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

October 27, 2009.

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

Phone: (867) 360-6338, Ext. 26

Fax: (867) 360-6369

E-mail: licensing@nunavutwaterboard.org

Sub: Renewal Water License Application of the Municipality of Clyde River

Dear Ms. Phyllis,

I am writing you to inform that the existing water License No: 3BM-CLY090 of the Municipality of Clyde River will be expired on November 13, 2009. This license was issued on March 18, 2009 to expedite the construction of the new sewage disposal facility of the community. This facility has been substantially completed. The entire construction including rehabilitation of the existing sewage lagoon will be completed in summer 2010. The design work for the management of solid wastes facility is in progress and scheduled for construction in 2011. The drinking water delivery system is working satisfactorily. The Municipal Authority is trying to bring all the environmental facilities under water license compliances as soon as possible.

Therefore, I, on behalf of the Municipality of Clyde River, submit the water License renewal application for the period of five years. With this forwarding letter, the following documents are attached:

Renewal application signed by SAO

2. A cheque of \$30.00 for application fees

3. Technical Summary of all the Environmental Facilities

4. Plan of Compliances Report with the attachment of the followings:

Appendix-A: Construction Progress Report of Sewage disposal facility

Appendix-B: Draft O&M manual of Sewage disposal facility
Appendix-C: Ottawa Lab Instruction sheet on BOD and TSS

Appendix-D: Spill Contingency Form

Appendix-E: Dillon's Feasibility Study of Solid waste Disposal facility, 2002 Appendix- F: Trow's Terms of Reference of Solid waste disposal facility

Appendix- G: Water testing Log sheet

Appendix-H: GN-DOH water disinfection guidelines

Appendix- I: GN-DOH Water quality management guidelines

P.O. Box 379, Government of Nunavut, Pond Inlet (867) 899-7301 (867) 899-7330



عوریم اردامکی ۱۹۵۸ کیلایه ۱۹۵

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

We trust that this will satisfy the requirements to renew the Water license for the Municipality of Clyde River for the period of five years. I will appreciate if you keep me in loop of the approval process.

Thanks.

Bhabesh Roy, M.A.Sc., P.Eng.

Municipal Planning Engineer
Community & Government Services
Baffin Region, Government of Nunavut
P.O.Box 379, Pond Inlet, X0A 0S0

Ph-867 899 7314 Fax-867 899 7328

E-mail: broy@gov.nu.ca

Copy to: Patricio Fuentes, Regional Projects Manager, GN-CGS, Baffin Region Johnathan Palluq, Assistant Regional Director, GN-CGS, Baffin Region Timoon Toonoo, Regional Director, GN-CGS, Baffin Region Richard Carbonnier, Project Officer, GN-CGS, Baffin Region Steven Burden, P.Eng., Trow Associates Inc. Bill Buckle, SAO, Hamlet of Clyde River



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

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Fax: (867) 360-6369

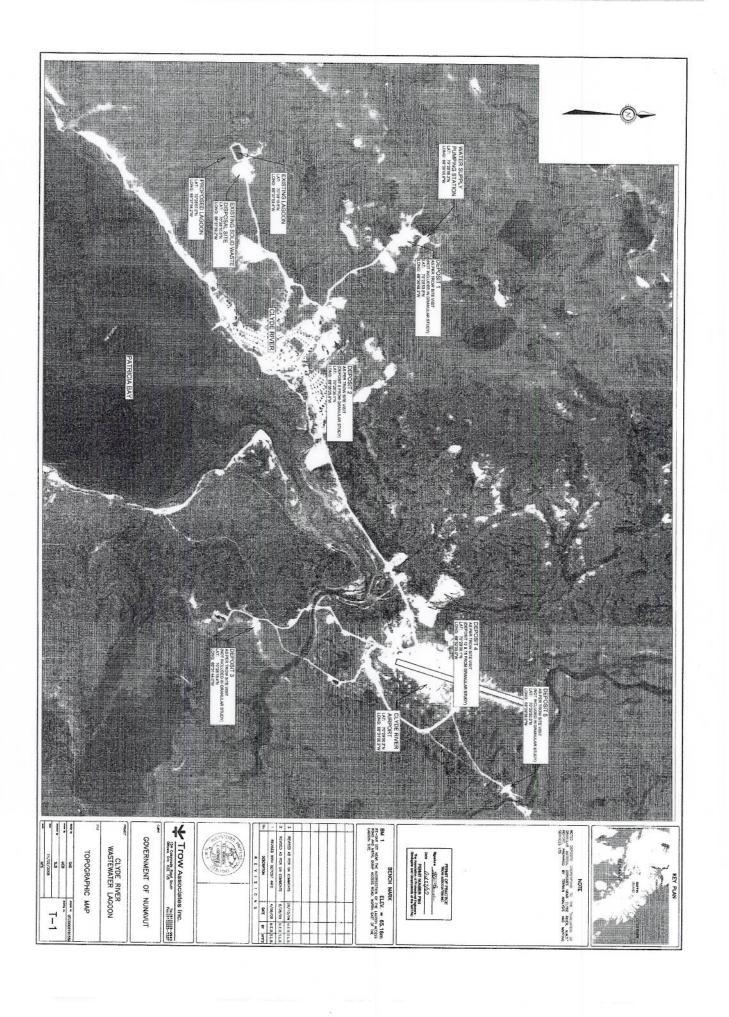
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WATER LICENCE APPLICATION FORM

