STANDALONE SPILL CONTINGENCY PLAN

Hamlet of Cape Dorset

April 2019

HAMLET OF CAPE DORSET
BAFFIN REGION
GOVERNMENT OF NUNAVUT

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Spill Contingency Plan

1.0 Purpose and Scope

The purpose of this plan is to outline response actions for potential spills of any size, including a worst case scenario within the boundary for the Hamlet of Cape Dorset in Baffin Region, Nunavut. The plan identifies key response personnel and their roles and responsibilities in the event of a spill, as well as the equipment and other

resources available to clean up a spill. It details spill response procedures that will minimize potential health and safety hazards, environmental damage and clean-up efforts. The plan has been prepared to ensure quick access to all the information required in responding to a spill.

2.0 Community Environmental Policy

The Hamlet of Cape Dorset has no formal Environmental policy; however, the Hamlet of Cape Dorset is committed to operating in an environmentally sensitive manner, and complying with requirements of the Nunavut Water Board.

With respect to spills, the Guidelines for Spill Contingency Planning[1] and Environmental Protection Act (R-068-93) require that all spill response plans include:

- The name, address and job title of the owner or person in charge, management or control of the facility;
- The name, job title and 24-hour telephone number for the person(s) responsible for activating the spill response plan;
- A description of the facility, a description of the type and amount of contaminants normally stored at the facility and a site map of the facility;
- The steps to be taken to report, contain, clean up and dispose of contaminants in the case of a spill;
- The means by which the spill response plan is activated;
- A description of the training provided to employees to respond to a spill;
- An inventory of and the location of response and clean-up equipment available to implement the spill response plan; and,
- The date the spill response plan was prepared.

Note: Prepared by Ex. Water Resources Division Indian and Northern Affairs Canada Yellowknife, NT April 2007

3.0 Contacts & Regulatory Authorities

The following table includes the contact information for the persons responsible for the facility. The persons listed below should be contacted in the event of a spill.

Table 1: Contacts

Name	Job Title	24-Hour Telephone #
John Hussy	Senior Administrative officer Hamlet of Cape Dorset	Ph. 867 897 8943
Steven Pootoogook	Director of Public works Hamlet of Cape Dorset	Ph. 867 897 8004
Bhabesh Roy, P.Eng.	Regional Municipal Engineer	Ph. 867 899 7314

In each instance that a spill is identified, the Emergency Spill Hotline and the Crown – Indigenous Relations and Northern Affairs Canada (CIRNAC) Water Resources Inspector shall be contacted as soon as possible. A NT-NU Spill Report Form (included) should also be completed and faxed to the Emergency Spill Hotline. The necessity to contact the other agencies will be contingent upon direction from the Emergency Spill Hotline.

- ***Emergency Spill Hotline: Phone: (867) 920-8130, Fax (867) 873-6924***
- ***Crown-Indigenous Relations and Northern Development of Canada Water Resources Inspector: Phone: (867) 975-4289.***

In addition to the local contacts described above, the following table summarizes the additional regulatory authorities that have a vested interest in the event of a spill.

Table 2: Additional Agencies

Agency	Legislation	Contact Phone #
Nunavut Water Board	**Nunavut Waters and Surface Right**	**(867) 360-6338**
Nunavut Impact Review Board	**Nunavut Land Claims Agreement Act**	**(867) 983-2593**
Environment Canada	**Canadian Environmental**	**(867) 975-4464**
Transport Canada (Coast Guard)	**Transportation of Dangerous Goods**	**(867) 979-5269**
Department of Fisheries and Oceans	**Fisheries Act**	**(867) 645-2871**

4.0 Project Description

The Hamlet of Cape Dorset is located on Dorset Island, near the southwest tip of Baffin Island at 64° 14' North latitude and 76°32' West longitude. situated in the Qikiqtaluk Region of Nunavut, the Community is approximately 402 air km southwest of the city of Iqaluit (see Figure 1 in page 2).

Located in the continuous permafrost zone, Cape Dorset has a climate which consists of short cool summers and long cold winters. Annual snowfall and rainfall are approximately 118 cm and 15 cm, respectively. The typical temperature range for January is between a low of about -29°C and a high of about -23°C whereas in July, the temperatures range between a low of 3°C to a high of about 7°C. Usually, freeze up occurs during the month of November but it may happen as early as October or even September. In some years, early freeze up may thaw again before final freeze up occurs. Spring thaw typically takes place during the month of July, but the time frame can vary as much as freeze up. During spring runoff, the community experiences mild flooding.

