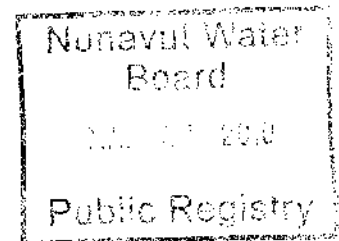


APPENDIX-A

RESPONSE TO INAC INSPECTOR'S INSPECTION





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Nunalingni Kavamatkunillu Pivikhaqautikkut
Department of Community Government Services
Ministère des Services communautaires et gouvernementaux

Phyllis Beaulieu
Manager of Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0

March 4, 2010

Sub: Renewal Application for Water Licence NWB3PON0409 (Hamlet of Pond Inlet)

Dear Ms Beaulieu,

I am writing you on behalf of the Hamlet of Pond Inlet in response to the letter of Mr. David Hohnstein C.E.T, Director of Technical Services, NWB, of dated January 21, 2010.

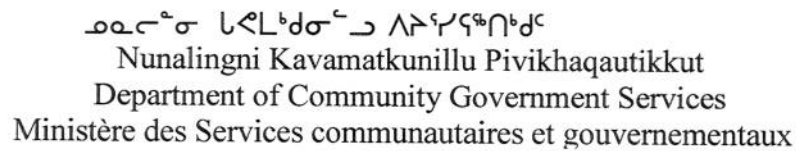
In order to address the issues and concerns of non compliances, we are working together with the Hamlet of Pond Inlet and have developed the following strategies.

To address the situation of the leaking berms the hamlet along with the GN will launch a geotechnical investigation this summer to assess the structural integrity and containment status of the lagoon. Once complete, we will take the appropriate action to rectify the situation. The hamlet will also thaw the decant to allow for proper operation.

We are also committed this year to stopping and recovering the leaching waste oil, this will be accomplished through proper storage of the barrels and collecting spilt waste oil.

Also this year the hamlet will devise a plan to better organize the landfill, develop procedures to sort out the bulk metals, and hazardous materials from the domestic waste.

These are short term actions; to address the compliance issues the GN will commission a study to improve the use of the waste management process. From this study, we will be able to know exactly what the needs of each community are. We will use this study to educate the municipalities in the proper operation of their landfill site, creating training manuals, which will lead to a landfill operation training program through MTO. We will incorporate this study to design new landfill sites to enable the communities to properly segregate their solid wastes within the landfill site.



2

APPENDIX-A

RESPONSE TO INAC INSPECTOR'S INSPECTION

Response to Inspector's Report

Water Licence # NWB 0409 Renewal Application for the Municipality of Pond Inlet

Seepage from the Sewage Lagoon:

This is a single cell sewage lined lagoon with gravity decanting system. This was designed to function as a containment retention structure. The facility has been in operation since 2005.



Fig. 1

After heavy rainfall during summer each year, there was a sign of leakage water next to the East berm. Water used to bubble out from the ground. It was observed during the event since the lagoon started operation. In 2007, samples were collected and tested in the accredited lab in Ottawa and the results are attached. The results does not proof that this bubble was leaking out from inside of the lagoon. It means this might not be sewage water coming out from the Lagoon. After few days of the rain, the bubble does not continue. This water might come from the upper hill nearby which penetrated during the heavy rainfall and leaked to the down slope and ran along the Eastern berm of the lagoon as shown in the Picture below.

