

Municipal Water Licence Annual Report

Hamlet of Tuktoyaktuk

Licence # N7L3-0714

Reporting year 2011

1. Water Usage

Total yearly volume withdrawn: 55,606.47³

Table 1 – Monthly withdrawal volumes

Month	Volume from source (m3 or l)	Volume from any other source (m3 or l)
January	4,446.40	n/a
February	4,027.15	n/a
March	4,901.58	n/a
April	4,727.53	n/a
May	4,742.19	n/a
June	5,900.00	n/a
July	4,914.49	n/a
August	5,740.21	n/a
September	5,215.23	n/a
October	3,888.04	n/a
November	3,650.60	n/a
December	3,453.05	n/a
TOTALS	55,606.47	n/a
% Increase from previous year	55%	n/a

Reasons for increase / decrease (if applicable):

Increased back washes due to high turbidity readings.

Reasons for exceeding licenced withdrawal volumes (if applicable):

n/a

General information:

n/a

2. Solid Waste and Sewage Disposal

Total yearly volume of sewage deposited: 55,606.47

Table 2 – Monthly sewage disposal volumes

Month	Volume of sewage deposited (m3 or l)
January	4,446.40
February	4,027.15
March	4,901.58
April	4,727.53
May	4,742.19
June	5,900.00
July	4,914.49
August	5,740.21
September	5,215.23
October	3,888.04
November	3,650.60
December	3,453.05
TOTALS	55,606.47
% Increase from previous year	55%

Has any sludge removal been conducted this year? If so, state volume, frequency and disposal method and site:

No.

State when the lagoon decanted this year. What was the frequency and volumes of the decant:

September 2011; Once per year; Volume unavailable.

3. Hazardous Waste Storage and Transportation

On Table 3, list the types of hazardous waste accepted into the facility with volumes if known.

Table 3 - Monthly hazardous waste storage

Month	Type of hazardous waste accepted (Volume if known in m3 or l)	Type of hazardous waste transported off-site (Volume in m3 or l)

January	n/a	
February	n/a	
March	n/a	
April	n/a	
May	n/a	
June	n/a	
July	n/a	
August	n/a	
September	n/a	
October	n/a	
November	n/a	
December	n/a	
TOTALS	n/a	
% Increase from previous year	n/a	

If hazardous waste has been transported off-site this year, please describe how it was transported and where the final destination was.

n/a

Please describe any changes or improvements to hazardous waste storage areas.

n/a

4. Problems, modifications or repairs completed during the year on water supply and waste disposal facilities

Include any changes to infrastructure to all facilities completed during the year in this section. This includes any changes, repairs and modifications. If any problems occurred during the year, please note them here. If there are no changes, make note of that.

n/a

5. Abandonment and restoration

Include any abandonment and restoration details here including and work anticipated to be completed during the next year.

n/a

6. Unauthorized discharges

List any unauthorized discharges here, including any spills, how and when they were reported, and how they were cleaned up.

n/a

7. Updates or revisions to approved plans

Details on any changes to approved plans such as the Operating and Maintenance Plan (O&M plan) or any other that is specific to your Hamlet's Water Licence.

Plans specific to your licence:

- *Spill Contingency Plan*
- *Sewage Treatment Plan*
- *Municipal Solid Waste Operations and Maintenance Plan*
- *Abandonment and Restoration Plan*

We are beginning survey and construction on a new Solid Waste Site Facility.
Completion for fiscal 2013/14.

8. Studies requested by the Board

If the Board has requested that specific studies be completed or have asked for specific information be included in the annual report, include these details in this section. Include a summary of the study completed and the outcome. Include any attachments with the submission of the Annual Report. Include details any upcoming studies that will be completed by the Hamlet. Please include a copy or a summary of the studies completed.

n/a

9. Other Information

Include any other information here that may be valuable to the NWTWB or to INAC. Please also include in this section non-compliance items identified in the inspection report and how the Hamlet is addressing them. If there is any contaminated soil piles currently in use, please list the details of containment, remediation and progress in this section. Ongoing issues with compliance can be identified here. If the NWTWB is aware of ongoing problems with the licence, discussions can occur to find a resolution. Please include any other details of water use or waste disposal as requested by the NWTWB.

