

CITY OF IQALUIT

SEWAGE LIFT STATION SPILL CONTINGENCY PLAN

May 29, 2003

TABLE OF CONTENTS

1.0	INTRODUCTION	I
1.0		
2.0	REPORTING PROCEDURES	1
2.1	First Domon Deponce	
2.2	I Itility Egramon's Response	
2.3	Parance Team Organization	•••••
	2.1 On Site Coordinator	
-	2.2 Response Team Leader	
	2.3.3 Chief Administrative Officer (CAO)	4
2.	.5.5 Chief Administrative Officer (5775)	
3.0	SITE INFORMATION AND FAILURE PREVENTION	5
3.0 3.1		5
	3.1.1 Sewage Lift Stations	5
3.	.1.1 Sewage Lift Stations	
4.0	RESPONSE TEAM, ACTION AND EQUIPMENT	6
4.0		
5.0	SYSTEM COMPONENT FAILURE RESPONSE ACTION	6
5.1	Sewage Lift Station	6
3.1		
6.0	GENERAL SPILLS	7
	Containment on Open Water	
6.1	Containment on Ice	
6.2 6.3	Containment on Snow	8
	Containment on Land	8
6.4	Fire or Explosion	8
6.5	Material Removal	9
6.6	мацеты кешоча	
7.0	SPILL EQUIPMENT INVENTORY	9
	Spill Equipment Inventory	9
7.1	Resource Contacts	10
7.2	RESOURCE CONDUCTS	

APPENDICES

Appendix A: Location Plan of City

Appendix B: Location Plan of Sewer Facilities

Appendix C: Spill Report Form

Appendix D: Detailed Drawings of all Liftstations
Appendix E: Liftstation Pumping Capacities

Appendix F: Organizational Chart for the Department of Public Works and Engineering

CITY OF IQALUIT SEWAGE LIFT STATION SPILL CONTINGENCY PLAN

INTRODUCTION 1.0

The purpose of this spill contingency plan is to outline a formal practical response system which can be implemented immediately in the event of spills of deleterious material, such as sewage, to the natural environment. These may result from the City's activities within its jurisdiction or from the failure of a system component in the City's infrastructure. This plan is intended to promote the safe handling of potentially hazardous materials to minimize health hazards, environmental damage and clean up costs. The plan is written so it can be easily understood and be reasonably comprehensive in providing access to all information needed in dealing with a spill.

The enclosed maps show the existing layout of all building and waste handling/disposal facilities in the City. Figure 1 (Appendix A) is a general layout of the City. Figure 2 (Appendix B) is a more detailed layout of the City showing the location of liftstations and dump stations.

It is the City's policy to:

- Comply with existing regulations; i.
- Provide such protection of the environment as is technically and economically feasible; ñ.
- Take appropriate action with the necessary resources to remedy a spill situation as soon as it iii. becomes evident;
- Cooperate with other groups to protect the environment; īv.
- Ensure an on-going preventative maintenance program is implemented for all City facilities and to upgrade infrastructure when appropriate; and
- Keep employees, government officials and the public informed. νĹ

2.0 REPORTING PROCEDURES

The Department of Public Works and Engineering personnel with the City of Iqaluit have access to vehicular mobile radios and in some cases, cellular phones; they are therefore able to communicate immediately with other personnel who in turn can telephone for a response team.

All spills are reported immediately to the NWT 24-hour Spill Report Line (Call collect 867-920-8130) to ensure that in investigation may be undertaken by the appropriate government authority.