New	Application for: (check one)					
LICENCE NO: (for NWB use only) 1. NAME AND MAILING ADDRESS OF APPLICANT/LICENSEE Bill Buckle, Interim SAO Hamlet of Clyde River Box-89, X0A 0E0 Baffin Region, Nunavut. Ph 867-924-6220, Fax 867924-6301 Contact Person: Bhabesh Roy, M.A.Sc., P.Eng. Municipal Planning Engineer GN-CGS, Pond Inlet, Baffin Region, P.O.Box-379, X0A 0S0, NU Phone: 867 7 899 7314 Fax: 867 899 7328 Cancellation ABDRESS OF CORPORATE OFFICE IN CANADA (if applicable) Bill Buckle, Interim SAO Hamlet of Clyde River Box-89, X0A 0E0 Baffin Region, Nunavut. Ph 867-924-6220, Fax 867924-6301 Contact Person: Bhabesh Roy, M.A.Sc., P.Eng. Municipal Planning Engineer GN-CGS, Pond Inlet, Baffin Region, P.O.Box-379, X0A 0S0, NU Phone: 867 7 899 7314 Fax: 867 899 7328	New Denoved					
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e-man: broy(@gov.nu.ca	e-mail: broy@gov.nu.ca	e-mail: broy@gov.nu.ca				
3. LOCATION OF UNDERTAKING (describe and attach a topographical map, indicating the main	3. LOCATION OF UNDERTAKING (describe and	attach a topographical map, indicating the main				
components of the Oridertaking)	components of the Oldertaking)					
Attached Topographic Map of the Hamlet of Clyde River shows locations of Environmental facilities.	Attached Topographic Map of the Hamlet of Cly	de River shows locations of Environmental facilities.				
Latitude: (70°27'0" N) Longitude: (68°33'0" W)						
NTS Map Sheet No · Scale:						
4. DESCRIPTION OF UNDERTAKING (attach plans and drawings).	4. DESCRIPTION OF UNDERTAKING (attach pla	ne and drawings)				
- (attach plans and drawings).	- Canada piu	is and diawnigs).				
A Detailed Technical Progress Report of the ongoing construction of the New Sewage						
Lagoon. A Site Plan and some construction Photos are attached.	Lagoon. A Site Plan and some construction	Photos are attached				
		i notos are attachea.				
5. TYPE OF PRIMARY UNDERTAKING (A supplementary questionnaire <u>must</u> be submitted with the						
application for undertakings listed in "bold")	application for undertakings listed in "bold")					
☐ Industrial ☐ A cricultural	☐ Industrial					
Mining and Milling(includes exploration/drilling)	☐ Mining and Milling(includes exploration/drilling					
Municipal (includes camps/lodges)	Municipal (includes camps/lodges)					
Power Miscellaneous (describe below):	☐ Power					
See Schedule II of Northwest Territories Waters Regulations for Description of Undertakings	See Schedule II of Northwest Torritories W					

