



**Environmental Emergency Contingency Plan
Hamlet of Rankin Inlet
Department of Community and
Government Services, Government of Nunavut**

Prepared by

Nuna Burnside Engineering and Environmental Ltd.
Box 175 Rankin Inlet NU X0C 0G0 Canada
15 Townline Orangeville ON L9W 3R4 Canada

*December 2008
Revised April 2010*

File No: N-O 14850

The material in this report reflects best judgement in light of the information available at the time of preparation.

Any use which a third party makes of this report, or any reliance on or decisions made based on it, are the responsibilities of such third parties. Nuna Burnside accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

Environmental Emergency Contingency Plan
Hamlet of Rankin Inlet

December 2008

Revised April 2010

Executive Summary

Community and Government Services (CGS) of the Government of Nunavut (GN), operates the Water Supply Facility and Sewage Treatment Facility for the Hamlet of Rankin Inlet.

Nunavut Water Board (NWB) License Number NWB3GRA0207 expired November 30, 2008 and a new license application is in progress.

An Environmental Emergency Contingency Plan specifically for the operation of the Water Supply Facility and Sewage Treatment Facility dated December 2008, was prepared by Nuna Burnside Engineering and Environmental Ltd (Nuna Burnside), as required by the original license and in support of the application for a new license.

As noted in the December 2008 Environmental Emergency Contingency Plan, as per the NWB License, the Plan is to be reviewed and updated annually.

This April 2010 update of the Plan also addresses comments provided by review agencies during the license renewal application process.

December 2008

Revised April 2010

Table of Contents

Executive Summary.....	i
Preamble.....	1
1.0 Introduction.....	2
1.1 Purpose of Plan	2
1.2 Objectives.....	2
1.3 CGS-GN Environmental Policy	3
2.0 Site Description.....	4
2.1 Hamlet of Rankin Inlet.....	4
2.2 Water Supply, Treatment and Distribution.....	4
2.3 Sewage Collection and Treatment	5
3.0 Spill Response Organization	6
3.1 Spill Response Team	6
3.2 Contact Information.....	8
4.0 Spill Reporting Procedure.....	9
4.1 NWT/Nunavut Spill Report Line	9
5.0 Action Plans	11
5.1 Initial Action	11
5.2 Environmental and Human Health Protection and Mitigation Measures – General Procedures	11
5.3 Mitigative Measures: Hydrocarbon Spills.....	12
5.4 Mitigative Measures: Sewage	13
5.5 Mitigative Measures: Solid Waste	14
5.6 Mitigative Measures: Hazardous Materials	14
5.7 Spill Recovery Assessment	15
6.0 Spill Response Resource Inventory.....	17
6.1 Additional Personnel Available	17
6.2 Spill Response Equipment Inventory.....	17
6.3 Spill Kit Storage Locations.....	17
7.0 Training	19
8.0 Annual Review of this Environmental Emergency Contingency Plan	20
9.0 References	21

Environmental Emergency Contingency Plan
Hamlet of Rankin Inlet

December 2008

Revised April 2010

Figures

- 1 Site Location Map
- 2 Community Plan

Appendices

- A Contact Information
- B NWT Spill Report

Environmental Emergency Contingency Plan
Hamlet of Rankin Inlet

December 2008

Revised April 2010

Preamble

This Environmental Emergency Contingency Plan applies to all operations and spill events relating to sewage, solid waste and hydrocarbons (gasoline, oil, and lubricants) in the Hamlet of Rankin Inlet, Nunavut, related to the operation of the Water Supply Facility and Sewage Treatment Facility by Community and Government Services (CGS) of the Government of Nunavut (GN).

An Environmental Contingency Plan is a requirement of the NWB Water License.

The following formal distribution will be made after this document receives approval:

- Community and Government Services of the Government of Nunavut
- Hamlet of Rankin Inlet:
 - Mayor and Council
 - Senior Administrative Officer (SAO)
 - CGS-GN Operations Staff
 - Fire Department
 - Community Health Centre
 - RCMP Detachment
- Nunavut Water Board.

