**November 2024** 

# **Document Control**

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November	Municipality of Clyde River	GN-CGS and	Update to previous	
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2024	Plan for Municipal Water Licence	Limited	standardized template	

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# 1.0 Introduction

This Environmental Emergency Contingency Plan relates to the collection, transportation, storage, and treatment operations associated with water supply, sewage and solid waste for the Municipality of Clyde River, Nunavut. This plan applies to facility operations and spill events relating to sewage, solid waste, and water supply for NWB licensed facilities.

Date this plan was prepared: 2024-Nov-12

Community: Clyde River Latitude: 70° 27' N Longitude: 68° 33' W

This plan was created to meet the requirements of the community's water licence:

Water licence number: 3BM-CLY1924
Issue date: August 20, 2019
Expiry date: August 19, 2024

# 1.1 Purpose of Plan

The impacts of spills can be catastrophic and may threaten or damage the environment, especially water supplies. As such, the Government of Nunavut (GN) requires contingency plans be written and fully implemented. The purpose of this Environmental Emergency Contingency Plan is to provide a plan of action for spills (sewage, solid waste, and petroleum products) that may occur as a result of water supply and treatment, sewage collection and treatment, and solid waste collection and disposal operations undertaken within the Municipality of Clyde River, Nunavut.

The Plan also focuses on the health and safety of both workers and the public. This Environmental Emergency Contingency Plan will assist in implementing corrective options quickly to minimize environmental damage. Furthermore, it defines the responsibilities of key personnel and outlines procedures to contain and recover spills of sewage, solid waste, and hydrocarbon products arising from water, sewage, and solid waste, collection, transportation, storage, and treatment operations effectively and efficiently. It will assist the Municipality in meeting the regulatory requirements related to reporting events to the appropriate authorities within the prescribed time period.

### 1.2 Objectives

The objectives of this Emergency Contingency Plan are to:

- Ensure the health and safety of workers and the general public (first priority at all times);
- Provide a plan with procedures so that the Municipality and their Spill Response Team can rapidly respond to a spill situation and minimize injury to individuals and environmental damage;
- Comply with all existing regulations;
- Cooperate with other groups and agencies;
- Be prepared and able to provide an integrated team approach with various Municipal departments and Federal and Territorial agencies; and
- Keep staff, government officials, and residents informed.

# 1.3 Health and Safety

Health and safety of workers and the public always takes priority. All activities must follow the requirements of the Nunavut Safety Act.

### 1.4 Municipality of Clyde River Environmental Policy

It is the policy of the Municipality of Clyde River to fully comply with all applicable legislation to ensure the protection of the environment in the territory of Nunavut. The legislation includes, but is not limited to:

- Nunavut Safety Act;
- Environmental Protection Act, Section 34 Spill Contingency Planning and Reporting Regulations; and
- Nunavut Waters and Nunavut Surface Rights Tribunal Act.

The Municipality will cooperate with other groups committed to protecting the environment and shall ensure that Municipal employees, regulatory authorities, and the public are informed on the policies and procedures developed to help protect the environment and the residents of the Municipality of Clyde River.

# 2.0 Site and System Description

### 2.1 General Site Description

This Environmental Emergency Contingency Plan is to be implemented within the Municipal boundaries of the Municipality of Clyde River, Nunavut.

The Municipality of Clyde River is situated on the shore of Patricia Bay, off Kangiqtugaapik. Clyde River is in the Qikiqtaaluk region of Nunavut and is located on a flood plain. The community has a population of approximately 1181 (Census 2021). Community infrastructure includes:

- A water distribution system consisting of a natural lake reservoir, and pumphouse with truck fill;
- A two-cell lagoon and natural tundra wetland system with a truck discharge area; and
- A solid waste disposal facility consisting of a fenced disposal area for municipal solid waste (MSW), bulk metal disposal area, and hazardous waste.

The community and surrounding area are shown in Figure 1.



Figure 1 Clyde River and Surrounding Area

# 2.2 Water, Sewage, and Waste Disposal Activities

#### 2.2.1 Water Supply and Treatment

The Municipality provides daily trucked services for water delivery. Drinking water is obtained from a lake approximately 1.2km north of the community and distributed to water trucks via the pumphouse truck fill. The Municipality operates water delivery trucks that fill at the pumphouse and deliver water to storage tanks at each building.