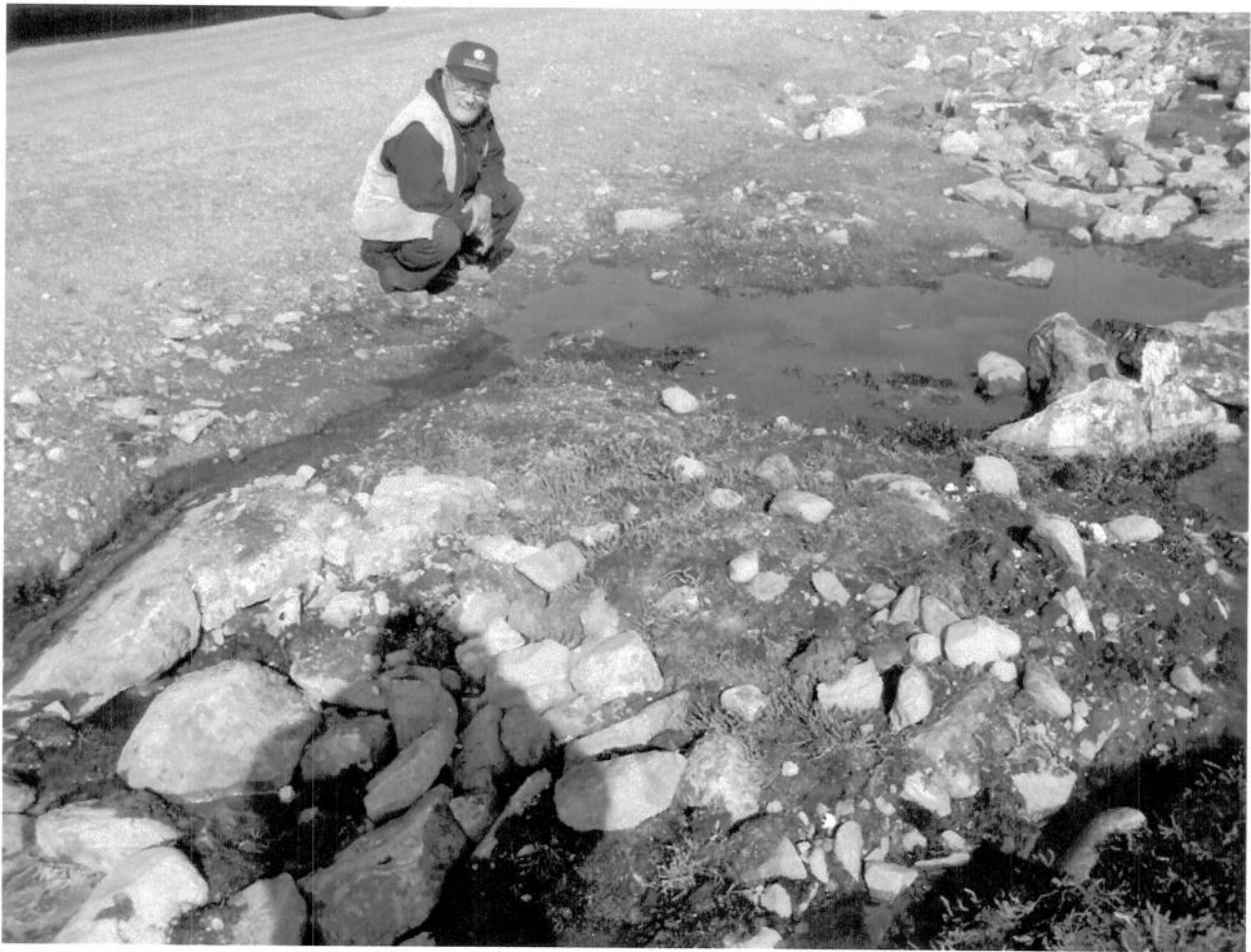


Fig. 2



Fig. 3

At the end of the Easter berm slope of the Lagoon, the ground elevation is lower and acts like a shallow ditch. This allows accommodating surface runoff from the surroundings. At the same time, the rain water penetrated in the upper hill during the rainfall try to bubble out at this ditch shown in this picture.

Last summer 2009 there was a sign of berm failure at the northern part of this lagoon as shown in the pictures below.



