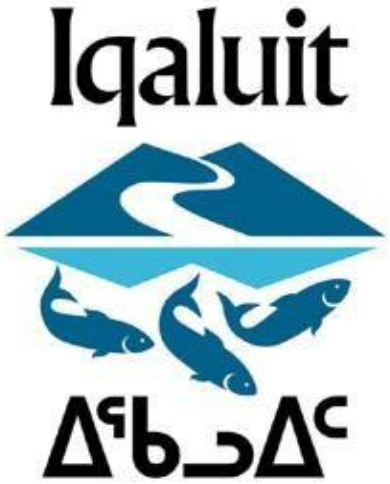

CITY OF IQALUIT

SPILL CONTINGENCY PLAN

Table of Contents

1.0 Introduction

The purpose of this Spill Contingency Plan is to establish a clear and practical response framework that can be implemented immediately in the event of any spill of deleterious or hazardous material into the natural environment. Such incidents may result from City operations, accidents within its jurisdiction, or the failure of infrastructure or equipment.

This plan promotes the safe and effective handling of potentially harmful materials, minimizing risks to human health, preventing environmental damage, and reducing cleanup costs. It has been prepared to be straightforward, practical, and comprehensive, ensuring that all personnel have ready access to the information and procedures necessary to respond effectively.

City Policy Commitments:

- Comply with all applicable regulations.
- Provide protection of the environment as is technically and economically feasible.
- Take immediate and appropriate action with available resources to remedy spills.
- Cooperate with other agencies and organizations to protect the environment.
- Maintain preventative maintenance programs for all City facilities and upgrade infrastructure where appropriate.
- Keep employees, government officials, and the public informed.

2.0 Reporting Contacts

All spills must be reported immediately to the NWT 24-hour Spill Report Line (867-920-8130). This ensures appropriate investigation and compliance with regulatory requirements.

Public Works personnel are equipped with mobile radios and, in some cases, cellular phones, ensuring prompt communication with dispatch, supervisors, and emergency services.

2.1 Emergency Contacts

Service/Department	Telephone
Fire Department	979-4422
RCMP	979-1111
Ambulance	979-4422
Emergency Services	Day: 979-5630 Evening/Weekend: 979-5650

2.2 City of Iqaluit – Key Personnel

Name	Role	Telephone
Steve England	Chief Administrative Officer (CAO)	979-5667
Kevin Kerr	Director of Engineering	979-5636
Adrian Blanchard	Director of Public Works	979-5612
Shane Turner	Superintendent of Water/Wastewater	979-5637
Pat Wolfe	Utilidor Foreman	979-5648
Alexander Janes	Roads Foreman	222-2949
Steve Allen	Chief Municipal Enforcement Officer	979-5670
Solomon Tagak	Fire Chief	979-5657

2.3 Contractors

Contractor	Telephone
Baffin Building Systems (BBS)	979-6949
Nunavut Excavating	979-3320
Tower Arctic Ltd.	979-6465

2.4 Regulatory Contacts

Organization	Telephone
Environmental Protection, Government of Nunavut	975-6305
Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC)	975-4500
INAC – Nunavut District Manager	975-4295
Environment Canada, Iqaluit	975-4636
Department of Fisheries and Oceans, Iqaluit	979-8005
Regional Public Health Officer, Government of Nunavut	975-4800

3.0 Common Causes of Spills and Response Procedures

The most common cause of spills and unauthorized discharges experienced by the City of Iqaluit is sewage system backups. These incidents may occur due to:

- Pipe failure or structural damage;
- Blockages from foreign objects introduced into the collection system; or
- Grease and sludge accumulation within the lines.

When such events are identified, Public Works crews respond immediately to repair damaged lines and restore service. To reduce recurrence, the City is implementing a proactive maintenance program that includes annual sewer cleaning and CCTV inspections to identify problem areas before failures occur. In addition, a public awareness campaign will continue to remind residents of proper disposal practices, emphasizing the importance of keeping inappropriate materials out of the wastewater system

Spills will be categorized by size on the Spill Report Form as follows:

- Small: less than 10 L
- Medium: 10 L – 100 L
- Large: greater than 100 L

The On-Site Coordinator will be responsible for estimating the spill volume at the time of the incident and ensuring that this information is accurately recorded on the Spill Report Form.

Despite preventative measures, spills will still occur. This plan provides a tiered framework for response, scaled to spill size and hazard level.