#### 2.2.2 Sewage Collection

Sewage collection is provided by the Municipality. Each building has a sewage holding tank that is pumped out by the Municipality's sewage trucks daily. Sewage is treated at the Sewage Treatment Facility lagoon. (Figure 1).

Sewage and wastewater are presently discharged directly into a natural tundra wetland, which treats the effluent and drains west and northwest eventually reaching the marine environment of Patricia Bay. Potential environmental emergencies include:

- House tank spill;
- Tank truck spill; and
- Uncontrolled spill/discharge from the lagoon, of untreated or partially treated sewage.

#### 2.2.3 Solid Waste Collection and Disposal

The Municipality of Clyde River provides regular solid waste pickup for the Community's residents, businesses, and institutions. Solid waste is trucked to the Municipality's Solid Waste Management Facility. (Figure 1).

The Hamlet currently has a domestic waste site and bulky metal waste site. An access road from the community to the sewage lagoon connects those isolated sites. Both facilities are non-engineered.

The landfill (domestic waste) site is on the south side of the access road. This site is about 600m from the ocean and slopes towards the ocean. There is a dilapidated fence located on the south face of the landfill which is intended to prevent debris from being blown from the site into the ocean. The landfill does not have berms, gate, lights, or designated areas for different wastes. This facility reportedly has a capacity issue.

The Bulky metals site is located at the north of the access road and opposite to the sewage lagoon. This site receives all the metal wastes without any segregation. A dump truck or low bed is used to transport bulky metals from the community to this site. A hazardous waste management cell was not built within the bulky metals site. As a result, the hazardous wastes are mixed up with other materials.

Potential environmental emergencies include:

- Fuel spill (from a truck);
- Uncontrolled discharge of landfill impacted surface water (leachate);
- Fire in the waste; and
- Hazardous waste spill.

## 2.3 Hazardous Materials in the Community

Table 1 outlines potential hazardous materials present in the community. This is intended to be a lost of commonly present hazardous materials and may not cover every hazardous material present in the community at any given time.

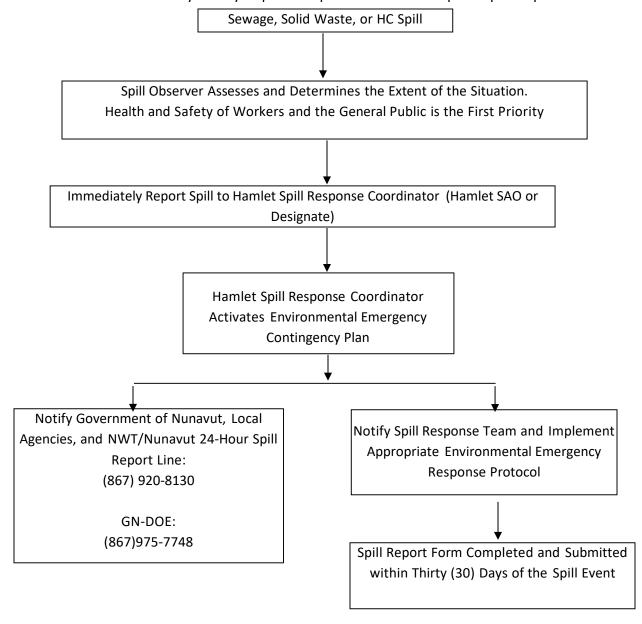
**Table 1 Potential Hazardous Materials in Clyde River** 

Material	Quantity in Community	Uses	Potential Discharge
Granular Hypochlorite	Unknown	Water treatment	Rupture, spill, overturned container
Diesel fuel	Unknown	Used to fuel pumps or generators	Failure in system, spill during refuelling, leak
Gasoline	Unknown	Motor vehicle fuel	Vehicular accident, leak, spill during transfer
Lubricating Oil	Unknown	Equipment lubrication	Valve or line failure, leak
Antifreeze and other coolants	Unknown	Motor vehicles	Vehicular accident, spill during transfer
Hydraulic oil	Unknown	Heavy equipment	Leak, valve or line failure, spill during transfer
Sewage	Unknown		Berm breach, vehicular accident
Motor oil	Unknown	Motor vehicles	Vehicular accident, leak