Fig. 4

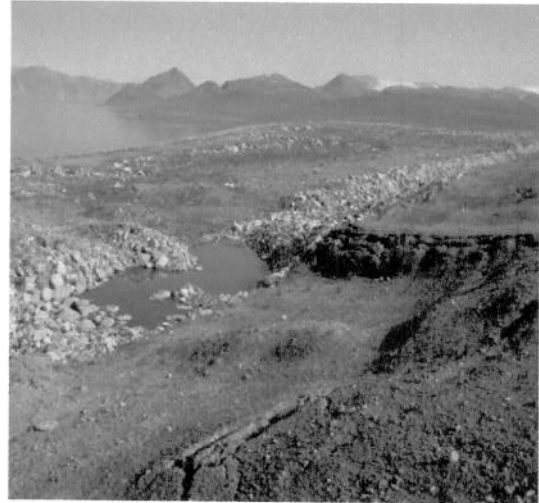


Fig. 5

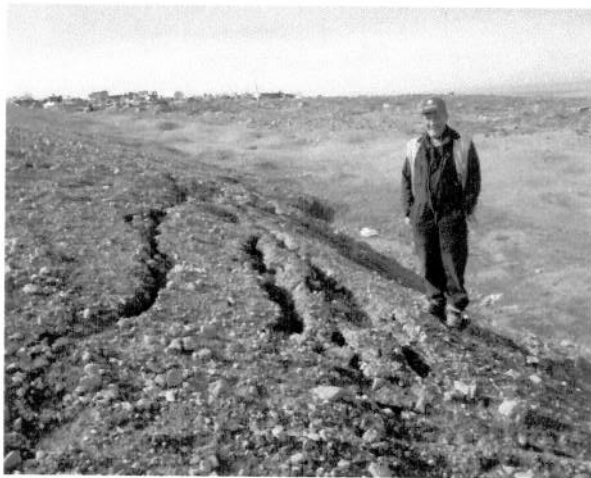


Fig. 6



Fig.7

We have recognized that there might be some geotechnical concerns inside the berms and their surroundings.

We are planning to hire a geotechnical consultant this summer 2010 to thoroughly investigate the structural stability and integrity of the berms of this facility. We are also conducting a technical assessment on the containment nature of this facility.

At the same time we will continue sampling and testing water from inside of the lagoon and surroundings from the lagoon during decanting of the lagoon and also during rainfall.

Caduceon Environmental Laboratories of Ottawa is assigned conducting all the testing and quality analysis of these water samples.

Waste oils leaching
Improper storage of barrels
Segregation of bulk metals and
Segregation of hazardous wastes

These all fall under waste management policy of the hamlet.



Fig. 8



Fig. 9



Fig. 10

Compliance Plan:

Short term action Plan: Hamlet will hire a consultant/contractor for managing waste oils leaching of the site and proper storage of barrels this summer 2010. CGS will be providing technical support where necessary to implement this action plan.

Medium term action Plan: CGS is hiring an Environmental consultant to assist GN in developing a long term strategy for managing community solid wastes site accommodating all different wastes. It is in the RFP stage and going to be advertised at the end of March, 2010. The outcome of the strategy will determine the future designs for the community solid wastes site.

Long Term action Plan: Following this technical assessment, a future consultant will be hired for detail design and construction of a new facility. As-built drawings and a Standard O&M manual satisfying the guidelines of NWB will be developed to operate and manage the new waste management facility once commissioned. This project is in substantiation stage and expected GAS TAX funding in 2011. This is scheduled for design and built by 2012.

The consultant's scope of works will accommodate decommissioning of the old lagoon.

Land farm: This facility was constructed in 2009 and currently is in operation. This will be fenced in 2010. As built drawings and a standard O&M manual have been developed and submitted already to NWB.

APPENDIX-B

SEWGAE LAGOON PERFORMANCE INDICATOR

Lab test Results of the treated wastewater quality of the community Municipality of Pond inlet

The Municipality of Pond Inlet has an account with the Canduceon Environmental lab in Ottawa to get their wastewater samples tested. During decanting of the lagoon, they try to follow the guidelines of the water licence. They also conduct testing in case of emergency like possible leakage or seepage of the lagoon .

The Water License regulates that BOD₅ and TSS of the treated water at the compliance point are 120mg/L and 180mg/L respectably. Since lab test started in 2007, it shows that the lagoon is functioning satisfactorily. In 2007, it was suspected possible leakage of the Lagoon . Tests were conducted on the samples taken inside the lagoon and from the source of possible leakage spot located outside of the lagoon. The results do not support that the Lagoon was leaking. However multiple tests are necessary to make a decision whether this facility is leaking or not. The Community is maintaining QA/QC with this accredited lab in Ottawa.

Performance indicator of the Sewage Lagoon

Parameter	Guidelines	Dump site 2009	Inside lagoon 2009	Leakage water ,2007	Middle of Beach and Land, 2008	Middle of Beach and Land, 2009	Remark
BOD ₅	120mg/L	276	56	54	67	14	satisfactory
TSS	180mg/L	170	40	156	36	18	satisfactory

The test results of dated Oct. 15, 2007 and Oct.23, 2007 show clearly that the sewage lagoon was not leaking. However, further investigation is necessary. Please see pages 3 and 4 of this appendix-B.

C.O.C.: ---

REPORT No. B07-34682

Report To:

Hamlet of Pond Inlet
P.O Box 379
Pond Inlet, Nunavut, X0A 0S0

Caduceon Environmental Laboratories

2378 Holly Lane
Ottawa, Ontario, K1V 7P1
Tel: 613-526-0123
Fax: 613-526-1244

Attention: Jonah Koonark

DATE RECEIVED: 12-Nov-07

JOB/PROJECT NO.:

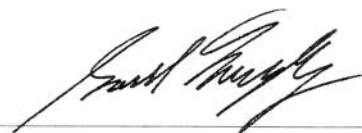
DATE REPORTED: 20-Nov-07

P.O. NUMBER:

SAMPLE MATRIX: Water

WATERWORKS NO.