3.1 Response to Spills

1. Ensure the area is safe for entry; prioritize personal safety.
2. Stop the source of the spill if possible (e.g., plug, upright container, shut valve, clear blockage).
3. For sanitary sewer spills contain the spill, identify and clear the cause of the spill and clean up as indicated below.
4. Check for hazards (flammable material, noxious fumes, cause of spill). If flammable liquid is spilled, turn off engines and nearby electrical equipment. If serious hazards are present leave the area and call the Superintendent of Water/Wastewater. Consult the applicable Material Safety Data Sheets for hazards.
5. Stop spill from entering drain (use absorbent or other material as necessary, close valve if available to drain, cover or plug drain).
6. If the spill enters the sanitary sewer, check the oil/water interceptor or catch basins then contact notify:
    - Superintendent of Water/Wastewater
    - City Emergency Services

7. Clean up material using absorbents; do not flush with water.
8. Place contaminated absorbents/material in secure containers for hazardous waste disposal.
9. Make sure cleaned area is not slippery (if slippery, put down no-slip material or mark area with a "slippery when wet" sign).
10. Notify the facility supervisor.
11. Complete and submit an NWT/NU Spill Report Form.
12. Spills will be categorized by size on the Spill Report Form as follows:
    - Small: less than 10 L
    - Medium: 10 L – 100 L
    - Large: greater than 100 L

    The On-Site Coordinator will be responsible for estimating the spill volume at the time of the incident and ensuring that this information is accurately recorded on the Spill Report Form.

4.0 Response Team Roles

Key roles in spill response include:

- On-Site Coordinator – Director of Public Works (or delegate) or Fire Chief. Responsible for overall authority at the scene, activating the plan, coordinating resources, and reporting if not already done.
- Response Team Leader – Normally the Utility Foreman. Directs field operations, ensures safety gear is used, and supervises containment, recovery, cleanup, and disposal activities.

5.0 General Spill Containment and Cleanup

The measures outline 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 cleanup will be required to leave the area.

5.1 Containment on Open Water

In the event of a spill in open water, containment procedures will depend on the characteristics of the material and the type of water-body affected. For materials that float, a surface boom should be deployed to contain the spill. In flowing water, the boom must be positioned across the current downstream from the spill, while in standing water it can be used to contain the material close to shore. Where a boom is not available, a dyke may be constructed, particularly in shallow areas, to provide effective containment.

For sinking materials, constructing a dyke, if feasible, will help limit dispersion in standing water, and in smaller flowing water bodies, the flow can be diverted around the material through dyking and ditching.

The On-Scene Coordinator is responsible for determining whether immediate containment or prompt removal of containers will best minimize the impact of the spill. This decision should be based on the availability of equipment and the expected time for additional resources to arrive. Any recovered containers must be placed on an impermeable and contained surface, such as a poly liner within a depression, to prevent further seepage into the environment.

5.2 Containment on Ice

Spills occurring on ice are influenced by both the strength of the ice and whether the spilled material floats or sinks. Before any response actions are taken, the safe bearing capacity of the ice must be carefully assessed. The following table provides general guidelines for good-quality ice:

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

Key considerations when working on ice include:

- White ice is only half as strong as blue ice.
- Reduce allowable loads by one-half if cracks run parallel to the direction of travel.
- Reduce allowable loads by one-quarter if cracks run both parallel and perpendicular to travel.
- Exercise extreme caution during periods of fluctuating temperatures (e.g., sudden cold after a warm spell, or sudden warmth after extreme cold).
- Control vehicle speed in shallow water to avoid wave buildup beneath the ice.

If the spill remains on the ice surface and the ice is confirmed safe to work on, containment should follow the same procedures as spills on land. If the spill penetrates the ice, the response becomes analogous to spills in open water. For floating materials, sections of ice may need to be broken to install a containment boom, and the ice between the spill and the boom should be collected and disposed of along with the contaminated material. Where standing water exists beneath the ice, response efforts should focus primarily on recovering the spilled material.

5.3 Containment on Snow

Snow is one of the most effective natural absorbents, as spilled materials migrate into it until they become immobilized. When available, snow should be utilized as much as possible during spill response. It also provides additional protection by limiting the spread of fire if the spilled material is flammable and burning is considered a practical response method. Furthermore, snow assists in flotation of spilled substances after melting during controlled burning. Contaminated and saturated snow can also be removed and transported to an approved recovery or disposal site. However, care must be taken when using snow, as it can also increase the migration of contaminants if not properly managed.

To prevent a spill on snow from spreading, the following methods are recommended:

- Compact the snow around the perimeter of the spill area, which can be done effectively using a snowmobile.
- Construct and compact snow dams to contain the spill.
- Identify the lowest point of the spill area, then clear channels in the snow to direct unabsorbed material into that low point.
- Once collected in the low point, the spilled material can be removed either by shoveling into containers or by using mobile heavy equipment for transport to an approved disposal site.