Material	Quantity in Community	Uses	Potential Discharge
Batteries	Unknown	Vehicle batteries	Improper storage or segregation
Jet A-1 Fuel	Unknown	Aircraft fuel	Improper storage, spill during refuelling, leak
Propane	Unknown	Household use	Leak, improper storage

# 3.0 Spill Response Organization

The flowchart on the following page identifies the response organization and the chain of command for responding to a spill or release. This chart should be posted in a highly visible location in each community facility to provide quick access to the spill response process.



An immediately reportable spill is defined as a release of a substance that is likely to be an imminent environmental or human health hazard or meets or exceeds the volumes shown in the attached table. These spills must be reported to the Spill Report Line.

**24-Hour Spill Line:** 867-920-8130

Table 2 provides information on immediately reportable spill quantities.

**Table 2 Immediately Reportable Spill Quantities** 

**Immediately Reportable Spill Quantities** 

TDG Class	Substance	Quantity	
1	Explosives		
2.3	Compressed gas (toxic)		
2.4	Compressed gas (corrosive)	A	
6.2	Infectious substances	Any amount	
7	Radioactive		
None	Unknown substance		
2.1	Compressed gas (flammable)	Any amount of gas from	
2.2	Compressed gas (non-corrosive, non-flammable)	containers with a capacity	
	Compressed gas (non-corrosive, non-naminable)	greater than 100 L	
3.1			
3.2	Flammable liquids	> 100 L	
3.3			
4.1	Flammable solids		
4.2	Spontaneously combustible solids	> 25 kg	
4.3	Water reactant		
5.1	Oxidizing substances		
9.1	Miscellaneous products or substances excluding	> 50 L or 50 kg	
	PCB mixtures		
5.2	Organic peroxides	. 4 L 4 L	
9.2	Environmentally hazardous	> 1 L or 1 kg	
6.1	Poisonous substances		
8	Corrosive substances	> 5 L or 5 kg	
9.3	Dangerous wastes		
9.1	PCB mixtures of 5 or more ppm	> 0.5 L or 0.5 kg	
	Other contaminants (e.g. crude oil, drilling fluid,		
None	produced water, waste, or spent chemicals, used	> 100 L or 100 kg	
	or waste oil, vehicle fluids, wastewater, etc.)		

None	Sour natural gas (i.e. contains H3S)	Uncontrolled release or	
	Sour natural gas (i.e. contains H2S)	sustained flow of 10 minutes or	
	Sweet natural gas	more	

In addition, all releases of harmful substances, regardless of quantity, are to be reported to the Spill Line if the release is near or into a water body, is near or into a designated sensitive environment or sensitive wildlife habitat, poses imminent threat to human health or safety, poses imminent threat to a listed species at risk or its critical habitat, or is uncontrollable.

## 3.1 Community Contact Information and Responsibilities

The Chief Administrative Officer (CAO) or his/her designate will serve as the Spill Response Coordinator for the Municipality in the event of a sewage or HC spill during collection, transportation, storage, or treatment operations. The SAO of the Municipality of Clyde River will appoint and train appropriate personnel to make up the Spill Response Team, which normally consist of the following personnel:

- Spill Response Coordinator (CAO or designate); and
- Municipal Public Works Personnel.