The community is situated between two valleys of the Kingnait range of hills. Topography consists of areas of moss surrounded by rock outcrops, bedrock and steep cliffs.

The community uses trucked services for both water delivery and sewage collection. Wastewater is treated using a constructed retention cell treatment system that is located approximately 800 m southwest from the center of the community.

Population Projection

Presently, the population of Cape Dorset is approximately 1,473 people (Based on 2009 GN estimates). Table 1 shows the population growth for the Hamlet over the lifetime of the new plant projected by Nunavut Bureau of Statistics.

Table 3: Population Projections for Cape Dorset

Year	2000	2006	2011	2016	2021	2026
Populatio	1,213	1,382	1,536	1,692	1,848	2,002

Source: Nunavut Bureau of Statistics.

Sewage Production

It is approximated, for smaller communities such as Cape Dorset where water distribution is provided by trucks, that the sewage generation is equal to the water consumption. Therefore, the daily and annual sewage generation rates are approximately equivalent to the water consumption rates. The following equation, proposed by MACA, gives the water consumption rate for small communities on trucked services that have a population less than 2,000 people.

$$\textit{Water Use (L/capita/day)} = 90\ \textit{L/capita/day} \times (1.0 + 0.00023 \times \textit{Population})$$

Using the estimated population projections shown in Table 1, the projected sewage generation is shown in Table 2 below. The new P- lagoon was constructed to hold the annual generation rate of 96,100 m^3 of wastewater but never Use. Hamlet has no intention to use in future. This facility is recommended to be decommissioned. Until the new facility is commissioned, the entire sewage will be continued to dump into these three cells lagoons.

Table 4: Projected Sewage Generation

Year	Population	Sewage Generation Rate	Annual Generation
2000	1,213	115.11	50,964
2006	1,382	118.61	59,829
2011	1,536	121.80	68,283
2016	1,692	125.02	77,213
2021	1,848	128.26	86,530
2026	2,002	131.44	96,047

Waste Production:

The average waste generation rate is considered is 0.015m3/person / day and for population of 1572 in 2019, total 8606.70 cubic meters waste is expected, which is equivalent to uncompacted volume for 8,52,062.30 kg (considering uncompacted).

Water Licence: The Environmental Facilities of the Community like Wastewater Treatment by sewage Lagoon, Waste Management sites (Landfill and Metal wastes) and Water supply system are Licensed # 3 BM-CAP 0810 by the Nunavut Water Board. Both Sewage lagoon and waste sites are non-engineered facilities. Hamlet is expecting a new Mechanical Wastewater Treatment Plant in next 3 to 4 yrs.

