

August 27, 2015

Executive Director
Inuvialuit Water Board
P.O. 2531
Inuvik, NT, Canada
X0E 0T0

Attention: Executive Director

Subject: Water Licence Application Questionnaire for the Hamlet of Paulatuk

To whom it may concern:

At the request of the Hamlet of Paulatuk, Dillon Consulting Limited (Dillon) has prepared their Water Licence Renewal Application (attached).

As part of the application, detailed scale plan drawings of the sewage treatment system and solid waste disposal area were requested; however, these have not been included within the application. The sewage treatment facility uses a natural lake for disposal; therefore, it is expected that engineered drawings for the facility are not available. Similarly, engineered drawings were not located for the solid waste facility.

Other documentation that has been included as part of the water licence application includes an updated operations and maintenance manual, an abandonment and reclamation plan, and a spill contingency plan for the sewage lagoon and solid waste facilities.

Should you have any questions or concerns, please feel free to contact the undersigned at (867) 920 - 4555 ext. 4110.

Yours sincerely,
Dillon Consulting Limited



Jennifer Spencer-Hazenberg, P.Eng.
Associate

BMP:clw
Dillon File No. 15-1920
/att. (Water licence application and relevant attachments)



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**Dillon Consulting
Limited**



Water Licence Application Questionnaire
for
Municipal Undertakings

'To provide for the conservation, development and utilization of waters in a manner that will provide the optimum benefit there from for all Canadians and for the residents of the Inuvialuit Settlement Region in particular.'

October 2014

The purpose of this questionnaire is to solicit supplemental information from an applicant to support his/her application for a water licence (or its renewal). It is anticipated that the completion of this questionnaire will reduce delays arising from the Inuvialuit Water Board having to solicit additional information after an application has already been submitted. This information will also be useful during the pre-screening of your application, which must be undertaken prior to development and approval of a water licence to determine if the project needs to be referred for further environmental assessment.

The applicant should complete the questionnaire to the best of his/her ability, recognizing that some questions may not be relevant to the project under consideration. For questions that do not relate to the operation undertaking, the applicant is requested to indicate "N/A" (Not Applicable).

NOTE: If space is insufficient for any of the responses on this questionnaire, use the back of the sheet or an attachment.

If any questions arise while completing the questionnaire, the applicant may wish to contact the Inuvialuit Water Board at (867) 678-2942.

This questionnaire can be sent with the application for a new licence or the renewal of an existing licence to the following contact information:

Executive Director
Inuvialuit Water Board
P.O. 2531
Inuvik, NT, Canada
X0E 0T0
Email: info@nwtwb.com

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SECTION 1: GENERAL

Date: _____

Applicant: Hamlet of Paulatuk

Hamlet of Paulatuk

(Company, Corporation, Hamlet, Town)

Greg Morash, Supervisor for the Hamlet of Paulatuk

(Name of contact / Title)

Hamlet of Paulatuk Box 98 Paulatuk NT, X0E 1N0

(Mailing address)

(867) 580-3531

(Phone #)

(867) 580-3703

(Fax #)

Community Status:

City _____ Village _____ Town _____ Camp _____

Other Hamlet

Population (according to most recent census results), and the Estimated Growth Rate over next five years or Camp Maximum Capacity:

According to the most recent census results the population of Paulatuk was 341 in 2011, it is projected to grow to 361 by 2016 and to 380 by 2021. This information was obtained by the NWT Bureau of Statistics.

Indicate the status of the municipality's licence on the date of application:

New Application: Yes X No _____

If yes, please submit your Water Licence Number and the date the licence was issued.

Renewal of Water Licence Number: N7L3-1619

Date of Issuance: November 30, 2009

Has any baseline data been collected for the main water bodies in the area?

Yes _____ No _____ Unknown X

If yes, please attach:

- All data gathered on the physical, biological and chemical characteristics at each sampling location;
- A summary or program details indicating sampling locations, description of waste at each location, sampling frequency, and parameters analyzed;
- An outline of Quality Assurance/Quality Control methods being applied to sampling, preservation and analysis within the program.

Has any baseline data collection and evaluation been undertaken with respect to the various biophysical components of the environment potentially affected by the project (e.g., wildlife, soils, air quality) in addition to water related information requested in this questionnaire?

Yes X No Unknown

If yes, please attach copies of reports or cite titles, authors and dates (prepared by, title and completion date).

If no, do you plan on doing such studies? If you do plan on doing such studies, please describe the proposals.

Biogenie S.R.D.C. Inc., Soil Treatment at the Paulatuk Landfill following Environmental Remediation at the the Dispenser Cabinet – Progress Report, produced for the Petroleum Products Division of the Government of the Northwest Territories, February 2009.

