584	2,658	2,721	2,791	2,855
Baker Lake	1,777	1,808	1,843	1,882	1,918	1,957	1,996	2,036	2,072	2,108	2,148
Bathurst Inlet	Х	X	X	X	X	X	×	X	X	X	X
Bay Chimo	X	X	X	X	X	X	X	X	X	X	X
Cambridge Bay	1,752	1,790	1,828	1,865	1,900	1,939	1,979	2,018	2,057	2,095	2,137
Cape Dorset	1,501	1,536	1,570	1,600	1,632	1,662	1,692	1,726	1,757	1,793	1,829
Chesterfield Inlet	476	486	498	509	519	528	539	549	563	572	583
Clyde River	982	1,007	1,028	1,050	1,072	1,095	1,121	1,144	1,167	1,190	1,214
Coral Harbour	1,078	1,101	1,128	1,158	1,187	1,219	1,250	1,281	1,312	1,345	1,376
Gjoa Haven	1,173	1,194	1,217	1,242	1,266	1,290	1,317	1,345	1,375	1,405	1,435
Grise Ford	155	157	160	160	163	165	166	168	169	172	173
Hall Beach	829	850	870	890	912	934	957	982	1,008	1,029	1,052
Igloolik	1,736	1,773	1,807	1,842	1,883	1,922	1,960	2,001	2,043	2,086	2,131
Iqaluit	6,477	6,669	6,866	7,064	7,276	7,456	7,637	7,814	7,997	8,178	8,391
Kimmirut	573	589	601	612	624	636	649	662	675	688	706
Kugaaruk	756	779	802	823	844	867	889	911	934	957	979
Kugluktuk	1,720	1,760	1,793	1,827	1,859	1,893	1,928	1,965	2,000	2,041	2,076
Nanisivik	220	218	215	215	209	205	202	200	196	195	191
Pangnirtung	1,870	1,905	1,955	1,995	2,032	2,074	2,117	2,160	2,202	2,243	2,280
Pond Inlet	1,761	1,808	1,851	1,904	1,951	1,999	2,047	2,093	2.137	2,184	2,233
Qikiqtarjuaq	668	683	697	711	724	737	752	765	780	795	811
Rankin Inlet	2,791	2,848	2,907	2,970	3,030	3,120	3,213	3,314	3,429	3,537	3,633
Repulse Bay	797	818	838	858	881	903	928	949	970	990	1,012
Resolute Bay	263	266	269	270	272	275	279	281	283	287	288
Sanikiluaq	896	918	939	963	987	1,008	1,029	1,050	1,069	1,090	1,108
Taloyoak	1,016	1,039	1,065	1,094	1,119	1,147	1,179	1,209	1,236	1,265	1,294
Whale Cove	397	405	412	422	432	442	450	458	469	481	491

Notes: Population projections produced by Statistics Canada and the Nunavut Bureau of Statistics include people in the population who are residents of Nunavut and do NOT have a home elsewhere in Canada from which they are temporarily absent. Therefore, temporary residents such as construction crews, residents in mining camps, etc. are not included in the population projections.

Data are suppressed for (a) communities with a population of 50 or less and (b) 'unorganized areas' -- but they are included in the Nunavut total.

## Nunavut: Community Population Projections

THE THE R. W. S. A. LEWIS WALLES	2000	2005	2010	2015	2020
	and the state of t	the state of the s			4 460
Nunavut	27,688	31,317	35,114	39,335	43,824
Arctic Bay	730	819	916	1,019	1,094
Arviat	1,690	1,929	2,198	2,517	2,855
Baker Lake	1,470	1,624	1,777	1,957	2,148
Bathurst Inlet	X	X	X	X	×
Bay Chimo	X	X	X	X	X
Cambridge Bay	1,418	1,581	1,752	1,939	2,137
Cape Dorset	1,213	1,354	1,501	1,662	1,829
Chesterfield Inlet	372	420	476	528	583
Clyde River	771	867	982	1,095	1,214
Coral Harbour	845	955	1,078	1,219	1,376
Gjoa Haven	984	1,084	1,173	1,290	1,435
Grise Ford	145	147	155	165	173
Hall Beach	635	734	829	934	1,052
lgloolik	1,379	1,562	1,736	1,922	2,131
Iqaluit	4,762	5,606	6,477	7,456	8,391
Kimmirut	450	506	573	636	706
Kugaaruk	582	664	756	867	979
Kugluktuk	1,389	1,556	1,720	1,893	2,076
Nanisivik	230	223	220	205	191
Pangnirtung	1,506	1,687	1,870	2,074	2,280
Pond Inlet	1,314	1,532	1,761	1,999	2,233
Qikiqtarjuaq	522	599	668	737	811
Rankin Inlet	2,277	2,527	2,791	3,120	3,633
Repulse Bay	615	702	797	903	1,012
Resolute Bay	243	253	263	275	288
Sanikiluaq	702	796	896	1,008	1,108
Taloyoak	804	904	1,016	1,147	1,294
Whale Cove	312	351	397	442	491

Notes: Population projections produced by Statistics Canada and the Nunavut Bureau of Statistics include people in the population who are residents of Nunavut and do NOT have a home elsewhere in Canada from which they are temporarily absent. Therefore, temporary residents such as construction crews, residents in mining camps, etc. are not included in the population projections.