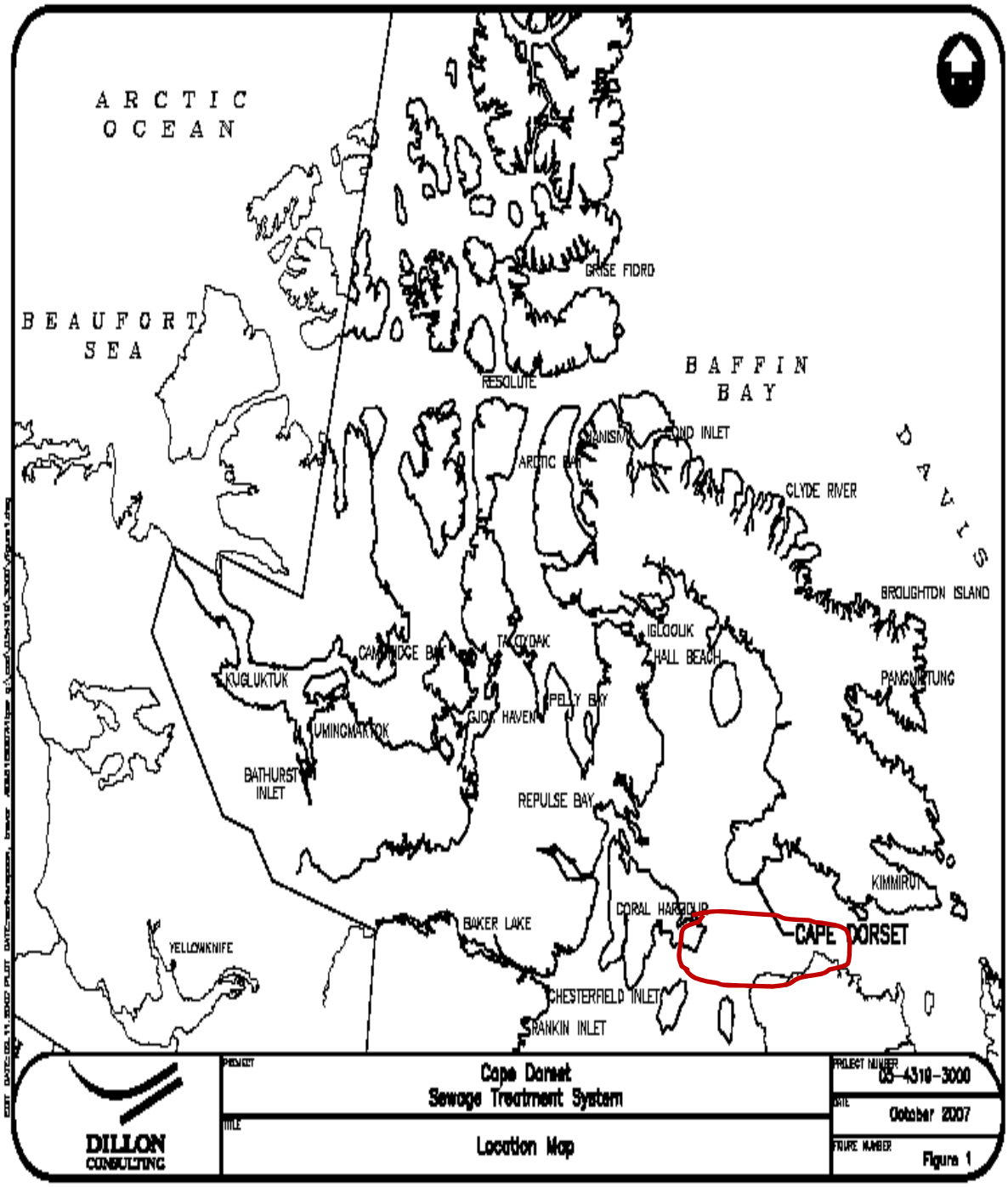
ARCTIC OCEAN
BEAUFORT SEA
BAFFIN BAY
GRISE FIORD
RESOLUTE
ARCTIC BAY
CLYDE RIVER
BROUGHTON ISLAND
IGLOOLIK
HALL BEACH
TAKYOAK
CAMBRIDGE BAY
KUGLUKTUK
PELLY BAY
GJOA HAVEN
UMINGMAKTOK
BATHURST INLET
REPULSE BAY
PANGNIRTUNG
KIMMIRUT
CORAL HARBOUR
CAPE DORSET
BAKER LAKE
YELLOWKNIFE
CHESTERFIELD INLET
RANKIN INLET
DILLON CONSULTING
PROJECT
Cape Dorset
Sewage Treatment System
TITLE
Location Map
PROJECT NUMBER
05-4319-3000
DATE
October 2007
FIGURE NUMBER
Figure 1