Government of the Northwest Territories, Department of Public Works and Services, Review of Community Water Management and Water System Infrastructure, Paulatuk, NT, April 2005.

Level 1 Environmental Screening by INAC (1994), on behalf of the NWT Water Board.

Attach detailed maps which show the relative locations of the:

- raw water intake;
- water treatment facilities;
- fuel & chemical storage;
- sewage treatment facilities;
- wastewater treatment area and discharge outlets;
- solid waste disposal areas and drainage patterns;
- hazardous waste disposal area;
- transportation access routes; and
- existing waterbodies/courses and any changes to these water bodies/courses which have or may occur as a result of water use of waste disposal facilities, locations of environmental monitoring sites.

Attach detailed scale plan drawing(s) of the proposed (or present) sewage treatment system. The drawing(s) must be stamped by an engineer registered in NWT and include the following:

- details of pond size and elevation;
- precise details of all retaining structures (dimensions, materials of construction, etc.);
- details of the drainage basin, and existing and proposed drainage modifications;
- details of all decant, siphon mechanisms etc, including sewage treatment facilities;
- details regarding direction and route followed by wastewater flow from the area;
- indications of the distance to nearby major watercourses, and fish bearing waters;
- location and construction of liners;
- leachate and groundwater collection systems; and
- control structures.

Attach detailed scale plan drawings of the proposed (or present) solid waste disposal area. The drawings must include the following:

- precise details of all retaining structures (dimensions, materials of construction, etc.);
- details of the drainage basin, and existing and proposed drainage modifications;
- details regarding direction and route followed by wastewater flow from the area;
- indications of the distance to nearby major watercourses, and fish bearing waters;
- all sources of seepage presently encountered in the vicinity of these areas;
- the volume of each seepage flow (m^3/day); and
- the direction of each flow.

Attach the present or proposed contingency plan which will be used for each portion of the waste control system in the event it fails to operate properly.

Attach the present or proposed spill contingency plan which will be employed in case a spill of hazardous materials occurs. Describe courses of action, mitigative methods and equipment available for use.

NOTE: Individual detailed large scale drawings of all facilities (dam, decant system, ditch, dike, water treatment plant, etc) constructed or proposed must be attached. Specific details with regard to the methods of construction, materials used, etc. are required.

SECTION 2: WATER SUPPLY

Volume of water use (m³/day):

Approximately 47 m³/day

Type of source:

Lake: X River: Well: Other:

Name of raw water source and alternative, if any:

New Water Lake

Usual break-up & freeze-up months:

Break-up: Mid June Freeze-up: Late October

Please provide short descriptions for the following:

Freshwater intake facility: It is a truck refill station, there is no storage tank, the intake line is approximately 50 m long and consists of 350 mm schd 40 HDPE piping with 50 mm urethane insulation

Operating capacity of the pumps used: A submersible pump (a Myers 84C3225 3-hp submersible turbine pump) at a depth of approximately 5 m draws water from the lake.

Type of water storage facility (ie: Reservoir, storage, tank, none. For other, please provide a description):

none

What is the capacity of the water storage facility? (m³ meters)

The water treatment facility does not have water storage. Water is pumped directly from the lake, treated and then pumped directly into the water delivery truck.

What is the rate of withdrawal from the source? (m³/day)

Approximately 47 m³/day

Is water drawn from the source?

If yes, during what month(s) is it drawn? And for what period of time is it drawn (days/weeks/months)?

Water is withdrawn using the truckfill station and is delivered Monday to Friday. Water is withdrawn continuously throughout the year, as there is no water storage facility.

What is the rate of flow of source (if river) or size (if lake)?

New Water Lake is approximately 450 m x 350 m. Information on the volume of New Water Lake is not available but it is estimated to be roughly 742,000 m³.

At the intended rate of water usage, describe the effects on the river or lake from which water will be drawn.

General condition of:

Water supply facility: Satisfactory _____ X Unsatisfactory _____

If unsatisfactory, explain: _____

Storage facility: Satisfactory _____ N/A Unsatisfactory _____

If unsatisfactory, explain: _____

Distribution system: Satisfactory _____ X Unsatisfactory _____

If unsatisfactory, explain: _____

Are there any changes planned in the water supply system?

Yes _____ No _____ X

If yes, please attach a copy of the plan, or describe changes.

SECTION 3: WATER TREATMENT

Indicate the quality of the raw water prior to treatment & distribution and give a description

Good Fair _____ Poor _____

Description: Raw water is generally of high quality, meeting the criteria set out in the Guidelines for Canadian Drinking Water Quality, published by Health Canada. Please see attached results.