All deficiencies identified in the September 2011 inspection report will be addressed over the summer of 2012. We have contracted Aecom

10. SNP data

A condition of the Water Licence is the Surveillance Network Program (SNP). The SNP outlines the sampling requirements and frequency at monitoring stations. *In table 4, insert the sites where the Hamlet sampled this year and the sampling period (sampling date). Please attached the complete Taiga laboratory results, when sending your "Municipal Water Licence Annual Report" to the Northwest Territories Water Board.*

Table 4: Sampling station and sampling period

Sampling station	After break-up	Prior to freeze-up
0714-2		
0714-3		

Landfill: only when needed.

Lagoon: one sample before decant, three during decant, most time because of weather we manage only to get two from the lagoon.





Taiga Environmental Laboratory
4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3
Tel: (867)-669-2788 Fax: (867)-669-2718

Taiga Batch No.:
110626

- FINAL REPORT -

Prepared For: Hamlet of Tuktoyaktuk

Address: P.O. Box 120
Tuktoyaktuk, NT
X0E 1C0

Attn: Peter Nogasak

Facsimile: (867) 977-2110

Final report has been reviewed and approved by:


Helene Harper
Manager

NOTES:

- Test methods and data are validated by the laboratory's Quality Assurance Program. Taiga Environmental Laboratory is accredited by the Canadian Association for Laboratory Accreditation Inc. (CALA) as a testing laboratory for specific tests registered with CALA.
- Routine methods are based on recognized procedures from sources such as
 - Standard Methods for the Examination of Water and Wastewater APHA AWWA WEF;
 - Environment Canada
 - USEPA
- Samples shall be kept for thirty (30) days after the final report is issued. All microbiological samples shall be disposed of immediately upon completion of analysis to minimize biohazardous risks to laboratory personnel. Please contact the laboratory if you have any special requirements.
- Final results are based on the specific tests at the time of analysis and do not represent the conditions during sampling.

ReportDate: Tuesday, September 13, 2011
Print Date: Tuesday, September 13, 2011



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Taiga Batch No.:
110626

- CERTIFICATE OF ANALYSIS -

Client Sample ID: Sewage Lagoon

Taiga Sample ID: 001

Client Project:

Sample Type: Sewage

Received Date: 06-Sep-11

Sampling Date: 06-Sep-11

Sampling Time: 9:15

Location:

Report Status: Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
<u>Inorganics - Physicals</u>						
pH	7.72		pH units	07-Sep-11	SM4500-H:B	
Solids, Total Suspended	114	3	mg/L	07-Sep-11	SM2540:D	
<u>Inorganics - Nutrients</u>						
Ammonia as Nitrogen	10.3	0.01	mg/L	08-Sep-11	SM4500-NH3:	
Biochemical Oxygen Demand	19	2	mg/L	07-Sep-11	SM5210:B	
<u>Microbiology</u>						
Coliforms, Fecal	6000	100	CFU/100mL	07-Sep-11	SM9222:D	
<u>Organics</u>						
Hexane Extractable Material	< 2.0	2.0	mg/L	12-Sep-11	EPA1664A	

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- CERTIFICATE OF ANALYSIS -

Client Sample ID: Sewage Lagoon Duplicate

Taiga Sample ID: 002

Client Project:

Sample Type: Sewage

Received Date: 06-Sep-11

Sampling Date: 06-Sep-11

Sampling Time: 9:15

Location:

Report Status: Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifier
<u>Inorganics - Physicals</u>						
pH	7.73		pH units	07-Sep-11	SM4500-H:B	
Solids, Total Suspended	56	3	mg/L	07-Sep-11	SM2540:D	
<u>Inorganics - Nutrients</u>						
Ammonia as Nitrogen	11.3	0.01	mg/L	08-Sep-11	SM4500-NH3:	
Biochemical Oxygen Demand	24	2	mg/L	07-Sep-11	SM5210:B	
<u>Microbiology</u>						
Coliforms, Fecal	5800	100	CFU/100mL	07-Sep-11	SM9222:D	
<u>Organics</u>						
Hexane Extractable Material	6.0	2.0	mg/L	12-Sep-11	EPA1664A	

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- CERTIFICATE OF ANALYSIS -

Client Sample ID: Sewage Lagoon Duplicate

Taiga Sample ID: 002

*** Taiga analytical methods are based on the following standard analytical methods**

SM - Standard Methods for the Examination of Water and Wastewater

EPA - United States Environmental Protection Agency

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Client Name	Taga Sample ID	Client Sample ID	Sample Type	Sampling Location	Sample Collect Date	Sample Received Date	Test Group Name	Lab Section	Parameter Name	Result Flag	Reported Result	UNITS	Calc MDL	Sample Result Quality	Analysis Result Qual	Analysis Date	Prep Method	Test Method	Report Status
Tuktoyaktuk	110626-001	Sewage Lagoon	Sewage		06-Sep-11	06-Sep-11	Ammonia as N	Nutrients	Nitrogen		10.3	mg/L	0.01			08-Sep-11	Split/Preserved	SM4500-NH3:G	Final
Tuktoyaktuk	110626-001	Sewage Lagoon	Sewage		06-Sep-11	06-Sep-11	Oxygen	Nutrients	Oxygen		19	mg/L	2			07-Sep-11	None	SM5210:B	Final
Tuktoyaktuk	110626-001	Sewage Lagoon	Sewage		06-Sep-11	06-Sep-11	pH	Physicals	pH		7.72	pH units				07-Sep-11	None	SM4500-H:B	Final
Tuktoyaktuk	110626-001	Sewage Lagoon	Sewage		06-Sep-11	06-Sep-11	Suspended	Physicals	Suspended		114	mg/L	3			07-Sep-11	None	SM2540:D	Final
Tuktoyaktuk	110626-001	Sewage Lagoon	Sewage		06-Sep-11	06-Sep-11	Fecal Coliform	Microbiology	Coliforms, Fecal		6000	CFU/100mL	100			07-Sep-11	None	SM9222:D	Final
Tuktoyaktuk	110626-001	Sewage Lagoon	Sewage		06-Sep-11	06-Sep-11	Extractable	Organics	Extractable	<	2.0	mg/L	2.0			12-Sep-11	None	EPA1664A	Final
Tuktoyaktuk	110626-002	Duplicate	Sewage		06-Sep-11	06-Sep-11	Ammonia as N	Nutrients	Nitrogen		11.3	mg/L	0.01			08-Sep-11	Split/Preserved	SM4500-NH3:G	Final
Tuktoyaktuk	110626-002	Duplicate	Sewage		06-Sep-11	06-Sep-11	Oxygen	Nutrients	Oxygen		24	mg/L	2			07-Sep-11	None	SM5210:B	Final
Tuktoyaktuk	110626-002	Duplicate	Sewage		06-Sep-11	06-Sep-11	pH	Physicals	pH		7.73	pH units				07-Sep-11	None	SM4500-H:B	Final
Tuktoyaktuk	110626-002	Duplicate	Sewage		06-Sep-11	06-Sep-11	Suspended	Physicals	Suspended		56	mg/L	3			07-Sep-11	None	SM2540:D	Final
Tuktoyaktuk	110626-002	Duplicate	Sewage		06-Sep-11	06-Sep-11	Fecal Coliform	Microbiology	Coliforms, Fecal		5800	CFU/100mL	100			07-Sep-11	None	SM9222:D	Final
Tuktoyaktuk	110626-002	Duplicate	Sewage		06-Sep-11	06-Sep-11	Extractable	Organics	Extractable		6.0	mg/L	2.0			12-Sep-11	None	EPA1664A	Final