Additional copies and updates of this plan may be obtained by writing to:

Regional Projects Manager
Community and Government Services
Government of Nunavut
PO Bag 002
Rankin Inlet, Nunavut X0E 0G0

December 2008
Revised April 2010

1.0 Introduction

1.1 Purpose of Plan

The impacts of spills can be catastrophic and may threaten or damage the environment, especially water supplies. As such, when licensing facilities with the potential to impact the environment, the Nunavut Water Board (NWB) requires contingency plans be written and implemented. The purpose of this *Environmental Emergency Contingency Plan* is to provide a plan of action for all spills (sewage, solid waste, and petroleum products) that may occur as a result of the operation of the Water Supply Facility and Sewage Treatment Facility by CGS-GN on behalf of the Hamlet of Rankin Inlet.

Although this is not a Health and Safety Plan it recognizes the human health and safety is the first priority in all circumstances.

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 effectively and efficiently contain and recover spills of sewage, solid waste, and hydrocarbon products arising from activities related to the operation of the Water Supply Facility and Sewage Treatment Facility. It will assist CGS-GN in meeting the regulatory requirements related to reporting events to the appropriate authorities within the prescribed time period.

The Plan should be incorporated (if appropriate) into the Hamlet's Environmental Management System (EMS), should one be established by the Hamlet as suggested by the Nunavut Water Board.

1.2 Objectives

The objectives of this Emergency Contingency Plan are to:

- Dictate that the health and safety of workers and the general public are the first priority
- Provide a plan including procedures so that the CGS-GN, the Hamlet, 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

December 2008

Revised April 2010

- Be prepared and able to provide an integrated team approach with all involved departments and agencies
- Keep staff, government officials, and Hamlet residents informed.

1.3 CGS-GN Environmental Policy

It is the policy of the CGS-GN 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
- Nunavut Waters and Nunavut Surface Rights Tribunal Act.

The CGS-GN will cooperate with other groups committed to protecting the environment and shall ensure that Hamlet employees, regulatory authorities, and the public are informed on the policies and procedures developed to help protect the environment and the citizens of the Hamlet of Rankin Inlet.

December 2008
Revised April 2010

2.0 Site Description

2.1 Hamlet of Rankin Inlet

This *Environmental Emergency Contingency Plan* is to be implemented within the Municipal boundaries of the Hamlet of Rankin Inlet, Nunavut, and specifically to the Water Supply Facility and Sewage Treatment Facility operated by CGS-GN.

The Hamlet of Rankin Inlet is located on Rankin Inlet, on the west coast of Hudson Bay. It is 96-air km southwest of Chesterfield Inlet and 1088 air km east of Yellowknife, at 62° 49'N latitude and 92° 05' W longitude (Figure 1). The Hamlet has been growing substantially in the past 10 years. Economic activities now include government, commercial fishing, transportation/communications, carvings/handicrafts, trapping, hunting, and tourism. The community has a population of approximately 2,358 residents.

2.2 Water Supply, Treatment and Distribution, and Storage

In the Hamlet most of the buildings are serviced with water by the Utilidor system. Only a small area of the Hamlet is supplied by trucked water. The community draws its water from the Nipissar Lake, located 2 km northwest of the Hamlet. Water from the Nipissar Lake pumphouse is pumped to the community through a shallow buried insulated main, which operates year-round. The supply line passes through the Williamson Lake pumphouse where most of the water is chlorinated in the bottom of the water storage tanks adjacent to the pumphouse. The large tanks are used for storage of water in the case of a fire. A small portion of the water is heated in the Nipissar Lake heat exchanger in the Williamson Lake pumphouse and then pumped back through the return line. Most of the heated water arriving in the Nipissar pumphouse is injected back into the supply line. Some of the heated water is bled into the Nipissar Lake intake casings to prevent freezing of the intake lines. The heat for the distribution water is produced by two fuel oil fired boilers. The heated water circulates through the Town heat exchanger, which in turn heats water for injection into the distribution header.

Potential environmental emergencies include:

- Chlorine and/or fluorine spill
- Fuel spill from supply tanks for heaters, generators, and motors.