Indicate the capacity of the treatment facility (L/minute)

There are two water trucks in Paulatuk, each in good condition, with a capacity of 1600 gallons (8056 L). The truck fill rate is approximately 1000 L/minute.

Type of water treatment facility (ie: Filtration & Chlorination, Chlorination only, UV, None. If other, please describe)

Chlorine disinfection is the only means of water treatment.

Describe in detail the method of water treatment (ie: backwash, flocculation, sedimentation, chemicals used) and provide the results of the most recent bacteriological and chemical analysis. Attach a diagram if possible.

Sodium hypochlorite is the only method of treatment used. Most recent results of the chemical and bacteriological analysis are can be found in Appendix A.

Have there been any problems or health and environmental concerns with the water treatment facilities?

Yes _____ No

If yes, please describe: _____

Are there any changes planned in the water treatment facilities?

Yes No

If yes, please attach a copy of the plan or indicate change

Preliminary planning for a new water treatment facility has begun. No further information is available at this point.

SECTION 4: SEWAGE DISPOSAL

Indicate the level of treatment the sewage will be receiving (primary, secondary or tertiary. If other, please describe)

Primary

Pre-treatment (if applicable)

Screening N/A Maceration N/A

Lagoons (if applicable)

Anaerobic aerobic facultative X

Indicate the capacity of the sewage treatment facility (m³ meters)

Dead Lake is approximately 250 m x 350 m with an unknown depth. The capacity of the lake is unknown.

Indicate the retention time of the sewage while in the treatment facility (days)

The retention time is unknown for the sewage lagoon as this is a natural lake the Hamlet is dumping in with no infrastructure in place. The lake has a natural outflow of sewage into the wetland which occurs at a continuous rate during the spring, summer and fall seasons.

Indicate the estimated rate of discharge of wastewater

The rate of discharge is unknown. There is a natural outflow from the lagoon through a wide vegetated corridor before it reaches Damley Bay.

Indicate the location of the discharge point

The discharge point from the lagoon to the wetland is located on the northwest side of the lagoon. See attached figures.

Will the discharge be seasonal or continuous?

If seasonal, during what month(s) will it occur? Continuous during the spring and summer.

What is the duration of the discharge (days/weeks/months) From break up to freeze up

Comment on the general condition of the:

Sewage collection system Sewage is collected from the community by vacuum truck five days a week and disposed at the sewage lagoon, the trucks are in good condition and are checked regularly.

Discharge control system The trucks discharge sewage using one of the two chutes at the facility.

Dams, diversion, dykes or berms There is no dams, dykes, diversions or berms. The sewage exfiltrates through a natural wetland adjacent to the lagoon.

Have there been any problems or health and environmental concerns with the sewage disposal facilities?

Yes _____ No X

If yes, please describe: _____

The average depth of the wastewater lagoon is (m³ meters)

Average depth of the lagoon is unknown.

What is the design freeboard? (m³ meters)

The sewage lagoon (lake) has no freeboard. As the lagoon is a natural lake, there are no berms surrounding the lagoon and therefore no freeboard.

Is there any harvesting of fish or shellfish in the waters where waste is discharged?

Yes _____ No _____

If yes, please indicate species harvested, and estimate amounts.

Will the municipality be using a honey bag pit?

Yes _____ No _____

If yes, describe its location, drainage and operation & maintenance

There are a very small number of homes still using honey bags; these are collected as required and deposited in a designated pit near the lagoon. They are covered over with dirt as often as required.

Are there any sources of commercial or industrial liquid waste being discharged or deposited to the municipal system which may affect the quality of the effluent or leachate produced?

Yes _____ No _____

If yes, please describe:

Have any spills occurred in the past five years?

Yes _____ No _____

If yes, please submit a list of all spills with the date of the spill, the type of spill, the quantity spilled, the location of the spill, the method used to clean the spill and the results of the clean-up.

Have there been any operating problems with the lagoon?

Yes _____ No _____

If yes, please describe: Hamlet is concerned about the state of the lagoon, but no emergencies or
problems have been encountered

Are there any changes planned in the sewage disposal facilities?

Yes No

If yes, please describe and if possible, attach a copy of the plan:

Currently the Hamlet is having an assessment of the lagoon completed to determine if upgrades to the lagoon are required.

SECTION 5: SOLID WASTE DISPOSAL

Indicate the capacity of the disposal area (m³ meters)

There is one cell currently available for solid waste disposal. Based on current landfilling methods being employed by the Hamlet, the total capacity of the cell is estimated to be 5427 m³.

The average depth of the solid waste disposal site is (m³ meters)

The solid waste disposal cell is approximately 67 m by 18 m, with a depth of approximately 4.5 m.

Are there any sources of commercial or industrial solid waste being deposited in the municipal system which may affect the quality of the effluent or leachate produced?