The following are contact numbers for response personnel:

City of Iqaluit

	<u>Telephone</u>	<u>Cell</u>
FIRE DEPARTMENT	979-4422	
RCMP	979-1111	
AMBULANCE	979-4422	
TOWN DISPATCH	979-5650	

DILLON CONSULTING LIMITED				
		Telephone	<u>Cell</u>	
Ian Freemantle	Chief Administrative Officer (CAO)	979-5666		
	Director of Engineering	975-8501	200 1001	
Jim Grittner	Director of Public Works	979-5636	975-1774	
Layli Noble	Engineering Coordinator	975-8500		
Nuyalea Kipanik	Municipal Services Foreman	979-5612	975-1773	
Paul Barrieau	Roads Foreman	979-5638	975-1463	
Chris Freda	Utilidor Foreman	979-5648	975-1443	
Jokeypah Kippomee	Public Works Clerk	979-5649		
Joanasie Naulaq	By-Law Supervisor	979-5670		
Cory Chegwyn	Fire Chief	979-5657		
Leo Tobin	Deputy Fire Chief	979-5662		
Contractors				
Baffin Building Systems	(BBS)	979-6949		
Kudlik Construction Ltd		979-1166		
Nunavut Construction Lt	d (NCL)	979-7711		
RL Hanson	-()	979-6004		
Tower Arctic Ltd	979-6465			
Additional Information or Assistance				
Environmental Protection	n, Government of Nunavut	975-5900		
Indian and Northern Affa	975-4295			
Indian and Northern Affa	975-4295			
Environment Canada, Iqa	975-4636			
Department of Fisheries	979-8000			
	Officer, Government of Nunavut	979-7652		

The effectiveness of this spill contingency plan will be greatly dependent upon the following factors:

- The proper distribution of the plan to those personnel most likely to encounter a spill or release of deleterious substance during the course of their normal work.
- Training of these same personnel as to the objectives and contents of this plan and how they
 should react upon encountering a spill or system failure that may result in a subsequent release of
 deleterious substances.
- Training of the response personnel as to what action they are required to take in the event of the plan being put into action.
- Training of the response personnel as to the techniques and materials to be used in containment and clean up activities.

Training in these areas will be achieved as follows:

1. The personnel most likely to be involved in the implementation of this contingency plan will be trained as to the objectives, methods and responsibilities set out in the plan. This session will provide the opportunity to review the plan in detail.

2. The personnel most likely to encounter a spill or release of deleterious material will receive training as to how they should react at the time of the initial discovery. They will be provided with an understanding of the importance of and what their responsibilities are, in reporting the discovery as soon as possible.

2.1 First Person Response

- i. Be alert and consider your personal safety first.
- ii. Assess the hazard to persons in the vicinity of the spill and where possible take action to control danger to human life. If possible, identify the material or products involved in this particular incident.
- iii. If safe and practical, try to take appropriate action to stop the release of material.
- iv. Contact the Town Dispatch and report the spill
- v. Contact the Utility Foreman and report the spill.

2.2 Utility Foreman's Response

- i. Proceed to the spill location.
- ii. Assess the situation and make arrangements for first aid and removal of injured personnel. Take the necessary action where possible to secure the site to protect human safety.
- iii. If not already done and if it is safe to do so, take the appropriate action to stop the flow or release of material. If at all possible, take the necessary action to contain or prevent the spread of the spilled material. The Utility Foreman should ensure that appropriate protective apparel is worn by workers when in the vicinity of the spill.
- iv. Gather information on the status of the situation.
- v. If required, contact the other Response Team On-Site Coordinator.
- vi. Fill out, as completely as possible, a spill form (attached in Appendix C) and then contact the 24 Hour Spill Line at 867-920-8130.
- vii. Contact the city CAO at 979-5666.

2.3 Response Team Organization

2.3.1 On-Site Coordinator

- Normally the Director of Public Works or his/her representative and/or the Fire Chief or his/her deputy.
- Has complete authority over the clean up personnel and the spill scene.
- Evaluate the initial situation and assess the magnitude of the problem.
- Activate the response plan and call out the key personnel in the response team, as deemed appropriate, to meet the situation.
- Develops the overall plan of action for containment and clean up of the specific incident and delegates the responsibility of implementing the plan.
- Ensure that the assigned responsibilities are carried out and that co-ordination exists between supervisory team members.
- Assess the requirements for labour, equipment, materials and tools to contain the spill in light of
 what resources are immediately available. The urgency will depend on the nature and magnitude
 of the spill.
- Report the spill if the Utility Foreman has not already done so by calling the 24-Hour Spill Line at 867-920-8130.