Fig: -1

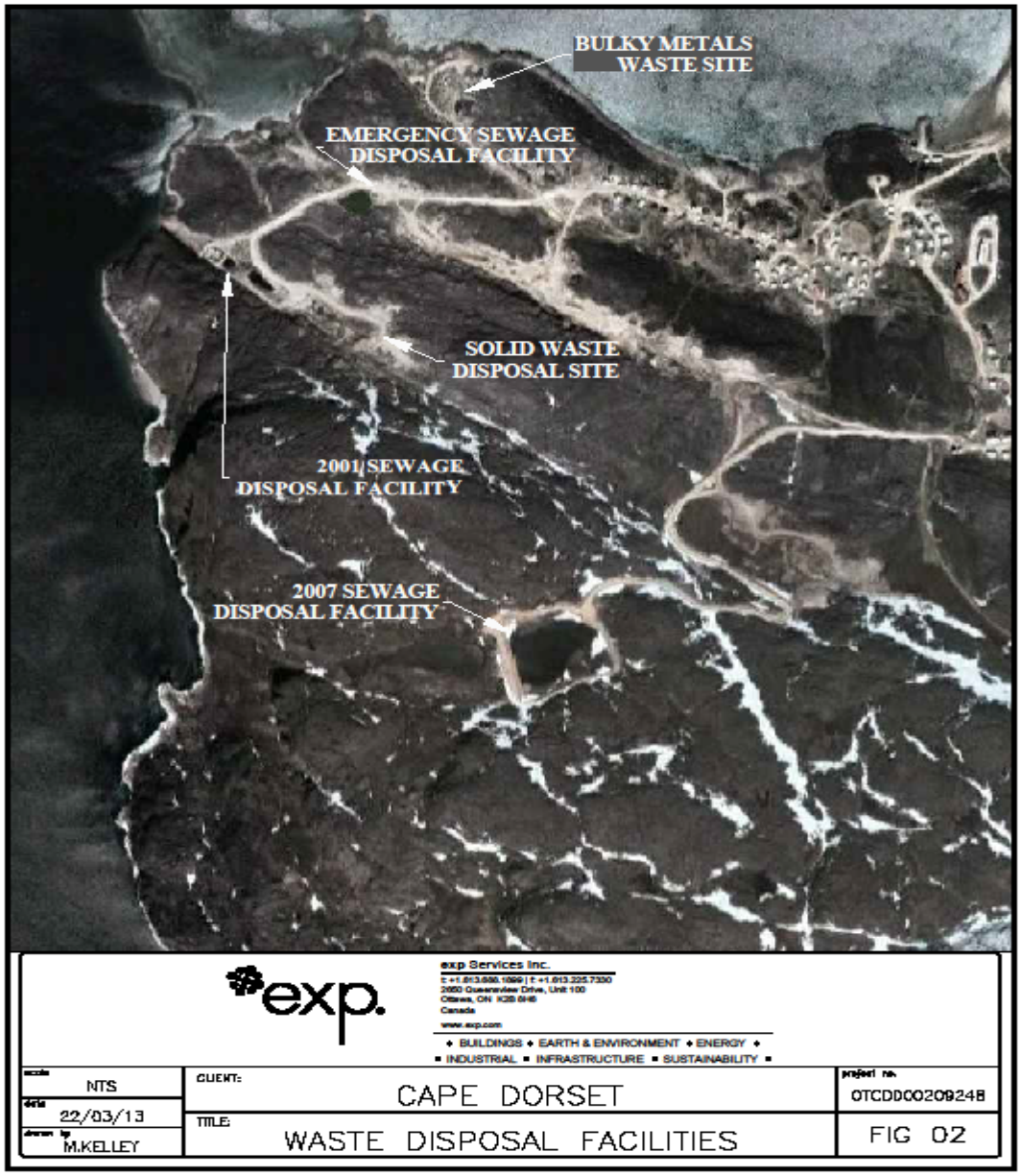
BULKY METALS
WASTE SITE
EMERGENCY SEWAGE
DISPOSAL FACILITY
SOLID WASTE
DISPOSAL SITE
2001 SEWAGE
DISPOSAL FACILITY
2007 SEWAGE
DISPOSAL FACILITY
exp
exp Services Inc.
2650 Queensview Drive, Unit 100
Ottawa, ON K2B 8H6
Canada
www.exp.com
BUILDINGS EARTH & ENVIRONMENT ENERGY
INDUSTRIAL INFRASTRUCTURE SUSTAINABILITY
scale
NTS
date
22/03/13
drawn by
M.KELLEY
CLIENT:
CAPE DORSET
TITLE:
WASTE DISPOSAL FACILITIES
project no.
OTCDDO0209248
FIG 02

Fig.-2

5.0 Personnel training

The Hamlet of Cape Dorset personnel that are taking responsibility for the Waste disposal are required to be trained in Workplace Hazardous Materials Information System (WHMIS), Transportation of Dangerous Goods Act and Regulation (TDGA and TDGR) as well as First Aid. In addition, personnel should ensure that proper vaccinations of employees are kept current and that they are familiar with the response plan. It is good practice to obtain copies of a list of procedures and equipment that are to be used for such emergencies in all sewage trucks and the common work area.

In all response cases, personnel should place their own safety as the highest priority. The procedures that should be taken in the likelihood of a potential fire or spill are described in the following sections.

6.0 Potential Contaminants and Spill Scenarios

Potential spill scenarios are dependent on the types and volumes of materials that are being used on the sites and the activities being carried out. For the purpose of this SRP, spill sizes are described as small (<10 litres), medium (>10 litres and <100 litres) or large (>100 litres).

The primary potential contaminants at the wastewater treatment site include raw sewage and sewage sludge. Other materials (potential contaminants) that are anticipated to be present on the site include gasoline, diesel fuel, hydraulic oil, motor oil and other lubricants, antifreeze and coolants from sewage delivery trucks and any heavy equipment in use for maintenance purposes. Spills may be the result of any of the following occurrences:

- Leaks or breaches of the sewage lagoon berms;
- Spill during transfer of liquids (sewage);
- Leaks or ruptures of vehicular fuel or hydraulic oil storage tanks;
- Valve or line failure in systems on vehicles or operating equipment;
- Heat expansion due to overfilling;
- Vehicular accidents; and/or,
- Vandalism.