Yes No

If yes, please describe: _____

Briefly describe how the solid waste will be picked up & delivered to the disposal area

Solid waste is collected from the community by a truck twice weekly, with increased pickup as required during peak times such as near Christmas holidays. The waste is transported to the solid waste disposal site; there is one public access road to the disposal site.

Is the solid waste site fenced?

Yes No

There is a partial fence across the access road that requires repairs. The entire site is not fenced.

Will the municipality be using a dead animal pit?

Yes No

If yes, please describe its location, drainage and operation & maintenance:

The municipality is using a dead animal incinerator. The animals are placed in a metal bin with a lid and burned on arrival at the solid waste facility.

Will the municipality be using a bulky metal waste disposal area?

Yes No

If yes, please describe its location and operation & maintenance:

Large non-combustible items such as white goods, automobiles, snowmobiles, etc. are placed in the bulky metal waste disposal area. Bulky waste is segregated as per the site plan in the attached figures.

Will the municipality be using a hazardous waste disposal area?

Yes No

If yes, please describe its location, structure and operation & maintenance:

There is some segregation of hazardous wastes at the bulky waste site, but a disposal area has not been developed yet. The Hamlet is looking into developing an area for this.

Are there any hazardous commercial wastes entering the solid waste disposal system?

Yes No

If yes, please describe (source, volume, special handling and disposal methods for these wastes):

If any natural watercourse may gain access to the proposed solid waste disposal area, what methods will be used to decrease the amount of runoff water entering these areas? Indicate the volume of water which may enter these areas from the source(s) in question and attach all pertinent details of proposed diversions

Please describe the nature of any diversions of watercourses

The bulky waste area has been partially sorted but has had no processing of the items completed. There is a concern that leachate is getting into old water lake, east of the site and the sewage lagoon. The Hamlet is looking into the need for an upgrade and modifications to site. Until further sampling is completed knowledge of leachate flow cannot be established.

Have there been any problems or health and environmental concerns with the solid waste disposal facilities?

Yes No

If yes, please describe: The community is concerned that there may be leachate going into Old Water Lake located northeast of the site.

Are any changes planned in the solid waste disposal system?

Yes No

If yes, please describe and, if possible, attach a copy of the plan:

Currently the Hamlet is having an assessment completed to determine what changes are required.

SECTION 6: ABANDONMENT AND RESTORATION PROGRAM

List and describe the locations of abandoned or restored water treatment facilities.

None previous

List and describe the locations of abandoned or restored sewage treatment facilities.

The original site was about 350 m from the community in another natural lake (not an engineered lagoon). See attached figures. When the Hamlet decided to move to the current site, the original site was abandoned in place and no restoration activities were completed.

List and describe the locations of abandoned or restored solid waste disposal facilities.

The original site was about 350 m from the community and approximately 3 km from the current site. Please see attached figures.

Do you have an abandonment and restoration plan?

Yes X No

If yes, please attach a copy of the plan.

The Hamlet has just updated their plan. A copy has been included with this application.

SECTION 7: WATER QUALITY MONITORING PROGRAM

Briefly describe the methodology that is presently used to sample the raw water supply

Raw water is sampled by the hamlet annually.

Briefly describe any monitoring that is done on wastewater effluent and leachate

Currently bi-annual testing of the wastewater effluent is required, however, this has not been completed in a couple of years.

Recognized laboratory performing analysis of samples

Name of the laboratory: Taiga Environmental Laboratory (chemical testing)

Contact name: Judy Mah

Postal address: 4801 - 52nd Avenue Yellowknife, NT X1A 2L9

Telephone number: 867-765-8645 Facsimile number: 867-920-8740

Are any changes planned in the water quality monitoring program?

Yes X No

If yes, please describe

The Hamlet is going to begin a SNP monitoring program that will include three sites for the sewage effluent, one sample will be taken where the sewage effluent enters the wetland, the second site will be midway through the wetland and the third site will be where the effluent enters Damley Bay.

The Hamlet is also considering a sampling of the water northwest of the Solid Waste Facility, called Old Water Lake. This is to see if any runoff from the facility is affecting the lake close to the Hamlet centre.

SECTION 8: ENVIRONMENTAL ASSESSMENT AND SCREENING

Has this project ever undergone an initial environmental review, including previous owners?

Yes _____ No X Unknown _____

If yes, by whom and when?

Has approval been obtained or sought from the Department of Fisheries and Oceans for using any fish bearing water bodies for containment or disposal of waste?

Yes _____ No X

Are there any environmental studies ongoing or planned?

Yes _____ No X

If yes, please provide a list of these studies.