The water supply system is operated by Community and Government Services (CGS) of the Government of Nunavut (GN) on behalf of the Hamlet. Until November 2007 it operated under NWB License NWB3GRA0207.

*December 2008**Revised April 2010*

A chlorine or fluorine spill is regarded as a limited risk to the environment, as the Water Supply Facility has limited quantities of these materials, and they are disinfectants and easily diluted. Fuel spills are possible from storage tanks and the proximity to drinking water is a concern. Fortunately, fuel floats and would not immediately threaten an intake at depth. Rapid containment and clean-up would be a priority.

2.3 Sewage Collection and Treatment

Most of the Hamlet is connected to sanitary sewer services and similar to the water supply. A few homes are not on the system and require the use of an individual water and sewage services. Sewage is collected by vacuum truck, and transported to a Sewage Treatment Facility operated by the Government of Nunavut. All other sewage is directed to the Sewage Treatment Facility by sanitary sewers. At the Sewage Treatment Facility the sewage undergoes primary treatment before being discharged into the bay. Potential environmental emergencies include:

- House tank spill
- Tank truck spill
- Spill/discharge of untreated or partially treated sewage from the sewage system
- Fuel spill from supply tanks for heaters, generators, and motors.

The Sewage Treatment Facility is operated by the CGS-GN on behalf of the Hamlet.

A sewage spill to the ground surface or local run-off ditches/ponds leading to the ocean is not likely to be a significant environmental impact. It could be mitigated through dilution with copious amounts of water.

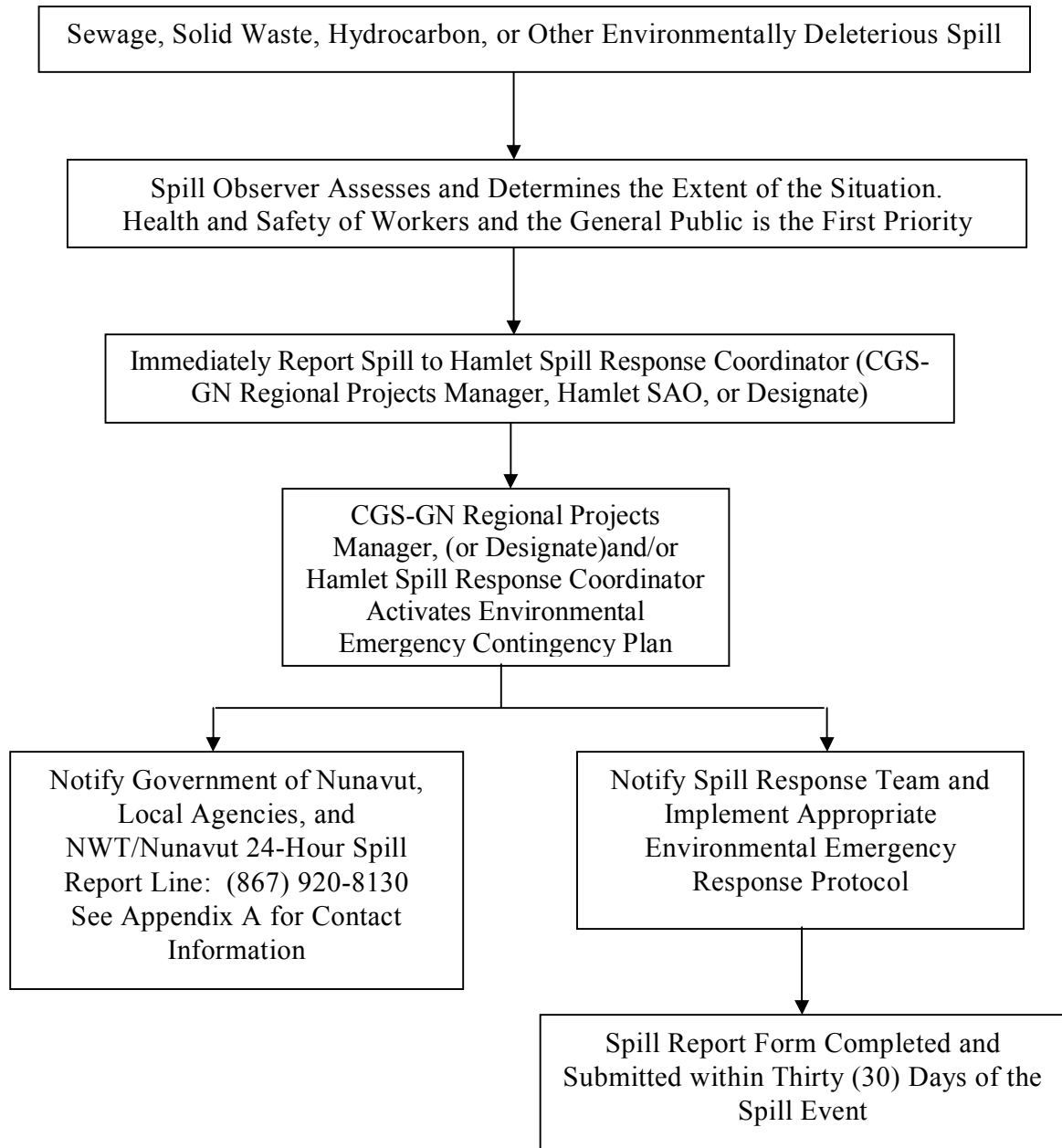
A fuel spill from a facility storage tank would be far from the water supply, but still require immediately containment and clean-up