Data are suppressed for (a) communities with a population of 100 or less and (b) 'unorganized areas' -- but they are included in the Nunavut total.



Indian and Northern Affairs Canada www.inac.gc.ca

Affaires indiennes et du Nord Canada www.ainc.gc.ca

Nunavut Regional Office P.O. Box 2200 Iqaluit, NU, X0A 0H0

NWB3KIM
Your file - Votre rétérence

August 20, 2001

Rita Becker Licensing Administrator Nunavut Water Board P.O. Box 119 Gjoa Haven, NU, X0E 1J0

Dur file - Notre référence

Dear Ms. Becker,

# Canadian Environmental Assessment Act (CEAA) Screening Report on Kimmirut Water Licence Renewal

I am pleased to inform you that pursuant to Section 5 of the Canadian Environmental Assessment Act, Indian and Northern Affairs Canada (INAC) has conducted an environmental assessment of the Hamlet of Kimmirut's water use and waste disposal facilities as described in the Water Licence renewal application submitted to the Nunavut Water Board (NWB) on May 17, 2001.

The project proposal was reviewed by INAC's Water Resources in collaboration with the Department of Fisheries and Oceans and Environment Canada. Based upon the results of this screening process, INAC has concluded that the project proposed in the application for

a Water Licence for the Hamlet of Kimmirut is not likely to cause significant adverse environmental effects. In fact, the application of proper conditions within the Water Licence will likely diminish current environmental effects caused by Kimmirut's currently inadequate sewage treatment. One such Water Licence condition we recommend is a deadline to implement a new and adequate sewage treatment system. The fact that Community Government and Transportation (CG&T) provides the plans and funding for such projects should be taken into consideration when imposing the deadline to the community's Licence.

It is mentioned in the application that construction of a new sewage lagoon is already underway. Site visits by the Inspector have revealed that work on the sewage lagoon is very nearly completed. However, plans for the new sewage lagoon were not submitted to the NWB prior to construction, nor are they included in the licence application. Due to the lack of information regarding this new sewage lagoon, we cannot properly screen this proposed project. So as not to delay the licensing process, which we believe is beneficial for the community, we propose that the new sewage lagoon project be separated from the licence renewal process. Plans for the new proposed sewage treatment system, along with the

appropriate Operation and Maintenance Plans, should be submitted by the Hamlet of Kimmirut in an application to amend the licence to include this new facility before it is operational. When the application for an amendment is received, INAC will require a CEAA screening for the new sewage treatment system. A screening on the new proposed sewage lagoon will begin as soon as all the required information is received.

In summary, the Water Licence renewal for the Hamlet of Kimmirut may proceed, but a separate amendment application and *CEAA* screening must be performed to evaluate the proposed new sewage lagoon before it becomes operational.

If you should require further information, please do not hesitate to contact me at (867) 975-4555.

Sincerely,

Michael Roy
Baffin Regional Coordinator, Water Management
INAC - Nunavut Regional Office
P.O. Box 2200, Iqaluit, NU, X0A 0H0
(867) 975-4555
fax: (867) 975-4560
roymjp:a inac.gc.ca



P.O. Box 119 GJOA HAVEN, NU XOB 1J0

kNK5 wmoEp5 vtmpq

TEL: (867) 360-6338 FAX: (867) 360-6369 NUNAVUT WATER BOARD NUNAVUT IMALIRIYIN KATIMAYINGI

August 6, 2001

Mr. Tommy Akavak Municipality of Kimmirut Kimmirut NU X0A 0N0

Re: Application for Municipal Licence - NWB3KIM

Dear Mr. Akavak:

The Nunavut Water Board (NWB) is currently reviewing your application for a municipal licence dated May 17, 2001. To this end, the Application and supporting documents have been forwarded to the attached distribution list for review and comments.