Prepared by:	Greg Morash	Supervisor, Hamlet of Paulatuk
	_____ Printed Name	_____ Title
	_____ Signature	_____ Completion Date

SECTION 9: LIST OF ATTACHMENTS

Reference to the question in the questionnaire	Title of the documents	Date of the documents	Author(s) of the documents	Number of pages of the documents
Question N ^o : Section 3	Water Chemistry Raw Intake 2014 Results.pdf	2011, 2014	NT Drinking water quality database	2
Question N ^o :	Most Recent Water Chemistry and Bacteriological Results.pdf	2014, 2015	NT Drinking water quality database	2
Question N ^o :	Haz Mat Database_Paulatuk.pdf	2015	ENR	1
Question N ^o :	Figures 1-3	July 2015	Dillon Consulting Limited	3
Question N ^o :	Contingency Plan	July 2015	Dillon Consulting Limited	25
Question N ^o :	Schedule C	July 2015	Dillon Consulting Limited	3
Question N ^o :	Paulatuk Sewage Lagoon Operations and Maintenance Manual.pdf	July 2015	Dillon Consulting Limited	36
Question N ^o :	Paulatuk Solid Waste Facility Operations and Maintenance Manual.pdf	July 2015	Dillon Consulting Limited	156
Question N ^o :	Paulatuk Abandonment and Reclamation Plan.pdf	July 2015	Dillon Consulting Limited	35
Question N ^o :				
Question N ^o :				
Question N ^o :				

Most recent water intake results

Northwest Territories Drinking Water Quality Database

Raw Water Test Results - Paulatuk

Sample Source:	New Water Lake	Sample ID:	Z79588
Sample Location:	Intake	Sample Date (m/d/y):	04/02/2011
Location Detail:		Laboratory:	Maxxam Analytics

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GCDWQ

Physicals	Value	Units	MAC	IMAC	AO
* pHec	7.89				6.5 - 8.5
* True Colour		TCU			<=15
* Turbidity	0.9	NTU	0.3/1.0/0.1		

GCDWQ

Nutrients	Value	Units	MAC	IMAC	AO
* Nitrate-N	0.013	mg/L	45		
* Total Dissolved Solidsa	310	mg/L			

GCDWQ

Organics	Value	Units	MAC	IMAC	AO
* Cyanide		mg/L	0.20		
* THM-Bromodichloromethane		mg/L			0.016
* Total Trihalomethanes (THM's)		mg/L	0.1		

GCDWQ

Major Ions	Value	Units	MAC	IMAC	AO
* Chloride	9	mg/L			<=250
* Fluoride	0.08	mg/L	1.5		
* Sodium	7.3	mg/L			<=200
* Sulphate	951	mg/L			<=500

GCDWQ

Metals - Total	Value	Units	MAC	IMAC	AO
* Aluminum		mg/L			0.1/0.2

<u>* Arsenic</u>	0.0003	mg/L	0.01	
<u>* Barium</u>	0.07	mg/L	1.0	
<u>* Cadmium</u>		mg/L	0.005	
<u>* Chromium</u>		mg/L	0.05	
<u>* Copper</u>	0.0014	mg/L		<=1.0
<u>* Iron</u>		mg/L		<=0.3
<u>* Lead</u>		mg/L	0.010	
<u>* Manganese</u>		mg/L		<=0.05
<u>* Mercury</u>		mg/L	0.001	
<u>* Selenium</u>		mg/L	0.01	
<u>* Uranium</u>	0.0001	mg/L		0.02
<u>* Zinc</u>	0.010	mg/L		<=5.0

GCDWQ - Guidelines for Canadian Drinking Water Quality**MAC - Maximum Acceptable Concentration****IMAC - Interim Maximum Acceptable Concentration****AO - Aesthetic Objective****ND - Not Defined**

Most recent waster Intake results

Northwest Territories Drinking Water Quality Database

Treated Water Test Results - Paulatuk

Sample Source:	New Water Lake	Sample ID:	LI0740
Sample Location:	Intake	Sample Date (m/d/y):	28/11/2014
Location Detail:		Laboratory:	Maxxam Analytics

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GCDWQ

Organics	Value	Units	<u>MAC</u>	<u>IMAC</u>	<u>AO</u>
* THM-Bromodichloromethane	0.0051	mg/L			0.016
* THM-Bromoform	<0.0005	mg/L			
* THM-Chlorodibromomethane	<0.001	mg/L			
* THM-Chloroform	0.013	mg/L			
<u>* Total Trihalomethanes (THM's)</u>	0.018	mg/L	0.1		

GCDWQ - Guidelines for Canadian Drinking Water Quality

MAC - Maximum Acceptable Concentration

IMAC - Interim Maximum Acceptable Concentration

AO - Aesthetic Objective

ND - Not Defined

Most recent bacteriological analysis. (Raw water house, water treatment plant)