6.	WATER USE			
	☐ To obtain water ☐ To cross a watercourse ☐ To modify the bed or bank of a watercourse ☐ Other (describe): ☐ To obtain water ☐ Flood control ☐ To divert a watercourse ☐ To alter the flow of, or store, water			
-				
7.	QUANTITY OF WATER INVOLVED (cubic metres per day including both quantity to be used and quality to be returned to source)			
	Water use 100m³/day or less Greater than 100m³/day; if greater, indicate quantities to be used for each purpose (camp, drilling, etc.). Present permit: 38,000 cubic meters per year. (104.12 cubic meters per day)			
	Water returned to source 74.0 m ³ /day			
0				
8.	8. WASTE (for each type of waste describe: composition, quantity (cubic metres per day), methods of treatment and disposal, etc.)			
	⊠ Sewage ⊠ Waste oil ⊠ Solid Waste ⊠ Greywater ⊠ Hazardous ⊠ Sludges ⊠ Bulky Items/Scrap Metal □ Other describe):			
	Note: The Construction of the new Sewage Lagoon is in progress and expected to complete in 2010 including rehabilitation of the existing sewage treatment facility. A contract to design of the Solidwaste The condition of the Water Truckfill station is unchnaged.			
9.	OTHER PERSONS OF PROPERTIES A TEST			
	OTHER PERSONS OR PROPERTIES AFFECTED BY THIS UNDERTAKING (give name, mailing address and location; attach if necessary)			
	Land Use Permit DIAND			
	Regional Inuit Association Yes No If no, date expected			
	Commissioner			
10.	PREDICTED ENVIRONMENTAL IMPACTS OF UNDERTAKING AND PROPOSED MITIGATION MEASURES (direct, indirect, cumulative impacts, etc.)			
	NIRB Screening			

11.	INUIT WATER RIGHTS	-, -, -, -,
	Will the project or activity substantially affect the quality, quantity, or flow of water flowing through Owned Lands and the rights of Inuit under Article 20 of the Nunavut Land Claims Agreement?	ı Inuit
	If yes, has the applicant entered into an agreement with the Designated Inuit organization to pay compensation for any loss or damage that may be caused by the alteration. If no compensation agree has been made, how will compensation be determined? Not applicable	ement
12.	CONTRACTORS AND SUB-CONTRACTORS (name, address and functions)	
	TROW Associates Inc., 154 Colonnade Road South, Ottawa, ON, Canada, K2E 7J5, Ph (613) 225-99 Fax: (613) 225-7337. Trow is the consultant who has done the design works of the new Sewage Lagor Rehabilitation of the existing one. Trow is also full time construction supervisor of this project. The Contractor is Kudlik Construction Ltd. Their contact address is: Kudlik Construction Ltd. Iqaluit, Nunavut. Tel 867-979-1166; Fax 867-979-1169	940, on and
13.	STUDIES UNDERTAKEN TO DATE (list and attach copies of studies, reports, research, etc.)	
	A contract on Solidwaste Management has been recently awarded to Trow Associates Inc. and the of Works is attached. A Fesibility Study of the Solidwaste Management conducted by Dillion Consulting Ltd in 2002 is	s attached
14.	THE FOLLOWING DOCUMENTS <u>MUST</u> BE INCLUDED WITH THE APPLICATION FOR REGULATORY PROCESS TO BEGIN	THE
	entary Questionnaire (whom and it is	
	and/or Inginpagtun/English Summer CP	
	on fee of \$30.00 (Payee Receiver General for Canada) Yes No If no, date expected Yes No If no, date expected	20
	e fee of \$30.00 (unless otherwise indicated in Section 9 of the NWT Waters Regulations; Payee Received or Canada)	
	Yes No If no, date expected	cr
5. F	PROPOSED TIME SCHEDULE (unless otherwise in disease of the North Annual Control of the	
а	five (5) year term) One year or less (or) Multi Year	for
	Start Date: November 13, 2009Completion Date: November 13, 2013	
D.111		
	Buckle Interim SAO E (Print) Title (Print) Signature Date	09
r Nunavu	it Water Board office use only	
PLICA	TION FEE Amount: \$30.00 Pay ID No.: SE DEPOSIT Amount: \$ Pay ID No.:	



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d^r P^bCDゼ^r D」^cU: ベハロ^c P D A, M.A.Sc., P.Eng, MPE, GN-CGS

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Trow Associates Inc-dc. የ৮% የባላኒ የሚያስፈር የተመሰው አመር የተመሰ

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Technical Summary of Environmental Facilities Hamlet of Clyde River

Prepared By: Bhabesh Roy, M.A.Sc., P.Eng, MPE, GN-CGS

Clyde River is a community located on Patricia Bay on the east coast of Baffin Region of Nunavut. Its geographical coordinates are 70°27'N latitude and 68°33'W longitude. Its current population is about 937. The Present Water License No.3BM-CLY 0909 was issued on March 18, 2009 and will be expired on November 13, 2009.