2.3.2 Response Team Leader

- Depending on the type of spill, would normally be the Utility Foreman
- Responsible for all field operations in response to the spill
- Ensures appropriate protective apparel is worn by all spill clean-up personnel
- Directs the Spill Response Team in containment, recovery, clean up and disposal operations, including operational support
- Ensures adequate decontamination procedures are followed for spill clean-up personnel and equipment. Equipment should be washed following use.
- Provides advice and guidance to the On-Site Coordinator

2.3.3 Chief Administrative Officer (CAO)

- Acts as the spokesperson with the public, media and government agencies.
- Ensure that all relevant City staff receive adequate training in order to fulfill their responsibilities as part of the Spill Response Team.

3.0 SITE INFORMATION AND FAILURE PREVENTION

3.1 Sewage Spills

It is the purpose of this section to outline possible failures of the waste handling/treatment system and control measures to prevent such failures. The location of the liftstations and dump stations are shown in Figure 2 (Appendix B). This drawing also serves to indicate the probable direction of flow should any facility fail.

3.1.1 Sewage Lift Stations

Upon shut down, all sewage liftstations will eventually overflow to a designated low lying area or body of water to prevent a public health hazard through contact with raw sewage. The following is a list of the liftstations and the body of water or liftstation that will receive sewage overflows (Appendix D contains relevant drawings for individual liftstations):

Liftstation No. 1:

Koojesse Inlet

Liftstation No. 2: Koojesse Inlet

In the event of an overflow, sewage flows directly into Koojesse Inlet, from the liftstations. Locations of the liftstations are available in Figure 2 (Appendix B).

Each lift station has the following main components

- A wet-well that receives the raw sewage.
- Two self-priming centrifugal pumps.
- Float levels in the wet-well that control the pumps
- Monitoring for high level of sewage in the wet-wells.
- Building low temperature alarms.
- Motor starters, domestic electrical (lighting) and electric heat.
- Alarms result in activation of the autodialer that will notify Town Dispatch of the alarm at the lift station.

Rating of the lift station pumps are as follows;

	Sewage Lift Station 1	Sewage Lift Station 2
Manufacturer	Gorman Rupp	Gorman Rupp
Model	T6A3 – B	T3A3 – B
Size	150 mm	75 mm
Impeller Diameter	314.3 mm	215.9 mm
RPM	1250	1350
Motor	30 Hp	7.5 Hp
Design Discharge	44 l/s	12.6 l/s
Head	17.7 m	11.6 m

All liftstations are checked once per day, Monday to Friday. Daily records are kept, indicating that the liftstations were checked. Should items require maintenance or replacement beyond the ability or scope of present staff, then "As and When" mechanical and electrical contractors can be called upon at any time, including emergency situations, to carry out the work.

4.0 RESPONSE TEAM, ACTION AND EQUIPMENT

An organizational chart for the Department of Public Works and Engineering is attached as Appendix F. Key personnel for emergency spills are the Municipal Services Foreman, Roads Foreman, Utility Foreman, Director of Public Services and the Director of Public Works and Engineering.

Should a spill become apparent at Liftstation No. 1, the Utility Foreman would:

- Ensure public safety at all times and if required, the Town Dispatch and Fire Department would be notified.
- Contact the NWT 24-Hour Spill Report Line
- Mobilize staff to determine the cause of the problem, whether in the liftstation or dump station and repair if possible with staff and outside resources, where required.
- Contact Town Dispatch for after-hours on-call personnel (979-5650) OR the appropriate foreman, for sewage pumper trucks (Municipal Services Foreman) and heavy equipment (Roads Foreman), as required. Sewage would be taken from the wet well and hauled to the lagoon.
- Mobilize equipment, including loaders, backhoes and dump trucks, to construct a temporary berm to prevent sewage from entering Koojesse Inlet.
- Clean up contaminated areas and haul material to the lagoon for disposal.