5.4 Containment on Land

In all cases of liquid spills, the primary objective is to prevent further dispersion of the material. The initial containment step should be to establish control by constructing dykes around the affected area, using mobile heavy equipment where necessary. Where appropriate, absorbent materials may be applied to capture and immobilize the spill. Alternatively, gelling agents may be used to limit migration and reduce seepage into surrounding areas.

5.5 Fire or Explosion

When a hazardous material spill is accompanied by fire, extinguishing the fire becomes the first priority, as it may otherwise prevent efforts to stop or minimize the spill. In all cases, the initial step must be to evacuate all personnel from the surrounding area to ensure safety.

For liquid spills, containment dykes should be constructed downslope to reduce the spread of fire and capture any unburned material. Once containment measures are in place, appropriate extinguishing agents—such as foam, CO_2, or water—should be applied depending on the nature of the fire. Particular caution must be taken to avoid inhalation of combustion vapours, which may be toxic.

The Iqaluit Fire Department is trained and equipped to manage fires that generate hazardous fumes. Their crews use self-contained breathing apparatus and full protective clothing to safely suppress such incidents. Once the fire has been fully extinguished and the site is deemed safe, efforts must continue to stop further spillage, contain the released material, and initiate appropriate cleanup and disposal measures.

5.6 Material Removal

Loose material should be collected using equipment appropriate to the scale of the spill and transferred into secure containers. Where feasible, any soil beneath the spill that has been contaminated must also be excavated and disposed of together with the recovered material.

The final method of disposal for all recovered and contaminated materials will be determined in consultation with the appropriate regulatory authorities and in accordance with the guidance provided by the product manufacturer.

6.0 Spill Response Equipment

Minimum Spill Response Equipment

25 kg of "Loose" Absorbent	**OR**	Universal Type Spill Kit – Standard Contents:
1 - Absorbent Booms		10 Absorbent Pads (Oil, Gas & Diesel)
20 - Absorbent Pads		10 Universal Absorbent Pads (Antifreeze & Non Haz)
1 – Shovel		2 – 3" x 4" Absorbent Socks (Oil, Gas & Diesel)
1 – Broom		2 HD Hazmat Disposal Bags
Garbage Bags		1 Pair of Nitrile Gloves

APPENDIX A: SPILL REPORT FORM

NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE
TEL: (867) 920-8130
FAX: (867) 873-6924
EMAIL: spills@gov.nt.ca

REPORT LINE USE ONLY

A	REPORT DATE: MONTH – DAY – YEAR	REPORT TIME	☐ ORIGINAL SPILL REPORT, OR ☐ UPDATE # _____ TO THE ORIGINAL SPILL REPORT	REPORT NUMBER ____-_____
B	OCCURRENCE DATE: MONTH – DAY – YEAR	OCCURRENCE TIME		

C	LAND USE PERMIT NUMBER (IF APPLICABLE)	WATER LICENCE NUMBER (IF APPLICABLE)
D	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION	REGION ☐ NWT ☐ NUNAVUT ☐ ADJACENT JURISDICTION OR OCEAN
E	LATITUDE DEGREES MINUTES SECONDS	LONGITUDE DEGREES MINUTES SECONDS

F	RESPONSIBLE PARTY OR VESSEL NAME	RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION	
G	ANY CONTRACTOR INVOLVED	CONTRACTOR ADDRESS OR OFFICE LOCATION	
H	PRODUCT SPILLED	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES	U.N. NUMBER
	SECOND PRODUCT SPILLED (IF APPLICABLE)	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES	U.N. NUMBER
I	SPILL SOURCE	SPILL CAUSE	AREA OF CONTAMINATION IN SQUARE METRES
J	FACTORS AFFECTING SPILL OR RECOVERY	DESCRIBE ANY ASSISTANCE REQUIRED	HAZARDS TO PERSONS, PROPERTY OR ENVIRONMENT
K	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS		

L	REPORTED TO SPILL LINE BY	POSITION	EMPLOYER	LOCATION CALLING FROM	TELEPHONE
M	ANY ALTERNATE CONTACT	POSITION	EMPLOYER	ALTERNATE CONTACT LOCATION	ALTERNATE TELEPHONE

REPORT LINE USE ONLY

N	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130

LEAD AGENCY ☐ EC ☐ CCG ☐ GNWT ☐ GN ☐ ILA ☐ INAC ☐ NEB ☐ TC | SIGNIFICANCE ☐ MINOR ☐ MAJOR ☐ UNKNOWN | FILE STATUS ☐ OPEN ☐ CLOSED

AGENCY	CONTACT NAME	CONTACT TIME	REMARKS
LEAD AGENCY			
FIRST SUPPORT AGENCY			
SECOND SUPPORT AGENCY			
THIRD SUPPORT AGENCY			