December 2008

Revised April 2010

3.0 Spill Response Organization

The following is a flow chart to illustrate the sequence of events that must be followed in the event of a sewage, solid waste, or HC (hydrocarbon) spill occurring during supply, distribution, collection, transportation, storage, and treatment operations:



Emergency Response Flow Chart

December 2008**Revised April 2010**

3.1 Spill Response Team

The CGS-GN Regional Projects Manager and/or Hamlet Senior Administrative Officer (SAO) or his/her Designate will serve as the Spill Response Coordinator for the Hamlet in the event of a sewage or HC spill during collection, transportation, storage, or treatment operations. The CGS-GN and/or SAO of the Hamlet of Rankin Inlet will appoint and train appropriate personnel to make up the Spill Response Team, which normally consist of the following personnel:

- Spill Response Coordinator (CGS-GN Manager and/or Hamlet SAO or Designate)
- Hamlet Public Works Personnel.

The responsibilities of the Spill Response Coordinator are as follows:

1. Assume complete authority over the spill scene and coordinate all personnel involved
2. Control access, and ensure the health and safety of workers and the general public
3. Evaluate the spill situation and develop an overall plan of action
4. Activate the *Environmental Emergency Contingency Plan* for the Hamlet of Rankin Inlet
5. Immediately report the spill to the NWT/Nunavut 24-Hour Spill Report Line at (867) 920-8130, and other applicable regulatory or assistance agencies
6. Provide regulatory agencies with information regarding the status of the clean-up activities
7. Act as a spokesperson on behalf of the Hamlet of Rankin Inlet with regulatory agencies, the public, and the media
8. Prepare and submit a report on the spill incident to regulatory agencies within 30 days of the event
9. 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 Hamlet staff.

December 2008

Revised April 2010

3.2 Contact Information

A complete listing of contact information, including telephone numbers of standard regulatory agencies, Hamlet personnel, and assistance agencies who may be contacted to supply resources, expertise, and advice needed to deal with a spill emergency is included in Appendix A.

It is recognized that CGS-GN operates the Water Supply Facility and the Sewage Treatment facility on behalf of the Hamlet, however CGS has limited equipment and personnel in the Hamlet to address a large spill or contingency. In the case of an environmental emergency, it may require the combined efforts of CGS-GN and the Hamlet to address the issue. Structure (chain-of-command) of a cooperative agreement is required. In the case of this document, the Spill Response Coordinator would be the person so designated by an agreement between CGS-GN and the Hamlet, related to environmental emergency contingency derived from the Water Supply Facility or the Sewage Treatment Facility.

December 2008

Revised April 2010

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, radio, or in person.