Chief Administrative Officer:

Name: Rajesh Kumar
Phone: 867-924-6220
Second phone: 867-924-6301
Email: cao@clyderiver.ca

Maintenance Foreman or Work Foreman:

Name: lan Tigullaraq Phone: 867-868-2240

Email: pworks@clyderiver.ca

The responsibilities of the Spill Response Coordinator are as follows:

- Assume complete authority over the spill scene and coordinate all personnel involved;
- Control access and ensure the health and safety of workers and the general public;
- Evaluate the spill situation and develop an overall plan of action;
- Activate the Environmental Emergency Contingency Plan for the Municipality of Clyde River;
- Immediately report the spill to the NWT/Nunavut 24-Hour Spill Report Line at (867)920-8130, and other applicable regulatory or assistance agencies;
- Provide regulatory agencies with information regarding the status of the clean-up activities;
- Act as a spokesperson on behalf of the Municipality of Clyde River with regulatory agencies, the public, and the media;
- Prepare and submit a report on the spill incident to regulatory agencies within 30 days of the event; and
- Obtain the assistance of regulatory agencies, consultants, and/or contractors with the skills and equipment to deal with emergency situations deemed to be beyond the capabilities of Municipal staff.

Responsibilities for spill response by facility are outlined in Table 3.

**Table 3 Spill Response for Municipal Infrastructure** 

Facility	Name	Position	Phone
WTP	Rajesh Kumar	SAO	867-924-6220
	Ian Tigullaraq	Foreman	867-868-2240
SDF	Rajesh Kumar	SAO	867-924-6220
	Ian Tigullaraq	Foreman	867-868-2240
SWDF	Rajesh Kumar	SAO	867-924-6220
	Ian Tigullaraq	Foreman	867-868-2240
Other Locations	Rajesh Kumar	SAO	867-924-6220
	Ian Tigullaraq	Foreman	867-868-2240

#### 3.2 Off-Site Resources

Off-site resources for assistance in the event of a spill are listed below. Assistance from outside the community may not be able to reach the site until at least the next business day.

24-Hour Spill Line	(867) 920-8130
Crown Indigenous Relations and Northern Affairs Canada	(867) 975-4295
Environment and Climate Change Canada Environmental	(780) 951-8861
Emergency Response	
Government of Nunavut	(867) 920-8130
Department of Fisheries and Oceans	(867) 979-8000
Clyde River Health Centre	(867) 924-6377
Clyde River Fire Department	(867) 979-4422
Royal Canadian Mounted Police	(867) 924 -1111

# 4.0 Spill Reporting Procedure

The Spill Response Coordinator must be notified immediately by any individual who is aware of any spill either by phone, email, or in person.

The following are the incident reporting procedures once the Spill Response Coordinator activates this Environmental Emergency Contingency Plan:

- Report spills immediately to the 24-Hour NWT/Nunavut Spill Report Line Phone (867)920-8130;
- Report immediately to the CIRNAC Manager, Water Resources in Iqaluit at (867) 975-4550 and GN-DOE (867) 975-7748;
- Notify Municipality of Clyde River Fire Department; and
- Fill out the NWT/Nunavut Spill Report Form (**Appendix B**) within thirty (30) days of the spill event occurring.

### 4.1 NWT/NU Spill Report Line

All spills, as defined in this document, must be reported immediately to the 24-hour NWT/Nunavut Spill Report Line. The following information should be gathered prior to making the call:

- Date and time of spill (if known);
- Location and map coordinates (if known) and direction of flow of spill materials if moving;
- Party responsible for spill;
- Product/material spilled and quantity estimate;
- Cause of spill;
- Note whether spill has been contained or if it is still releasing into the environment;
- Extent of contaminated area;
- Factors affecting spill or recovery, such as weather conditions or terrain;
- Note whether spill containment is available;
- Action taken or proposed;
- If assistance is required;
- Possible hazards to individuals, property, or environment (e.g., fire, drinking water, fish, wildlife, etc.); and
- Health and safety issues.

The information collected should be brief, and rough estimates made to enable the Spill Report Line and the Spill Response Coordinator to assess the situation. The information is the same as to that required on the Nunavut Spill Report form that must be completely filled out and submitted within thirty days of the incident. This form is included as **Appendix A**.

# 5.0 Action Plans

#### 5.1 Initial Action

The instructions to be followed by the first person on the spill scene are as follows:

- Always be alert and consider your safety and the safety of others first;
- If possible, estimate the volume of material that has been spilled;
- Assess the hazard of people in the vicinity of the spill;
- If possible, and safety permits, attempt to stop the release of product to minimize potential for environmental impacts;
- Immediately report the spill to the Spill Response Coordinator; and
- Resume any effective action to contain, mitigate, or terminate the flow of the spilled material.