Presently the annual average wastewater discharge volume of this community is about 36,636 cubic meters. The existing wastewater treatment facility is undersized to satisfy the present demand of the community. Therefore following the condition assessment study done by Dillon Consulting Ltd in 2003, a new lagoon has been designed by Trow Associates Inc. which will operate jointly with the existing facility. The both lagoons will function as storage cell lagoons with the capacity of existing cell being 11,600 cubic meters and the capacity of new lagoon being 46,900 cubic meters. The lagoons will work in conjunction with a vast area of wetlands of 23.5 ha. The life time of the project has been designed for 20 years. The design of these facilities was already approved by NWB.

The construction of the new cell began in late June 2009 and has been substantially completed. The remaining construction of the new cell as well as the rehabilitation of the existing cell will be completed in summer 2010. A Standard O&M manual will be updated for efficient operation of these lagoons.

Trow Associates Inc. has also been hired recently for designing solid waste management facility. This facility will accommodate all different types of domestic wastes and metal wastes. The design will be submitted to NWB once completed. This facility is scheduled for construction in 2011. A standard O&M manual will be guided for efficient operation of this facility.

The current drinking water supply system is functioning satisfactorily. This facility is unchanged during the life time of the current water license.

Finally the hamlet is in the process to bring all the facilities into compliance under the water license.

ANNUAL REPORT FOR THE MUNICIPALITY OF CLYDE RIVER

YEAR	BEING	REPORTED:	2009

The following information is compiled pursuant to the requirements of Part B, Item 1 of Water License 3BM-CLY0909 issued to the Municipality of Clyde River.

 i)- iii) tabular summaries of all data generated under the "Monitoring Program"; monthly and annual quantities in cubic metres of freshwater obtained from all sources; monthly and annual quantities in cubic metres of each and all wastes discharged;

Attached are quantities of water used as reported in our On Tap Water Delivery System and the estimated discharge of sewage waste based on quantities used.

Month Reported	Quantity of Water Obtained from all sources (litres)	Quantity of Sewage Waste Discharged
January 2009	2,411,248	Same
February 2009	2,179,850	Same
March 2009	2,532,907	Same
April 2009	2,249,844	Same
May 2009	2,454,588	Same
June 2009	2,371,109	Same
July 2009	2,376,840	Same
August 2009	2,498,540	Same
September 2009	2,571,081	Same
October 2009		
November 2009		
December 2009		
ANNUAL TOTAL	21,646,007	Same

Total in Cubic Metres =21,646.007

ANNUAL REPORT FOR THE MUNICIPALITY OF CLYDE RIVER

iv. a summary of modifications and/or major maintenance work carried out on the Water Supply and Waste Disposal Facilities, including all associated structures and facilities; Please see attached the Technical Summary of all the Environmental Facilities under the existing Water License No. 3MB-CLY 0909. a list of unauthorized discharges and summary of follow-up action taken; v. Nil vi. a summary of any abandonment and restoration work completed during the year and an outline of any work anticipated for the next year; The Engineering Consulting firm, Trow Associates Inc., is working on the design for Abandonment and Restoration of the existing Landfill site. Once this design is approved by the NWB, the facility will be ready for decommissioning. This is Scheduled in 2011. a summary of any studies requested by the Board that relate to waste disposal, water use vii. or reclamation, and a brief description of any future studies planned; 1. Wastewater Treatment Facility: The construction of the new facility and Rehabilitation works of the existing facility will be completed in summer 2010. 2. Wastes Management Facility: The Consultant is working on the design of the new Facility and this is scheduled for construction in 2011. Previous study report conducted by Dillon Consulting Ltd in 2002 is attached. 3. Water Supply System: Unchanged. viii. any other details on water use or waste disposal requested by the Board by November 1st of the year being reported; and 1. Attached draft O&M manual for Wastewater Treatment Facilities, Appendix-B 2. Attached Trow's Terms of Reference for Waste Management Facility, Appendix-F

ANNUAL REPORT FOR THE MUNICIPALITY OF CLYDE RIVER

ix. updates or revisions to the approved Operation and Maintenance Plans.

O & M plan for Wastewater management facilities have been updated. The final document will be ready once the construction of these facilities are completed in summer 2010.

ADDITIONAL INFORMATION THAT THE LICENSEE DEEMS USEFUL:

- 1. The Community will be using a new wastewater facility in 2010.
- 2. The Community will be using the new waste management facility in 2011
- 3. The Community will be decommissioning the existing landfill site in 2011

FOLLOW-UP REGARDING INSPECTION/COMPLIANCE CONCERNS:

The Community is planning to bring all the Environmental facilities under Water License Compliances in 2011