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

1. Report spill immediately to the 24-Hour NWT/Nunavut Spill Report Line Phone (867) 920-8130
2. Report immediately to the INAC Manager, Water Resources in Iqaluit at (867) 975-4550
3. Notify Hamlet of Rankin Inlet Fire Department
4. Fill out the NWT/Nunavut Spill Report Form (Appendix B) within thirty (30) days of the spill event occurring.

Refer to Appendix A for contact information.

4.1 NWT/Nunavut 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.)
- Health and safety issues.

Environmental Emergency Contingency Plan
Hamlet of Rankin Inlet

December 2008

Revised April 2010

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 similar 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 B.

December 2008
Revised April 2010

5.0 Action Plans

5.1 Initial Action

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

1. Always be alert, and consider your safety and the safety of others first
2. If possible, estimate the volume of material that has been spilled
3. Assess the hazard of people in the vicinity of the spill
4. If possible, and safety permits, attempt to stop the release of product to minimize potential for environmental impacts
5. Immediately report the spill to the Spill Response Coordinator
6. 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 Hamlet:

- 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

December 2008**Revised April 2010**

- For fuel spills on water, deploy containment booms, and recovery as much fuel as possible with a work boat and skimmer if less than 1/10th 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 clean-up options
- Conduct required clean-up operations
- Assess and appropriately treat any areas disturbed by clean-up activities with laboratory testing
- 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
- 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.

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.

December 2008
Revised April 2010

Environment Canada policy is that any spill located on ice or into water is immediately reported to the 24 hour spill line.

Environment Canada policy is to be consulted regarding clean-up methods.

5.3.4 Hydrocarbon Contaminated Material Storage and Transfer

Soil and gravel contaminated by hydrocarbons should be treated at the on-site landfarm in accordance with normal operating procedures. If necessary, contaminated soil and gravel may be stored temporarily until space becomes available in the landfarm, provided that appropriate measures are taken to prevent the leaching of contaminants into the underlying soil. Larger quantities of soil could be placed on a tarp, and covered if necessary. Small quantities could be stored in labelled drums in the hazardous waste storage area.

As space permits, small quantities of water, ice, snow, vegetation and cleanup supplies contaminated by HC may be stored in labelled 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 Hamlet shall contact the appropriate regulatory agencies before removing any materials.

5.4 Mitigative Measures: Sewage

These plans relate to any sewage spills from home tanks, trucks, utilidor, and the sewage treatment plant.

If possible, and safety permits, stop the flow of sewage escaping to the environment.

A small spill (truck lead or household tank) is not a significant environmental issue, site control contaminant and clean up can be accomplished without significant concerns. Dilution with water is an effective remedy for any residual.

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
- 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 Hamlet sewage treatment facility

*December 2008**Revised April 2010*

- As a minimum, monitor the affected water body by sampling for Biological Oxygen Demand (BOD), Total Suspended Solids (TSS), ammonia (NH₃), and faecal coliforms (FC).

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 to the Hamlet sewage treatment facility.

5.4.4 Sewage Storage and Transfer

All contaminated water, ice, snow, soil, and clean-up supplies will be deposited to the Hamlet sewage treatment facility (liquid or frozen liquid) or landfill facility (solid), as appropriate.

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 approved Hamlet 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 approved Hamlet Solid Waste Management Facility
- Capture any sheen from the water using absorbent pads or skimmer, and deposit any used absorbent pads to the approved Hamlet Solid Waste Disposal facility.

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 approved Hamlet Solid Waste Management Facility.

5.5.4 Disposal

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

5.6 Mitigative Measures: Hazardous Materials

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

- Physically remove the spilled solid waste from the area, and deposit in the Hamlet Solid Waste Management Facility, Hazardous Waste Storage Area.

*December 2008**Revised April 2010***5.6.2 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 Hamlet Solid Waste Management Facility, Hazardous Waste Storage Area
- Capture any sheen from the water using absorbent pads or skimmer, and deposit any used absorbent pads to the Hamlet Solid Waste Disposal facility, Hazardous Waste Storage Area.

5.6.3 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 Hamlet Solid Waste Management Facility, Hazardous Waste Storage Area.