# 5.2 Environmental and Human Health Protection and Mitigation Measures – General Procedures

The environmental protection and mitigation measures outlined in the following sections are to be taken by all personnel responding to a spill event. This will reduce the chance of environmental impairment and health hazards due to a spill, release, or other incident. The following general clean-up procedures shall apply for all spill areas within the Municipality:

- Control access to the area and ensure the health and safety of workers and the general public;
- Always wear personal protective equipment (PPE);
- Smoking is prohibited during all spill response activities;
- Eliminate all ignition sources;
- Contain spills on soil or rock by construction of earthen dykes using available material. If soil is not available, place sorbent materials or a boom in the path of the spill. As the sorbent barrier becomes saturated, continually replace it. Fuel or other liquids lying in pools, or trenches are to be removed with pumps, buckets, or skimmers;
- If the ground is snow covered, create snow dykes, and line them with a chemically-compatible liner for containment and recovery of liquid;

- For fuel spills on water, deploy containment booms, and recovery as much fuel as possible with a work boat and skimmer if less than 1/10<sup>th</sup> of the area is covered in ice. If the area is frozen, burn fuel spills using igniters;
- Apply sorbent materials, if necessary;
- Assess potential for disturbance of wildlife, fish, and archaeological sites from spill or clean-up operations;
- Notify environmental authorities to discuss available and feasible disposal and cleanup options;
- Conduct required clean-up operations;
- Assess and appropriately treat any areas disturbed by clean-up activities with laboratory testing; and
- Ensure that the site has been completely restored. Resume operations, only once all work is finalized and laboratory testing confirmed.

Procedures for containing spills of specific contaminants are provided in the following sections.

## 5.3 Mitigative Measures: Hydrocarbon Spills

Hydrocarbon spills include gasoline, diesel fuel, hydraulic fluid, lubricating oil, and aviation fuel. If possible, and safety permits, stop the flow of product, which is occurring, and eliminate all ignition sources. Smoking is prohibited during all spill response activities.

#### 5.3.1 Hydrocarbon Spill on Soil, Gravel, Rock, or Vegetation

- Build a containment berm using soil material or snow and place a plastic tarp at the foot of the berm easily capture the spill after all vapours have dissipated;
- Remove the spill by using absorbent pads or excavating the soil, gravel, or snow; and
- Remove spill splashed on vegetation using particulate absorbent material.

#### 5.3.2 Hydrocarbon Spill on Water

- Use containment boom to capture spill for recovery after vapours have dissipated;
- Use absorbent pads to capture small spills;
- Use a petroleum skimmer for larger spills; and
- GN-DOE requires that Environment Canada be consulted regarding clean-up methods.

#### 5.3.3 Hydrocarbon Spill on Ice and Snow

Build a containment berm around spill using snow;

- Remove spill using absorbent pads or particulate sorbent material;
- The contaminated ice and snow must be scraped and shovelled into plastic buckets with lids, 205 litre drums, and/or polypropylene bags; and
- GN-DOE requires that Environment Canada be consulted regarding clean-up methods.

#### 5.3.4 Hydrocarbon Contaminated Material Storage and Transfer

In the absence of a landfarm, soil and gravel contaminated by hydrocarbons should be bagged, contained, and transported out of the community for proper disposal.

As space permits, small quantities of water, ice, snow, vegetation, and cleanup supplies contaminated by HC may be stored in labeled drums in the hazardous waste storage facility in accordance with normal operating procedures. If the quantity of contaminated material makes storage in drums unfeasible, the Municipality shall contact the appropriate regulatory agencies before removing any materials.

#### 5.4 Mitigative Measures: Sewage

If possible, and safety permits, stop the flow of sewage escaping to the environment. A small spill (truck leak or household tank leak) is not a significant environmental issue, site control containment and clean up can be accomplished without significant concerns. Dilution with water is an effective remedy for any residual.