On the issue of the proposed upgrade to the present sewage treatment system, the NWB received a copy of a letter dated July 19, 2001 from Jordan DeGroot, Habitat Management Biologist with the Department of Fisheries and Oceans (DFO), sent to your attention, requesting additional information on the location of the proposed sewage lagoon, the presence of fish habitat, and potential impacts to fish habitat associated with the project. The Board also notes that the Supplementary Questionnaire submitted in support of your Application states that the current sewage lagoon is being re-located and that there will be a new sewage lagoon in the year 2001. It appears from your Application that the construction of this new facility is in progress; however, our files indicate that this facility has not been approved by the Board and we wish to remind you that Section 13.9.1 of the Nunavut Land Claims Agreement stipulates that "where the approval of the NWB is required for a water application, the Applicant shall not proceed until approval has been granted".

On the same issue, the NWB Public Registry shows that on May 19, 1999, Dillon Consulting submitted to the NWB, on behalf of the Nunavut's Department of Public Works, Telecommunications & Technical Services, a planning report and design drawings for approval to proceed with the construction of a wetlands treatment system -rather than a sewage lagoon as currently proposed in your Application. This proposal was submitted to the NWB as a requirement of Part C, Item 4 of licence N5L4-1441, which expired December 31, 2000. The proposal was not approved by the NWB as the additional information requested by DFO in a letter dated June 2, 1999 to Mr. David Parker was not provided by Public Works, Telecommunications & Technical Services. In an electronic message to Mr. David Parker dated March 1, 2000, the NWB Technical Advisor inquired about the status of the treatment option by wetlands put forward in Dillon's 1999 proposal and reminded Mr. Parker that the

Frankling V.

NWB had not issued approval for the project to proceed. Our files contain neither a reply to this inquiry nor a notification that a different treatment option was envisaged.

Consequently, in order for the NWB to resume the review and approval of your Application. please forward to this office as soon as possible your complete proposal and design drawings for upgrading the present sewage disposal system, including a response to Mr. DeGroot's request for additional information.

Sincerely,

Original signed by:

Philippe di Pizzo Executive Director

Distribution List C.C.

NWB3KIM-August 6, 2001

(867)939-2045 Hamlet of Kimmirut Tommy Akavak

(867) 983-2723 Carson Gillis cgillis@polarnet.ca ITM (867) 979-3238 Lands Manager (867) 979-5391 QIA, Lands (867) 979-1491 (867) 979-1560 Executive Director QWB

igalipeau@nwmb.com (867) 979-7785 NWMB Jose Galipeau



Indian and Northern Affairs Canada www.inac.gc.ca

Affaires indiennes et du Nord Canada www.ainc.gc.ca

Nunavut Regional Office P.O. Box 2200 Iqaluit, NU, X0A 0H0

NWB3KIM

Your file - Votre référence

Our file - Notre référence

June 25, 2001

Tommy Akavak
Acting Senior Administrative Officer
Hamlet of Kimmirut
P.O. Box 120
Kimmirut, NU, X0A 0N0

Dear Mr. Akavak,

This letter is to inform you that, according to Section 5 (a) (d) of the Canadian Environmental Assessment Act (CEAA), Indian and Northern Affairs Canada (INAC) has determined that an environmental assessment will be required if the Nunavut Water Board holds a public hearing during the licencing processes of your application for the renewal of Water Licence NWB3KIM.

To prepare for the possibility of a public hearing, INAC has initiated a screening in accordance with *CEAA* procedures. It has been determined that INAC will be the responsible authority during this screening. The Department of Fisheries and Oceans and Environment Canada are also federal authorities and will be providing information and expertise for the screening.

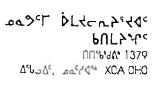
If you have any questions, please feel free to contact me at (867) 975-4555, or fax at (867) 975-4560.

Sincerely,

Michael Roy
Baffin Regional Coordinator, Water Management
INAC - Nunavut Regional Office
P.O. Box 2200, Iqaluit, NU, X0A 0H0
(867) 975-4555
fax: (867) 975-4560
roymip a inae.ge.ea

cc: DFO (Jordan deGroot) EC (Lawrence Ignace) NWB (Rita Becker)







NUNAVUT WILDLIFE MANAGEMENT BOARD

P.O. Box 1379 Igaluit, NT XQA 0H0

Iqaluit, June 6th 2001

Mrs. Rita Becker Licensing Administrator Nunavut Water Board Gjoa Haven, Nunavut

#### RIC: Municipality of Kimmirut

Mrs. Becker,

I'm sending the NWMB comments/concerns regarding the Municipality of Kimmirut application, to obtain water for municipal purposes.

As long as the Municipality of Kimmirut takes steps to address the situation of the sewage lagoon (high elevation and close to a creek), during the term of the license, we have no other concerns. We also ask that any reports generated by this project be submitted to NWMB for our records.

Bost regards

Josée Galipeau

Wildlise Management Assistant