5.6.4 Disposal

Any solid waste shall be transferred to the Hamlet Solid Waste Management Facility, Hazardous Waste Storage Area.

5.7 Spill Recovery Assessment

In order 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 Hamlet of Rankin Inlet 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 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 to Nunavut Guidelines for Industrial Waste Discharges or General Management of Hazardous Waste.

Environmental Emergency Contingency Plan
Hamlet of Rankin Inlet

December 2008

Revised April 2010

Refer to the Monitoring Program and Quality Assurance/Quality Control Plan, Hamlet of Rankin Inlet, 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 Hamlet of Rankin Inlet:

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

*December 2008**Revised April 2010*

6.0 Spill Response Resource Inventory

6.1 Additional Personnel Available

In addition to Hamlet staff, the Rankin Inlet 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 (see contact list in Appendix A).

6.2 Spill Response Equipment Inventory

Within the community, there is equipment available to assist in responding to a hazardous materials spill including heavy equipment (i.e. vacuum trucks, dozer, front end loader, and grader), as well as, various hand held tools including shovels. In addition, three spill kits should be available on site during spill incident response operations. Each spill kit should contain the following supplies.

Composition of Spill Kit

	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
• 1 lb 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.

6.3 Spill Kit Storage Locations

Currently, CGS-GN the operator of the Water Treatment Facility and Sewage Treatment Facility, has limited spill equipment in each facility. The Water Treatment Facility

Environmental Emergency Contingency Plan
Hamlet of Rankin Inlet

December 2008

Revised April 2010

contains chlorine (gas) and fluorine (liquid) for water treatment. Spill response would involve containment and clean-up of liquids, and large scale dilution with water of any residual that escaped into the environment.

The Sewage Treatment Facility primary spill concern is raw sewage, which would require containment and liquid recovery, and large scale water dilution to mitigate the impacts of any residual.

One spill kit should be located in each facility building.

December 2008
Revised April 2010

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 and hazardous material spills. All employees on site 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
- Occupational health and safety including proper selection and use of protective equipment.

Environmental Emergency Contingency Plan
Hamlet of Rankin Inlet

December 2008

Revised April 2010

8.0 Annual Review of this Environmental Emergency Contingency Plan

As part of the preparation of the Annual Report to the Nunavut Water Board for the Water License, the Hamlet 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 Hamlet 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.

Environmental Emergency Contingency Plan
Hamlet of Rankin Inlet

December 2008
Revised April 2010

9.0 References

Canadian Council of Ministers of the Environment (CCME), 2007. *Canadian soil quality guidelines for the protection of environmental and human health: Summary tables*. Updated September, 2007. In: Canadian environmental quality guidelines, 1999, Canadian Council of the Environment, Winnipeg.

Canadian Council of Ministers of the Environment (CCME), 2007. *Canadian Water Quality Guidelines for the Protection of Aquatic Life: Summary table*. Updated September, 2007. In: Canadian environmental quality guidelines, 1999, Canadian Council of the Environment, Winnipeg.

Government of Nunavut, (2002), *Environmental Guideline for Industrial Waste Discharges*.

Government of Nunavut, (2002), *Environmental Guideline of General Management of Hazardous Waste*.

Northwest Territories, (1998). *Spill Contingency Planning and Reporting Regulations*.

Nuna Burnside Engineering and Environmental Ltd. (2008). *Solid Waste Management Facility Operations and Maintenance (O&M), Hamlet of Rankin Inlet*.

Nuna Burnside Engineering and Environmental Ltd. (2008, revised April 2010). *Water Supply Facility Operations and Maintenance (O&M), Hamlet of Rankin Inlet*.

Nuna Burnside Engineering and Environmental Ltd. (2008, revised April 2010). *Sewage Treatment Facility Operations and Maintenance (O&M), Hamlet of Rankin Inlet*.

Nuna Burnside Engineering and Environmental Ltd. (2008, revised April 2010). *Environmental Monitoring Program and Quality Assurance/Quality Control Plan, Hamlet of Rankin Inlet*.