In the event of a catastrophic failure of the sewage lagoon, which allowed a large volume of partially treated sewage to escape, efforts should focus on re-establishing containment. The following mitigative measures would follow:

- Control flow and attempt to pump sewage back into containment;
- Cordon off the area and warn the public;
- Maximize the length of the flow path of the sewage in the wetland through ditching and diversion berms;
- Dilute with water pumped from local streams;
- Sample along the flow path and direct efforts to areas of most concern; and
- Recover solids as best as possible while limiting the environmental impacts.

#### 5.4.1 Sewage Spill on Soil, Gravel, Rock, or Vegetation

- Build a containment berm using soil material or snow and place a plastic tarp at the
  foot of the berm to easily capture the spill, and to prevent sewage from entering any
  water body; and
- Remove the spill by using vacuum trucks or excavating the soil, gravel, or snow.

#### 5.4.2 Sewage Spill into Water

- Use containment boom to capture spill, and pump contaminated water into vacuum trucks;
- Deposit contaminated water in the Municipal sewage lagoon;
- As a minimum, monitor the affected water body by sampling for Biological Oxygen Demand (BOD), Total Suspended Solids (TSS), ammonia (NH<sub>3</sub>), and faecal coliforms (FC); and
- Environment Canada should be contacted regarding clean-up methods.

#### 5.4.3 Sewage Spill on Ice and Snow

- Build a containment berm around spill using snow;
- Remove spilled sewage and contaminated snow and ice and dispose of it at the municipal sewage lagoon; and
- Environment Canada should be contacted regarding clean-up methods.

#### 5.4.4 Sewage Storage and Transfer

All contaminated water, ice, snow, soil, and clean-up supplies will be deposited to the municipal sewage lagoon (liquid or frozen liquid) or landfill facility (solid), as appropriate. Environment Canada should be contacted regarding clean-up methods.

# 5.5 Mitigative Measures: Solid Waste

#### 5.5.1 Solid Waste Spill on Soil, Gravel, Rock, or Vegetation

 Physically remove the spilled solid waste from the area, and deposit in the municipal Solid Waste Management Facility.

#### 5.5.2 Solid Waste Spill into Water

- Use containment boom to capture soil waste for recovery;
- Physically remove the spilled solid waste from the water, and deposit in the municipal Solid Waste Management Facility;

- Capture any sheen from the water using absorbent pads or skimmer, and deposit any
  used absorbent pads to the Municipal Solid Waste Disposal facility; and
- Environment Canada should be contacted regarding clean-up methods.

#### 5.5.3 Solid Waste Spill on Ice and Snow

- Build a containment berm around spill using snow;
- Physically remove the spilled solid waste and deposit in the Municipal Solid Waste Management Facility; and
- Environment Canada should be contacted regarding clean-up methods.

#### 5.5.4 Disposal

Any solid waste shall be transferred to the Municipal Solid Waste Management Facility.

### 5.6 Mitigative Measures: Hazardous Materials

#### 5.6.1 Hazardous Solid Waste Spill on Soil, Gravel, Rock, or Vegetation

 Physically remove the spilled hazardous solid waste from the area, and store in the Hazardous Waste Storage Area at the Municipal Solid Waste Management Facility.

#### 5.6.2 Hazardous Solid Waste Spill into Water

- Use containment boom to capture solid hazardous waste for recovery;
- Physically remove the spilled solid waste from the water, and store in the Hazardous
   Waste Storage Area at the Municipal Solid Waste Management Facility; and
- Capture any sheen from the water using absorbent pads or skimmer and store any used absorbent pads as hazardous waste.

#### 5.6.3 Hazardous Solid Waste Spill on Ice and Snow

- Build a containment berm around spill using snow; and
- Physically remove the spilled hazardous solid waste and store in the Hazardous Waste Storage Area at the Municipal Solid Waste Management Facility.

#### 5.6.4 Disposal

Any solid hazardous waste shall be transferred to the Hazardous Waste Storage Area at Municipal Solid Waste Management Facility until it can be properly characterized and shipped out of the community.

The GN-DOE monitors the movement of hazardous waste through the use of a tracking document known as a Waste Manifest. A Waste Manifest must accompany all movements, and all parties must register with DOE by contacting:

- Sean Noble: (867) 975-7769, <a href="mailto:snoble@gov.nu.ca">snoble@gov.nu.ca</a>; and
- Michele LeBlanc-Havard: (867) 975-7726, mleblanc-havard1@gov.nu.ca.