A similar response would be undertaken with other liftstations with the exception of berm construction which is site specific.

The City has had to respond to liftstation sewage overflows in the past. The response team and measures taken to date have proven effective. The City seeks to improve its contingency planning with input from the regulating authorities and other parties.

5.0 SYSTEM COMPONENT FAILURE RESPONSE ACTION

5.1 Sewage Lift Station

Any person finding a discharge from or a malfunction of the liftstation should immediately report the incident to the Utility Foreman. Action must be taken as soon as possible to ensure that the sewage released is contained and any material is prevented from reaching a water body. If necessary, the Utility Foreman is to call out the members of the response team, as described in Section 4.0.

Use the reporting procedures to notify proper authorities.

6.0 GENERAL SPILLS

The measures outlines in this section are intended to minimize the extent of contamination following a hazardous materials spill. For all spills, the initial response will be to immediately prevent any direct danger to human life and the environment. People not associated with the containment and clean up will be required to leave the area.

6.1 Containment on Open Water

For spills in open water, containment procedures will vary depending on whether the material floats or sinks, and whether the water is flowing or standing.

For floating materials, a surface boom shall be deployed. In flowing water, the boom should be stretched across the flow downstream from the spill. In standing water, the boom can contain the spill close to shore. Failing a boom, a dyke may be constructed, especially in shallow areas.

For sinking material, a dyke should be constructed, if possible. This will contain the dispersion of the material in standing water. In small amounts of flowing water, divert the flow around the material by dyking and ditching if possible.

The On-Scene Coordinator will have to judge whether the impact of the spill will be most reduced by carrying out a containment procedure or by immediately attempting to remove any containers from the water. This will depend on the equipment available and how long it will take for additional equipment to arrive. Removed containers should be placed on an impermeable contained surface (example – poly liner in a depression) to prevent further seepage.

6.2 Containment on Ice

Spills on ice will be affected by the strength of the ice and the floating or sinking characteristics of the materials. The safe bearing capacity of ice has to be carefully assessed. For good ice the following thickness table can be used to estimate the load capacity:

Thickness (inches)	Load (tons)
3	0.2
6	1.0
9	2.0
15	6.0
20	10.0
30	20.0
40	40.0

Rules about ice strength include:

- i. "White" ice is only 'as strong as "Blue" ice.
- ii. Reduce load by 'Af cracks parallel to travel.
- iii. Reduce load by %of cracks both parallel and normal to travel.
- iv. Use extreme care if weather is extremely cold after a warm period or warm after a cold period.
- v. Control speed in shallow water to avoid wave build up.

If the spill does not penetrate the ice, and the ice is safe to work on, containment will take the same form as containment on land.

If the spill penetrates the ice, then the situation is analogous to spills in open water. If the material floats then the ice will be broken to install a containment boom. The ice between the spill and the boom will be collected and disposed of with the spilled materials. In standing water under ice, the primary effort must be to recover the material.

6.3 Containment on Snow

Snow is one of the best absorbents, as spill materials migrate into snow until they become immobile. Use it as much as possible when it is available. Snow provides protection against fire spreading if the spill is burnable and is located where burning is practical. Snow also provides flotation of spilled materials after the snow melts during burning. Contaminated, saturated snow facilitates removal of the contaminant to a recovery or disposal site. Care should be exercised when using snow since increased migration of waste could result.

Methods to prevent a spill on snow from spreading include:

- Compact the snow around the outside perimeter of the spill area. This is easily done with a snowmobile.
- Construct and compact snow dams.
- Locate the low point of the spill area, then clear channels in the snow to allow material not absorbed to flow into the low area.
- Once collected, the spilled material contained in the low area can either be shovelled into containers or picked up using mobile heavy equipment and then transported to an approved disposal site.