Nunavut Water Board, November 2004. *Guidelines for Spill Contingency Planning*. Gjoa Haven, Nunavut.

Nunavut Water Board, December 2002. *Hamlet of Rankin Inlet Water Licence NWB3GRA0207*. Gjoa Haven, Nunavut.

Nunavut Safety Act.



Figures



Map Reference:
Map Art Publishing

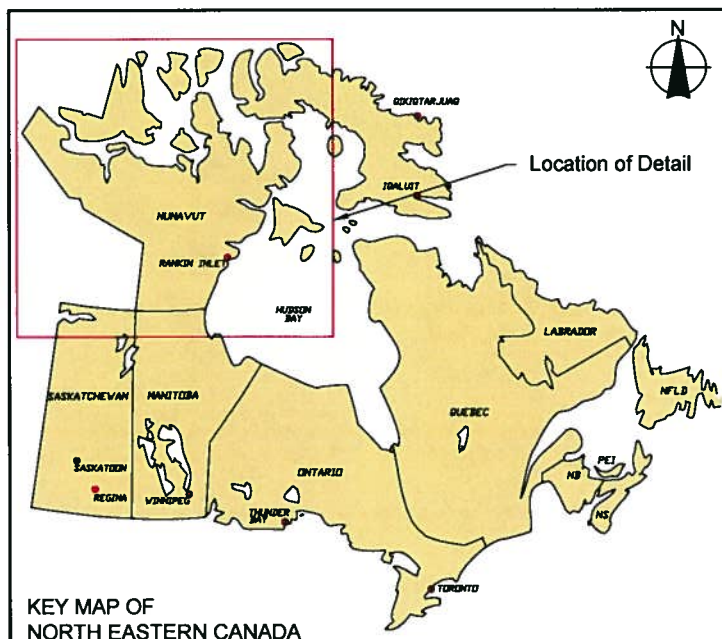


FIGURE 1 - SITE LOCATION MAP

GOVERNMENT OF NUNAVUT HAMLET OF RANKIN INLET, NUNAVUT

ENVIRONMENTAL EMERGENCY CONTINGENCY PLAN

December 2008

Project Number: N-014850

Prepared by: C. Sheppard

Verified by: J. Walls

ᑎᓄᓐᓂᓐ **BURNSIDE**

N-014850 ENVIRONMENTAL EMERGENCY - GOVERNMENT SL.dwg



FIGURE 2

GOVERNMENT OF NUNAVUT
HAMLET OF RANKIN INLET, NUNAVUT
ENVIRONMENTAL EMERGENCY CONTINGENCY PLAN

COMMUNITY PLAN

Satellite Image Source:
Background 2006 satellite image covering the immediate community area obtained from MDA Geospatial Services.
Background colour satellite image covering the area beyond the immediate community obtained from the Google Earth Pro website.



1:30,000
August 2008
Project Number: N-014850
Prepared by: C. Sheppard

Projection: UTM Zone 15
Datum: NAD83
Verified by: J. Walls





Appendix A
Contact Information

Appendix A

Contact Information

Contact	Location	Telephone Number	Fax Number	Email
Hamlet of Rankin Inlet SAO	Rankin Inlet	(867) 645-2895	(867) 645-2146	
24-Hour NWT/Nunavut Spill Report Line	Yellowknife	(867) 920-8130	(867) 873-6924	
INAC–Water/Wastewater Resources Manager	Iqaluit	(867) 975-4550	(867) 979-6445	
Government of Nunavut - Regional Engineers/Managers <i>Bryon Purdy</i> <i>Wayne Thistle</i>	Rankin Inlet	(867) 645-8159	(867) 645-8196	
Environment Canada - Inspector	Iqaluit	(867) 975-4644	(867) 979-4594	
Fire Department	Rankin Inlet	(867) 645-2525	-	
RCMP Detachment	Rankin Inlet	(867) 645-1111	(867) 645-2568	
Community Health Centre	Rankin Inlet	(867) 645-8300	(867) 645-8324	
Government of Nunavut Department of Environment Manager of Pollution Control <i>Ian Rumbolt</i>	Rankin Inlet	(867) 975-7748	(867) 975-6445	irumbolt@gov.nu.ca
INAC Manager of Field Operations <i>Peter Kusugak</i>	Rankin Inlet	(867) 975-4295		