# 5.7 Transferring, Storing, and Managing Spill Related Wastes

Spills are generally cleaned up starting at the outer limit of the spill and working towards the point of the spill. Sorbent materials and hand tools such as cans and shovels are used for smaller spills. Larger spills can be contained with the use of a pump and/or heavy equipment. Spill wastes include used absorbent materials and containers of impacted water and snow. Sorbent materials should be placed in plastic bags or drums for proper disposal. The containers of impacted water and snow should be sealed and stored until disposal at an approved facility can be arranged. For most of the containment procedures, spilled petroleum products and materials used for containment will be placed into empty waste oil containers and sealed for proper disposal at an approved disposal facility.

Following a spill, all used materials need to be properly cleaned and/or replaced.

## 5.8 Spill Recovery Assessment

Once a spill has been contained, community personnel will consult with the regulatory personnel assigned to the file to determine the level of remediation required. The regulatory personnel may request that a site-specific study be conducted to ensure appropriate remediation is met for the site.

After clean-up has been completed, the community should follow up with the 24-hour Spill Line to ensure that the spill report file has been closed. Closure of the spill file provides evidence that the spill was cleaned up to the regulator's satisfaction. This will help prevent the spill from being considered an environmental liability for the community in the event of a change of ownership, refinancing, or closure of the site. A copy of the spill report marked "Closed" can be provided on request for the community's files. The Spill Line also keeps copies of these reports on file.

To determine whether a spill has been successfully remediated, samples of the soil and/or water within the spill containment area and surrounding the area, are to be collected and sent to an accredited Canadian Association of Environmental Analytic Laboratories (CAEAL)

laboratory to be analyzed for the chemical parameters contained expected in the spill material. If concentrations of the spill chemicals are not detected, or are at concentrations below the applicable Territorial, Federal, or CCME regulations/criteria, the spill clean-up will be determined a success. Clean-up operations may then cease.

Refer to the Environmental Monitoring Program and Quality Assurance/Quality Control Plan for the Municipality of Clyde River for a description of sampling protocols and parameters. Sampling and monitoring results (air, sediments, water, and soil) will be compared to the applicable land use classification of the site (residential, commercial, industrial, etc.), as contained within the Canadian Environmental Quality Guidelines (CCME, 2007). Should NWB Water License or Nunavut guideline criteria exist that are applicable to the situation, then the most stringent criteria should be followed.

Depending on the nature of the spill or emergency, the material requiring clean-up and handling must be handled and disposed of in accordance with Nunavut Guidelines for Industrial Waste Discharges or General Management of Hazardous Waste.

Refer to the Monitoring Program and Quality Assurance/Quality Control Plan, Municipality of Clyde River, for directions on obtaining sample bottles, conducting sampling, and laboratory analysis of samples. Refer to the following documents for the handling and disposal of liquid and solid waste within the Municipality of Clyde River:

- Solid Waste Management Facility Operation and Maintenance (O&M) Plan; and
- Sewage Treatment Facility Operation and Maintenance (O&M) Plan.

# 6.0 Spill Response Resources

#### 6.1 Additional Personnel

In addition to Public Works staff, the Clyde River Fire Department is available to assist in spill response and clean-up activities. Personnel from the local RCMP Detachment will be available for securing the site from unauthorized individuals, closing roads, etc. The Community Health Centre has personnel to assist in the treatment of anyone injured during the emergency.

Environmental consulting companies can provide technical guidance and spill response impact evaluation, remediation, and post remedial confirmatory sampling.