6.4 Containment on Land

In all cases of liquid spills, the initial containment step is to prevent further dispersion. This is done by dyking as needed around the spill utilizing mobile heavy equipment. If necessary, adsorbents (example – Zorbal, Hazorb Pillows, peat moss, sawdust) or gelling agents (example – Chemgel) should be used to prevent further spread or seepage.

6.5 Fire or Explosion

When fire is associated with a spill of hazardous material, extinguishing the fire is a necessary step. The fire may prevent efforts to stop or minimize the spillage. In all cases, the first step is to clear people from the surrounding area.

Dykes are to be constructed down slope from liquid spills, to minimize spreading of the fire and contain unburned fluid. Foam, CO₂, or water will then be used as is appropriate for the fire. Particular care must be taken to prevent inhalation of vapours that are the products of combustion.

The Iqaluit Fire Department crews are trained and equipped to combat fires which generate toxic fumes, including measures requiring self-contained breathing apparatus and full protective clothing. When the

fire is extinguished, proceed to stop further spillage, contain the spill and initiate appropriate clean up measures.

6.6 Material Removal

Loose material should be scooped up (using equipment appropriate to the spill size) and transferred into containers. Any soil beneath the spill which may have been contaminated should also be removed, where possible, and disposed of with the recovered material.

Final disposal of the recovered material will be determined in consultation with the regulatory officials and the advice of the manufacturer.

7.0 SPILL EQUIPMENT INVENTORY

7.1 Spill Equipment Inventory

The City of Iqaluit does not currently have any spill containment equipment. However, they will be purchasing the following in the near future:

- Industrial spill kits, containing:
 - Sorbent materials (Pads, socks, pillows)
 - Dry acid neutralizer
 - Dry base neutralizer
 - Chemical classifier strips
 - Disposable bags and twist ties
 - Poly drum
- Disposable Tyvek suits
- Heavy duty rain gear waders and jacket (for sewage spills)
- Face shields
- Goggles
- Rubber boots

The following is a list of equipment available for spill containment and clean up, at the Department of Public Works and Engineering:

- 1 4" Gorman Rupp pump on trailer with Lister Diesel Engine
- 1 4" Gorman Rupp pump on trailer, with Deutz Diesel Engine
- 2 2" Stow Submersible Pumps (115 V)
- 1 Wacker Plate Type Compactor (gas-powered)
- 1 2" Gorman Rupp Trash Handling Pump (gas-powered)

Heavy Equipment:

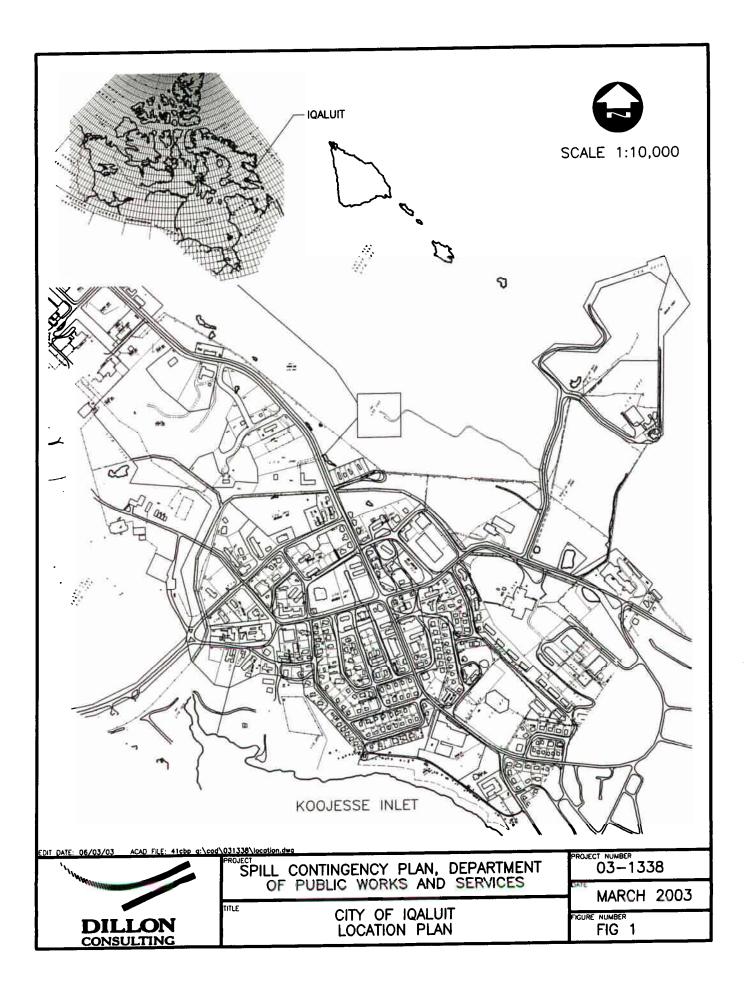
- 1 Cat 950F Wheel Loader
- 1 Cat 928G Wheel Loader
- 1 Cat 814-B Wheel Dozer
- 2 Ford LNT 8000 Sand Trucks
- 1 Cat 140G Grader
- 1 Cat 814 Wheel Dozer
- 4 Sewer trucks (tank size 2800 gal)
- 1 Cat 426-B Backhoe
- 1 Sewer Blaster

7.2 Resource Contacts

Baffin Building Systems (BBS) Kudlik Construction Ltd Nunavut Construction Ltd (NCL) RL Hanson Tower Arctic Ltd Environmental Protection Division Environmental Canada Fire Department	Telephone 979-6949 979-1166 979-7711 979-6004 979-6465 975-5900 975-4636 979-4422	Manpower, ambulance, fire and rescue equipment
Town Dispatch By-law Department	979-5650 979-5669	After-hours on-call personnel Traffic control and public safety