Northwest Territories Drinking Water Quality Database

Raw Water Test Results - Paulatuk

Sample Source:	New Water Lake	Sample ID:	colilert report
Sample Location:	Water Treatment Plant	Sample Date (m/d/y):	29/06/2015
Location Detail:	raw water hose	Laboratory:	In House (Colilert System)

[Ecoli Present \(Yes/No\)](#) No

[Total Coliforms Present \(Yes/No\)](#) Yes

Public Drinking Water Supply Systems

1. No sample should contain *Escherichia coli*. *E. coli* indicates recent faecal contamination and the possible presence of enteric pathogens that may adversely affect human health. If *E. coli* is confirmed, the appropriate agencies should be notified, a [boil water advisory](#) should be issued, and corrective actions taken.

2. No consecutive samples from the same site or not more than 10% of samples from the distribution system in a given calendar month should show the presence of total coliform bacteria. The ability of total coliforms to indicate the presence of faecal pollution is less reliable than *E. coli*. However, this group of bacteria is a good indicator of quality control. The presence of total coliforms does not necessarily require the issuance of a [boil water advisory](#) but corrective actions should be taken.

For more information please visit the [GCDWQ website](#).

Most recent bacteriological analysis. (Water Truck)

Northwest Territories Drinking Water Quality Database

Treated Water Test Results - Paulatuk

Sample Source:	New Water Lake	Sample ID:	colilert report
Sample Location:	Water Truck	Sample Date (m/d/y):	29/06/2015
Location Detail:		Laboratory:	In House (Colilert System)

[Ecoli Present \(Yes/No\)](#) No

[Total Coliforms Present \(Yes/No\)](#) No

Public Drinking Water Supply Systems

1. No sample should contain Escherichia coli. E. coli indicates recent faecal contamination and the possible presence of enteric pathogens that may adversely affect human health. If E. coli is confirmed, the appropriate agencies should be notified, a [boil water advisory](#) should be issued, and corrective actions taken.

2. No consecutive samples from the same site or not more than 10% of samples from the distribution system in a given calendar month should show the presence of total coliform bacteria. The ability of total coliforms to indicate the presence of faecal pollution is less reliable than E. coli. However, this group of bacteria is a good indicator of quality control. The presence of total coliforms does not necessarily require the issuance of a [boil water advisory](#) but corrective actions should be taken.

For more information please visit the [GCDWQ website](#).



Hazardous Materials Spill Database

Environment Division of ENR

Scotia 6, 5102-50th Avenue; Yellowknife, NT X1A 3S8

Phone: (867) 873-7654 Fax: (867) 873-0221

Sorted By: SpillNo for the year(s): 2015

Spill No.	Date	Ter	Region	Location	Site Description	Commodity	Quantity	Source	Agency
2010429	2010-10-27	NT	INU	Paulatuk	Paulatuk Landfill Site	Dump Fire	0 L	UK	GNWT
2010456	2010-12-09	NT	INU	Paulatuk	NTPC Power Plant	Glycol	15 L	PL	GNWT
2011052	2011-03-09	NT	INU	Paulatuk	Paulatuk Power Plant	Glycol	150 L	PL	GNWT
2011058	2011-03-15	NT	INU	Paulatuk	Paulatuk Power Plant	Glycol	180 L	PL	GNWT
2011086	2011-03-29	NT	INU	Paulatuk	Lot 80, Plan 3538, Paulatuk NT	Fuel Oil	10 L	ST<	GNWT
2012349	2012-08-27	NT	INU	Paulatuk	PPD Tank Farm Fuel Dispenser Building	Jet A-1	200 L	TRU	GNWT
2012353	2012-08-28	NT	INU	Paulatuk	PPD Airport Tank Farm - Paulatuk Airport	Jet A-1	20 L	AIR	GNWT
2012426	2012-10-31	NT	INU	Paulatuk	G385 RCMP - 54 Hamlet Road	P50 - Heating Fuel	5 L	ST<	EPS
2013154	2013-05-16	NT	INU	Paulatuk	Paulatuk	Heating oil	0 L	ST<	GNWT
2013383	2013-11-18	NT	INU	Paulatuk	Paulatuk	Heating Fuel	0 L	PL	GNWT
2014059	2014-02-27	NT	INU	Paulatuk	Paulatuk NTPC Power Plant	Diesel Fuel	400 L	ST<	GNWT
2014129	2014-04-30	NT	INU	Paulatuk	Housing Units 67-70, LT04365, Block 106-107 Lot 98	Heating Fuel	1650 L	PL	GNWT
2014182	2014-05-29	NT	INU	Paulatuk	Housing Units 67-70, LT04365, Block 106-107, Lot 98	Heating Fuel	700 L	PL	GNWT
2015084	2015-03-09	NT	INU	Paulatuk	Airport Terminal Tank	Diesel	1000 L	PL	GNWT
2015209	2015-05-20	NT	INU	Paulatuk	Radio Station, Paulatuk	Diesel Oil	20 L	UK	GNWT
2015252	2015-06-12	NT	INU	Paulatuk	Hamlet of Paulatuk	Diesel	15 L	ST<	GNWT