### 6.2 Spill Response Equipment Inventory

Within the community, there is some equipment available to assist in responding to a spill including heavy equipment (i.e., vacuum trucks, dozer, front end loader, and grader), as well as various handheld tools including shovels. In addition, the municipal spill kit should be available during spill incident response operations. Each spill kit should contain the following supplies:

**Table 4 Spill Kit Inventory** 

Spill Kit Item	Quantity
360 litre polyethylene over pack drum	1
Oil sorbent booms (5" X 10')	6
Oil sorbent sheets (16.5" X 20" X 3/8")	100
Drain cover (36" X 36" X 1/16")	1
Caution tape (3" X 500')	1
1lb plugging compound	1
Nitrile gloves (pair)	4
Safety goggles (pair)	4
Tyvek coveralls (pair)	4
Instruction booklet	1
Printed disposable bags (24" X 48")	10

Sorbent capacity of each spill kit is 240 litres.

The spill response kits should be stored in the on-site locker at the Hazardous Waste Storage Area provided for this purpose. Some equipment may be stored in other areas throughout the community.

# 7.0 Training

All members of the Spill Response Team should be trained in the safe operation of all machinery and tools to help prevent sewage solid waste and hazardous material spills. All Public Works staff should also be trained for initial spill response. Annual refresher exercises should be conducted to review the procedures of this Environmental Emergency Contingency Plan with all members the Spill Response Team, including members of the local volunteer fire department, RCMP Detachment, and Community Health Centre.

Spill Response Team training should include the following aspects:

- Spill awareness and prevention;
- Methods of detection;
- Types of spills and seasonal considerations;
- Reporting procedures and initial responses;
- Spill response kit familiarization;
- Clean-up and site remediation methods; and
- Occupational health and safety including proper selection and use of protective equipment.

# 8.0 Annual Review of this Environmental Emergency Contingency Plan

As part of the preparation of the Annual Report to the Nunavut Water Board as required by the Water License, the Municipality should review and update the information contained within this plan. The purpose of the update is to ensure all changes to regulations are incorporated into this plan, along with the use of any new technology or method advances, to prevent or stop a spill and to mitigate and/or remediate a spill. This ensures that the plan adapts as the Municipality grows, to ensure the community is properly prepared in the event of an incident.

Staff training must accompany the use of this document.

Annual refresher training of personnel should be completed after any revisions to this document have been approved. This will familiarize personnel with the updated plan, and to provide a rapid and coordinated response.

# **Appendix A**

Spill Report Form





# **NT-NU SPILL REPORT**

NT-NU 24-HOUR SPILL REPORT LINE

TEL: (867) 920-8130 FAX: (867) 873-6924 EMAIL: spills@gov.nt.ca

												REPORT LINE USE ON	ILY	
Α	REPORT DATE: MONTH	MONTH – DAY – YEAR		REPORT TIME		RTTIME	□ DRIGINAL SPILL REPOR			RT, OR	REP	REPORT NUMBER		
В	OCCURRENCE DATE: N	DATE: MONTH – DAY – YEAR		occi		RRENCE TIME		UPDATE# THE ORIGINAL SPILL R		REPORT				
С	LAND USE PERMIT NUMBER (IF APPLICABLE)				WATER LICENCE NUMB			BER (IF APPLICABLE)						
D	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM THE N				NAMED LOCATION			REGION						
Е	LATITUDE DEGREES MINUTES SECONDS				LONGITUDE DEGREES MINUTES SECONDS									
F	RESPONSIBLE PARTY	RESPONS	RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION											
O	ANY CONTRACTOR INVOLVED				ONTRACTOR ADDRESS OR OFFICE LOCATION									
I	PRODUCT SPILLED	RODUCT SPILLED			QUANTITY IN LITRES, KILOGRAMS OR CU				UBIC METRES U.N			U.N. NUMBER		
	SECOND PRODUCT SPILLED (IF APPLICABLE)  QUANT				ANTITY IN LITRES, KILOGRAMS OR CU			IC MET	RES	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					MENT	
	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, F						R DISPO	OSE OF	SPILLED PR	ODUCT A	ND CON	TAMINATED MATERIAL	LS	
K	<													
							-					TELEPHONE		
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М	ANY ALTERNATE CONTACT POSITI		POSITION	DSITION		1PLOYER	ALTERNATE CON		IATE CONTA	ACT LOCATION		ALTERNATE TELEPH	IONE	
REPOR	REPORTLINE USE ONLY													
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SECOND SUPPORT AGENCY														
THIRD SUPPORT AGENCY														