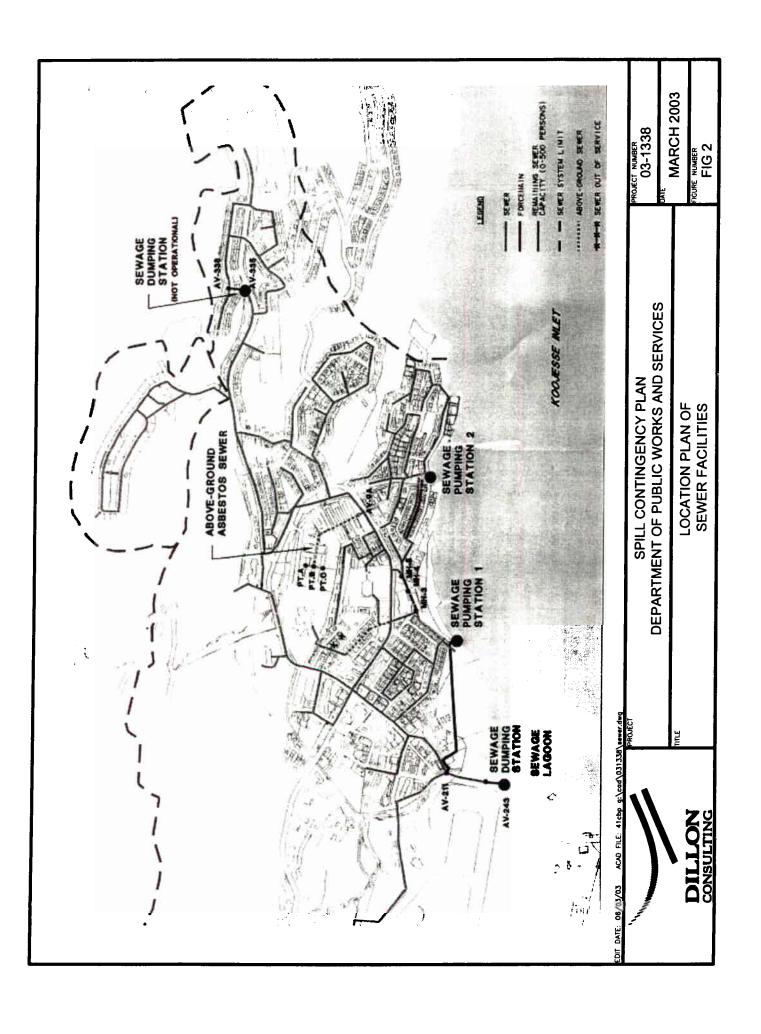


Location Plan of City





Location Plan of Sewer Facilities





Spill Report Form



NWT SPILL REPORT

(Oil, Gas, Hazardous Chemicals or other Materials)

24 - Hour Report Line Phone: (867) 920-8130 Fax: (867) 873-6924

Α	Report Date and Time	B Date and Time of spill (if known)		C Origin	nal Report ite no	Spill Number
D	Location and map coordinates (if known) and	direction (if moving)				
E	Partly responsible for spill					
F	Product(s) spilled and estimated quantities (p	ovide metric volumes/weights if possible)				
G	Cause of spill					
Н	Is spill terminated? If spill is continuing, yes no	give estimated rate J is further spill yes	lage possible?	K Extent of co	ntaminated area (in s	equare meters if possible)
L	Factors effecting spill or recovery (weather co	nditions, terrain, snow cover, etc.)	M Con	tainment (natural c	lepression, dikes, etc	.)
Ν	Action, if any, taken or proposed to contain, re	cover, clean up or dispose of product(s) a	nd contaminated r	materials		
0	Do you require assistance?	P Possible hazards to p	erson, property, o	r environment; eg:	fire, drink water, fish	or wildlife
Q	Comments or recommendations				FOR SPILL	LINE USE ONLY
					Lead agency	
					Spill significance	
					Lead Agency contr	act and time
<u> </u> 						,
					Is this file now clos	ed? yes no
Repo	rted by	osition. Employer, Location			Telephone	
Repor	ted to P	esition. Employer, Location			Telephone	



Liftstation Pumping Capacities

Liftstation Pumping Capacities

	Sewage Pumping Station 1	Sewage Pumping Station 2
	Gorman-Rupp	Gorman-Rupp
Manufacturer	T6A3-B	T3A3-B
Model	6"	3"
Size	12 3/8"	8 1/2"
Impeller Diameter		1,350
RPM	1,250	7.5 hp
Motor	30 hp	12.6 L/s (200 US GPM)
Design Discharge	44 L/s (700 US GPM)	11.6 m (38 ft)
Head	17.7 m (58 ft)	11.0 11 (30 10)