Appendix B
NWT Spill Report

A Report Date and Time ፳፻፲፱ ዓ.ም. ጥቅምት ፳፱ ቀን		B Date and Time of Spill(if known) ፳፻፲፱ ዓ.ም. ጥቅምት ፳፱ ቀን		C ☐ Original Report ፳፻፲፱ ዓ.ም. ጥቅምት ፳፱ ቀን ☐ Update No. _____		Spill Number ፳፻፲፱	
D Location and Map Coordinates (if known) and Direction (if moving) ሰሜን ምዕራብ (፳፻፲፱ ዓ.ም. ጥቅምት ፳፱ ቀን)							
E Party Responsible for Spill (Full Name and Address) የ፳፻፲፱ ዓ.ም. ጥቅምት ፳፱ ቀን							
F Product(s) Spilled and Estimated Quantities(provide metric volumes/weights if possible) የ፳፻፲፱ ዓ.ም. ጥቅምት ፳፱ ቀን							
G Cause of Spill የ፳፻፲፱ ዓ.ም. ጥቅምት ፳፱ ቀን							
H Is Spill Terminated? ፳፻፲፱ ዓ.ም. ጥቅምት ፳፱ ቀን		I If Spill is Continuing, Give Estimated Rate የ፳፻፲፱ ዓ.ም. ጥቅምት ፳፱ ቀን		J Is Further Spillage Possible? ፳፻፲፱ ዓ.ም. ጥቅምት ፳፱ ቀን		K Extent of Contaminated Area (in square metres if possible) የ፳፻፲፱ ዓ.ም. ጥቅምት ፳፱ ቀን	
☐ Yes/Δ ☐ No/ቁ		☐ Yes/Δ ☐ No/ቁ		☐ Yes/Δ ☐ No/ቁ		☐ Yes/Δ ☐ No/ቁ	
L Factors Affecting Spill or Recovery(weather conditions, terrain, snow cover, etc.) የ፳፻፲፱ ዓ.ም. ጥቅምት ፳፱ ቀን				M Containment (natural depression, dykes, etc.) የ፳፻፲፱ ዓ.ም. ጥቅምት ፳፱ ቀን			
N Action, if any, taken or Proposed to Contain, Recover, Clean Up or Dispose of Product(s) and Contaminated Materials የ፳፻፲፱ ዓ.ም. ጥቅምት ፳፱ ቀን							
O Do You Require Assistance? ፳፻፲፱ ዓ.ም. ጥቅምት ፳፱ ቀን				P Possible Hazards to Persons, Property or Environment e.g. fire, drinking water, fish or wildlife የ፳፻፲፱ ዓ.ም. ጥቅምት ፳፱ ቀን			
Q Comments and/or Recommendations የ፳፻፲፱ ዓ.ም. ጥቅምት ፳፱ ቀን							
FOR SPILL LINE USE ONLY Lead Agency ፳፻፲፱ ዓ.ም. ጥቅምት ፳፱ ቀን Spill Significance ፳፻፲፱ ዓ.ም. ጥቅምት ፳፱ ቀን Lead Agency Contact and Time ፳፻፲፱ ዓ.ም. ጥቅምት ፳፱ ቀን Is this file now closed? ፳፻፲፱ ዓ.ም. ጥቅምት ፳፱ ቀን							
Reported By ፳፻፲፱ ዓ.ም. ጥቅምት ፳፱ ቀን		Position, Employer, Location ፳፻፲፱ ዓ.ም. ጥቅምት ፳፱ ቀን		Telephone ፳፻፲፱ ዓ.ም. ጥቅምት ፳፱ ቀን			
Reported To ፳፻፲፱ ዓ.ም. ጥቅምት ፳፱ ቀን		Position, Employer, Location ፳፻፲፱ ዓ.ም. ጥቅምት ፳፱ ቀን		Telephone ፳፻፲፱ ዓ.ም. ጥቅምት ፳፱ ቀን			