Total Spills on this Report: 16

This report contains information regarding spills that were reported to the NWT 24-Hour Spill Line. The absence of information on any particular location in no way guarantees that contamination has not occurred at that location.

LEGEND

Region:	Source:	Agency:
BAF - Baffin	AIR - Aircraft	CCG - Canadian Coast Guard
DEH - Deh Cho	DRUM - Drum or Barrel	EP - Environment Canada
INU - Inuvik	PL - Pipe or Line	GN - Government of Nunavut
KEE - Keewatin	RT - Rail Train	GNWT - Government of Northwest Territories
KIT - Kitikmeot	MV - Marine Vessel	ILA - Inuvialuit Land Administration
NSL - North Slave	SL - Sewage Lagoon	INAC - Indian and Northern Affairs Canada
SAH - Sahtu	NS - Natural Seepage	NEB - National Energy Board
SSL - South Slave	ST< - Storage Tank <4000 litres	
	OTH - Other Transportation	
	ST> - Storage Tank >4000 litres	
	TP - Tailings Pond	
	TRU - Truck	
	UK - Unknown	
	WELL - Wet Wells, Flaring Boom	



Image retrieved 2015-07-23
 Photos come from the Department of Municipal and Community Affairs

PAULATUK
 WATER LICENCE RENEWAL

FIGURE 1 AREA MAP



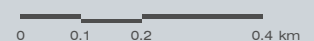
- BUILDING FOOTPRINT
- ROADS
- AIRSTRIP
- DRAINAGE PATHS
- WETLAND AREA

MAP DRAWING INFORMATION:
 DATA PROVIDED BY GNWT

MAP CREATED BY: PMH
 MAP CHECKED BY: AC
 MAP PROJECTION: NAD 1983 UTM Zone 10N

FILE LOCATION: \\DILLON.CA\DILLON_DFS\SASKATOON\CAD\GIS\151920 WATER LICENCE RENEWAL\PAULATUK\PAULATUK.MXD

SCALE 1:12,500



PROJECT: 151920 STATUS: DRAFT DATE: 2015-07-24



Image retrieved 2015-07-23
 Photos come from the Department of Municipal and Community Affairs



PAULATUK
 WATER LICENCE RENEWAL

FIGURE 2 SITE OVERVIEW

- BUILDING FOOTPRINT
- ROADS
- SOLID WASTE FACILITY
- DRAINAGE PATHS

SCALE 1:12,000
 0 0.1 0.2 0.4 km



MAP DRAWING INFORMATION:
 DATA PROVIDED BY GNWT

MAP CREATED BY: PMH
 MAP CHECKED BY: AC
 MAP PROJECTION: NAD 1983 UTM Zone 10N

FILE LOCATION: \\DILLON.CA\DILLON_DFS\SASKATOON\CAD\GIS\151920 WATER LICENCE RENEWAL\PAULATUK\PAULATUK FIGURE 2 SITE OVERVIEW .MXD