			Client I.D.:	Truck Dumping Place				
			Sample I.D.:	B07-34682-1				
			Date Collected:					
Parameter	Units	M.D.L.	Reference Method	Date Analyzed				
Total Suspended Solids	mg/L	3	SM 2540	18-Nov-07	180			
BOD	mg/L	3	SM 5210	13-Nov-07	427			



Gord Murphy
Lab Supervisor

M.D.L. = Method Detection Limit

Accredited by the Standards Council of Canada and CAEAL for specific tests.

The analytical results reported herein refer to the samples as received. Reproduction of this analytical report in full or in part is prohibited without prior written consent from Caduceon Environmental Laboratories.

C.O.C.: ---

REPORT No. B07-31475

Report To:

Hamlet of Pond Inlet
P.O Box 379
Pond Inlet, Nunavut, X0A 0S0

Caduceon Environmental Laboratories

2378 Holly Lane
Ottawa, Ontario, K1V 7P1
Tel: 613-526-0123
Fax: 613-526-1244

Attention: Bhabesh Roy

DATE RECEIVED: 12-Oct-07

JOB/PROJECT NO.:

DATE REPORTED: 15-Oct-07

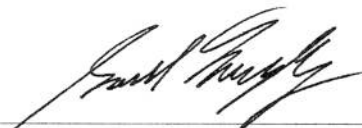
P.O. NUMBER:

SAMPLE MATRIX: Water

WATERWORKS NO.

Parameter:		Total Coliform	E coli			
Units:		cts/100mL	cts/100mL			
M.D.L.:		1	1			
Reference Method:		MOE E3371	MOE E3371			
Date Analyzed:		12-Oct-07	12-Oct-07			
Client I.D.	Sample I.D.	Date Collected				
Lagoon Raw Water	B07-31475-1		> 200000	> 200000		
Leakage Water	B07-31475-2		53000	< 10 ¹		
Fresh Water from Water Reservoir	B07-31475-3		5	< 1		
Treated Water from Supply Line	B07-31475-4		1	< 1		

1. Diluted due to matrix interference



Gord Murphy
Lab Supervisor

M.D.L. = Method Detection Limit

Accredited by the Standards Council of Canada and CAEAL for specific tests.

The analytical results reported herein refer to the samples as received. Reproduction of this analytical report in full or in part is prohibited without prior written consent from Caduceon Environmental Laboratories.

C.O.C.: ---

REPORT No. B07-31475

Report To:

Hamlet of Pond Inlet
P.O Box 379
Pond Inlet, Nunavut, X0A 0S0

Caduceon Environmental Laboratories

2378 Holly Lane
Ottawa, Ontario, K1V 7P1
Tel: 613-526-0123
Fax: 613-526-1244

Attention: Bhabesh Roy

DATE RECEIVED: 12-Oct-07

JOB/PROJECT NO.:

DATE REPORTED: 23-Oct-07

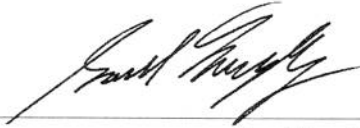
P.O. NUMBER:

SAMPLE MATRIX: Water

WATERWORKS NO.

Client I.D.:					Lagoon Raw Water	Leakage Water	Fresh Water from Water Reservoir	Treated Water from Supply Line
Sample I.D.:					B07-31475-1	B07-31475-2	B07-31475-3	B07-31475-4
Date Collected:								
Parameter	Units	M.D.L.	Reference Method	Date Analyzed				
Total Coliform	cts/100mL	1	MOE E3371	12-Oct-07	> 200000	53000	5	1
E coli	cts/100mL	1	MOE E3371	12-Oct-07	> 200000	< 10 ¹	< 1	< 1
BOD	mg/L	3	SM 5210	17-Oct-07	99	54	--	--
Total Suspended Solids	mg/L	3	SM 2540	16-Oct-07	34	156	--	--

1. Diluted due to matrix interference


Gord Murphy
Lab Supervisor

M.D.L. = Method Detection Limit

Accredited by the Standards Council of Canada and CAEL for specific tests.