Organizational Chart for the City of Iqaluit

City of Iqaluit's Organizational Chart

Department	Name	Title
Administration	lan Freemantle	Chief Administrative Officer
	Ookalik Curley	Deputy, CAO
	Sarah MacRury	Executive Assistant
	Nikki Eegeesiak	Human Resource Officer
	Jose Arreak	Municipal Liaison Officer
	Jeanie Eeseemailee	Sr. Interpreter/Translator
	Moosie Qaunirq	Community Wellness Coordinator
	Kooyoo Nooshoota	Receptionist
	Cheri Kemp-Kinnear	Director, Economic Development
Recreation	Dave St.Louis	Director, Community development
Recieation	Chrystal Jones	Program Coordinator
	Simon Adams	Manager, Facility & Operations
	David lou	Recreation Programmer Trainee
	Amy Elgersma	Youth Programmer
	Rob Smith	Aquatics Coordinator
	Kim Merkok	Senior Life Guard
	Gordon McIntosh	Facility Manager
	Akeeshoo Kootoo	Facility Worker
	Billy Siginiq	Facility Worker
	Levi Qaumariaq	Facility Worker
	Moses Kownirk	Building Maintainer
	****	Elder's Facility Assistant
	Lizzie Kelly	Eldor o'r dollify'r boroton
Emergency Services	Vacant	Director
	Cory Chegwyn	Fire Chief
	Scott Clay	Firefighter
	Debbie McGean	Firefighter
	Walter Oliver	Firefighter
	Jeremy Hamburg	Firefighter
	Tina Hallet	Firefighter
	Greg Jewers	Firefighter
	Travis Hodder	Firefighter
	Barry Rogers	Firefighter
	Kyle Nowlan	Dispatcher
	Pitseola Ineak	Dispatcher
	Perry Ryan	Dispatcher
	Jerry Aniniliak	Dispatcher
By-Law	Travis Dow	Supervisor, By-law
. , ===	Joanasie	By-Law Enforcement Officer
	Luc Wilman	By-Law Enforcement Officer By-Law Enforcement Officer
	Robert Kavanaugh	- · - · · · · · · · · · · · · · · · · ·

Department	Name	Title
inance	Gordon Roberson	A/Director, Finance
	John Hussey	Controller
	Geneva Chislett	Finance Officer
	Sharon Craig	Payroll/Benefits Officer
	Denise Hutchings	Finance Officer
	Naimi K. McLister	Finance Officer Trainee
	Nuna Michael	Finance Officer
Planning & Lands	Chrystal Fuller	Director
idining a control	Robyn MacKay	Lands Administrator
	Spencer Dewar	Lands Officer
Engineering	Matthew Hough	Director
Lingin coming	Layli Noble	Engineering & Planning Coordinator
Public Works	Jim Grittner	Director
	Guy Plaza	Projects Officer
	Jokeypah Kippomee	Public Works clerk
w&S	Dave Angrove	Foreman - W & S
W & O	Georges Pelletier	Driver
	lan Dart	Driver
	Norman Laisa	Driver
	Maurice Lachance	Driver
	Andrew Crout	Driver
	Steven Dupuis	Driver
	Josephee Nooveya	Driver
	Damien Beauregard	Driver
	Daniel Joamie	Driver
	Darren Deacon	Driver
	Akuila Ipeelie	Labourer
	Mipeegaq Michael	Labourer
	Joetanie Kanayuk	Labourer
	Tommyu Kudlualik	Labourer
	Charlier Jonah	Labourer
Onlid Mosts	Nuyalea Kipanik	Driver
Solid Waste	Charlie Joe Pee	Labourer
0	Kevin Okpik	A/Foreman
Garage	Imoona Atagoojuk	Heavy Equipment mechanic
	Vacant	Heavy Equipment mechanic
	Newkinga Sagiaktook	Motor Vehicle Mechanic
	•	Shop Helper
	Jayko Lango Chris Dederick	Heavy Equipment Mechanic Apprentice
	CHIS Dedelick	Hours = derburger

Department	Name	Title
Roads	Paul Barrieau	Foreman
1	Louis Barrieau	Heavy Equipment Operator
_	Bruce Arnold	Heavy Equipment Operator
	Simionie Nowdlak	Heavy Equipment Operator
	Arlooktoo Takoonagak	Heavy Equipment Operator
	Alan Hatt	Heavy Equipment Operator
	Peter Nowdluk	Heavy Equipment Operator
Utilidoor	Chris Freda	Foreman
Ottill Co.	Bob Brouillet	Water Treatment Plant Operator
	Pat Wolfe	Technician
	Steven lyago	Maintainer
	Levi Tikivik	Utilidoor Assistant Technician
Waste Facility	Darcy Reist	Waste Facility Operator
Tradic Lacinty	Anawak Lucassie	Waste Facility Labourer
	Don Kunuk	Waste Facility Labourer