PROJECT: 151920
 STATUS: DRAFT
 DATE: 2015-07-24

Darnley Bay

Old Solid Waste Facility

Old Sewage Lagoon

Old Water Lake



PAULATUK
WATER LICENCE RENEWAL

FIGURE 3 Old Facilities Site Plan

-  BUILDING FOOTPRINT
-  ROADS
-  AIRSTRIP
-  DRAINAGE PATHS

SCALE 1:6,000

0 0.05 0.1 0.2 km

MAP DRAWING INFORMATION:
DATA PROVIDED BY GNWT

MAP CREATED BY: PMH
MAP CHECKED BY: AC
MAP PROJECTION: NAD 1983 UTM Zone 10N

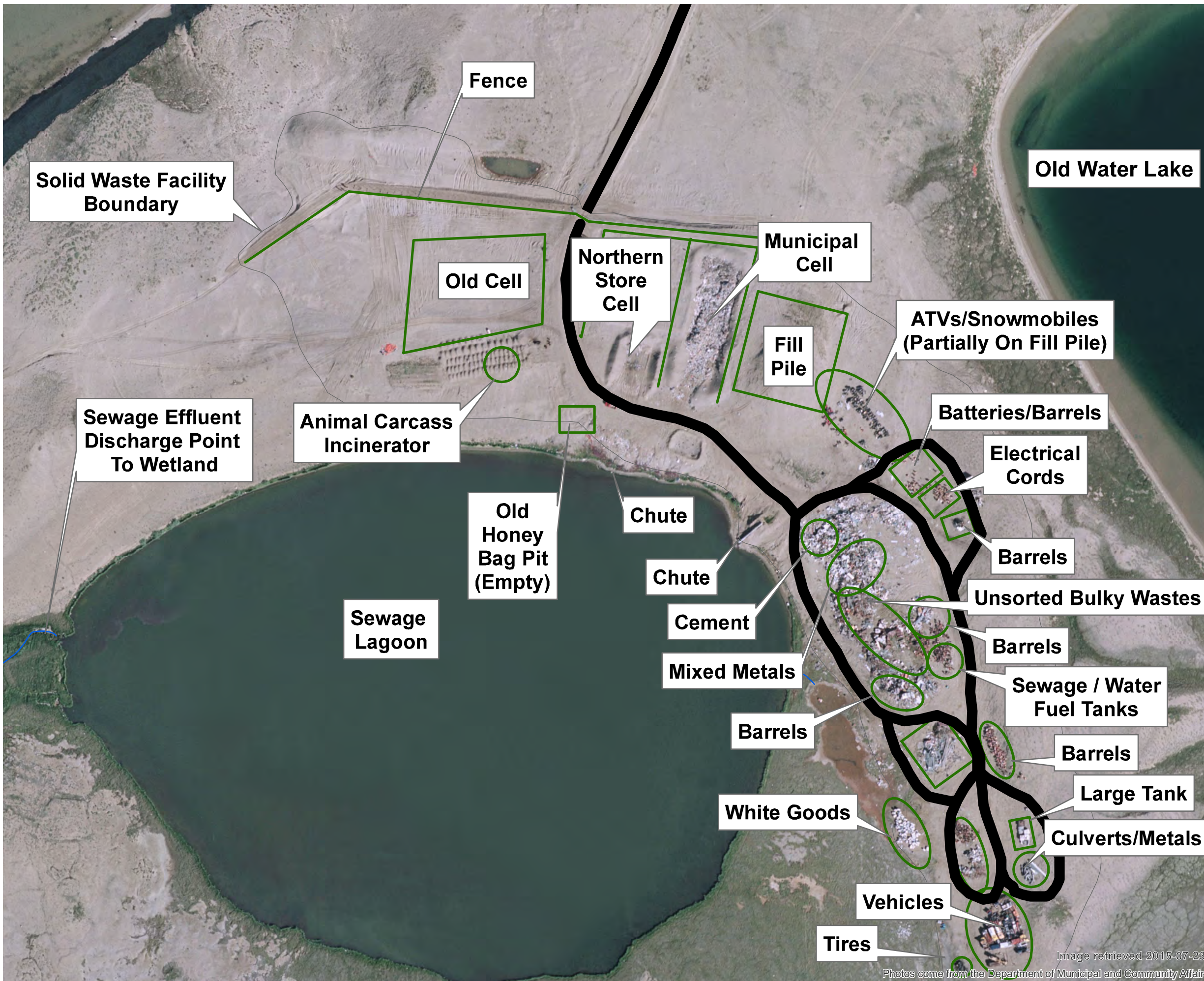
FILE LOCATION: \\DILLON.CA\DILLON_DFS\SASKATOON\CAD\GIS\151920 WATER LICENCE RENEWAL\PAULATUK\PAULATUK FIGURE 3 OLD FACILITIES SITE PLAN .MXD



PROJECT: 151920
STATUS: DRAFT
DATE: 2015-07-24

Image retrieved 2015-07-23

Photos come from the Department of Municipal and Community Affairs

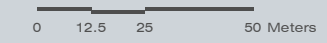


PAULATUK
WATER LICENCE RENEWAL

FIGURE 4 SOLID WASTE SITE
DETAILED SITE PLAN

- BUILDING FOOTPRINT
- ROADS
- DRAINAGE PATHS
- LANDFILL FEATURES

SCALE 1:1,750



MAP DRAWING INFORMATION:
DATA PROVIDED BY GNWT

MAP CREATED BY: PMH
MAP CHECKED BY: AC
MAP PROJECTION: NAD 1983 UTM Zone 10N

FILE LOCATION: \\DILLON.CA\DILLON_DFS\SASKATOON\CAD\GIS\151920 WATER LICENCE RENEWAL\PAULATUK\PAULATUK FIGURE 4 SOLID WASTE SITE DETAILED SITE PLAN.MXD



PROJECT: 151920
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