The analytical results reported herein refer to the samples as received. Reproduction of this analytical report in full or in part is prohibited without prior written consent from Caduceon Environmental Laboratories.

C.O.C.: ---

REPORT No. B08-35297

Report To:

Hamlet of Pond Inlet
P.O Box 379
Pond Inlet, Nunavut, X0A 0S0

Caduceon Environmental Laboratories

2378 Holly Lane
Ottawa, Ontario, K1V 7P1
Tel: 613-526-0123
Fax: 613-526-1244

Attention: Jonah Koonark

DATE RECEIVED: 22-Oct-08

JOB/PROJECT NO.:

DATE REPORTED: 27-Oct-08

P.O. NUMBER:

SAMPLE MATRIX: Water

WATERWORKS NO.

			Client I.D.:		Beach Sample			
			Sample I.D.:		B08-35297-1			
			Date Collected:					
Parameter	Units	M.D.L.	Reference Method	Date/Site Analyzed				
Total Suspended Solids	mg/L	3	SM 2540	23-Oct-08/O	36			
BOD	mg/L	3	SM 5210	22-Oct-08/O	67			

M.D.L. = Method Detection Limit

Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,P-Peterborough,M-Moncton



Gord Murphy
Lab Supervisor

The analytical results reported herein refer to the samples as received. Reproduction of this analytical report in full or in part is prohibited without prior consent from Caduceon Environmental Laboratories.

C.O.C.: ---

REPORT No. B09-32686

Report To:

Hamlet of Pond Inlet
P.O Box 379
Pond Inlet, Nunavut, X0A 0S0

Caduceon Environmental Laboratories

2378 Holly Lane
Ottawa, Ontario, K1V 7P1
Tel: 613-526-0123
Fax: 613-526-1244

Attention: Jonah Koonark

DATE RECEIVED: 19-Oct-09

JOB/PROJECT NO.:

DATE REPORTED: 26-Oct-09

P.O. NUMBER:

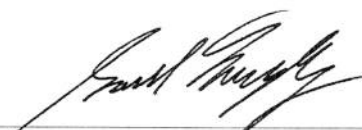
SAMPLE MATRIX: Water

WATERWORKS NO.

			Client I.D.:		Middle of Beach and Land			
			Sample I.D.:		B09-32686-1			
			Date Collected:		30-Sep-09			
Parameter	Units	M.D.L.	Reference Method	Date/Site Analyzed				
BOD	mg/L	3	SM 5210	21-Oct-09/O	14			
Total Suspended Solids	mg/L	3	SM 2540	22-Oct-09/O	18			

M.D.L. = Method Detection Limit

Site Analyzed=K-Kingston, W-Windsor, O-Ottawa, P-Peterborough, M-Moncton



Gord Murphy
Lab Supervisor

The analytical results reported herein refer to the samples as received. Reproduction of this analytical report in full or in part is prohibited without prior consent from Caduceon Environmental Laboratories.

C.O.C.: C18494

REPORT No. B09-32860

Report To:

Hamlet of Pond Inlet
P.O Box 379
Pond Inlet, Nunavut, X0A 0S0

Attention: Jonah Koonark

Caduceon Environmental Laboratories

2378 Holly Lane
Ottawa, Ontario, K1V 7P1
Tel: 613-526-0123
Fax: 613-526-1244

DATE RECEIVED: 20-Oct-09

JOB/PROJECT NO.:

DATE REPORTED: 26-Oct-09

P.O. NUMBER:

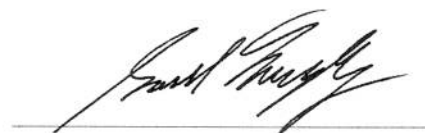
SAMPLE MATRIX: Waste Water

WATERWORKS NO.

			Client I.D.:		Dumping Site	Sewage Lagoon		
			Sample I.D.:		B09-32860-1	B09-32860-2		
			Date Collected:		09-Oct-09	09-Oct-09		
Parameter	Units	M.D.L.	Reference Method	Date/Site Analyzed				
BOD	mg/L	3	SM 5210	21-Oct-09/O	276	56		
Total Suspended Solids	mg/L	3	SM 2540	24-Oct-09/O	170	40		

M.D.L. = Method Detection Limit

Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,P-Peterborough,M-Moncton



Gord Murphy
Lab Supervisor

The analytical results reported herein refer to the samples as received. Reproduction of this analytical report in full or in part is prohibited without prior consent from Caduceon Environmental Laboratories.