7.0 Reportable Spill Quantities

In the event of a spill, the following table is to be used as a guide to determine if the spill should be reported to the proper authorities. Any spilled quantities that exceed the specified amounts must be reported to the Emergency Spills Hotline. Spills of any quantity that occur near or into fish-bearing waters or sensitive environment, wildlife or habitat must be reported. In addition, spills of any quantity that pose an imminent threat to human health or life or listed species at risk or critical habitat must also be reported. It is recommended that any spill of significant size be reported and the advice received should be followed.

Table 5: Reportable Quantities

Item	TDGA[2] Class	Contaminant	Amount Spilled
1	2	Explosives	Any amount
2	2.1	Compressed Gas (flammable)	Any amount of gas from containers with capacity greater than 100 kg
3	2.2	Compressed Gas (non-corrosive, non-flammable)	Any amount of gas from containers with capacity greater than 100 kg
4	2.3	Compressed Gas (toxic)	Any amount
5	2.4	Compressed Gas (corrosive)	Any amount
6	3.1, 3.2, 3.3	Flammable Liquid	100 L
7	4.1	Flammable Solid	25 kg
8	4.2	Spontaneously Combustible Solids	25 kg
9	4.3	Water Reactant Solids	25 kg
10	5.1	Oxidizing Substances	50 L or 50 kg
11	5.2	Organic Peroxides	1 L or 1 kg
12	6.1	Poisonous Substances	5 L or 5 kg
13	6.2	Infectious Substances	Any amount
14	7	Radioactive	Any amount
15	8	Corrosive Substances	5 L or 5 kg
16	9.1(in part)	Misc. products or Substances Excluding PCB Mixtures	50 L or 50 kg
17	9.2	Environmentally Hazardous	1 L or 1 kg
18	9.3	Dangerous Wastes	5 L or 5 kg
19	9.1 (in part)	PCB Mixtures of 5 or More Parts Per Million	0.5 L or 0.5 kg
20	None	Other Contaminants	100 L or 100 kg

Notes:

[1] *Environmental Protection Act*, Consolidation of Spill Contingency Planning and Reporting Regulations
[2] TDGA Class – Transportation of Dangerous Goods Class under the *Transportation of Dangerous Goods Act*.

8.0 Spill Contingency

A spill contingency plan has been developed by the Hamlet of Cape Dorset that identifies the procedures to follow when a spill of any hazardous material has occurred. Similar procedures can be used for the case of sewage spills as well.

Below, in the subsequent sections, the measures that are to be implemented if a spill or uncontrolled release of a substance occurs during the collection and transportation of wastes are described for the following areas:

- Initial Response
- Containment Procedures
- Spot Spills
- Spills in Proximity to a Water body

8.1 Initial Response

If a spill occurs, the first person at the scene will:

1. Perform an initial assessment to identity immediate danger.
2. Identify the material spilled and verify the nature of the hazard by corresponding to the Material Safety Data Sheets (MSDS) so to apply appropriate safety procedures.
3. If possible and safe to do so, cut off and/or stop the source of the spill.
4. Control danger to the human life without further assistance, if possible. If, for instance, the spill creates a fire, explosion or other hazard, remove all potential ignition sources.
5. Obtain immediately assistance from others and start to contain and/or clean up the spill.
6. Contact the SAO of the Resolute Bay Hamlet to notify them of the spill as they will contact relevant regulators and community residents of the occurrence.
7. Mark off the spill site as to warn the public of the incident and to prevent access.

Once the Hamlet of Resolute Bay staffs have been contacted and have arrived on site, he/she will immediately ensure that:

1. Necessary arrangements for first aid and removal of injured personnel have been made. Where possible, necessary action will be taken to secure the site to protect human safety.
2. If not already done and is safe to do so, take the appropriate action to stop the flow or release of material/substance as well as to contain or prevent the spread of the spilled material if at all possible.
3. Contact the 24 Hour Spill Line at (867) 920-8130 to report spill and obtain additional assistance.

4. Contact the SAO of Cape Dorset Hamlet; Ph.: 867 -897-8943
5. If required, notify the Fire Department at (867) -897-3333 and RCMP Detachment at (867) - 897-1111.

8.2 Containment Procedures

Response personnel will immediately start to contain the spill to ensure that the spill does not spread and contaminant other areas and/or environment. The following actions might also be taken if relevant to the spill situation:

1. If the source of the spill is coming from a leaking fuel truck, then pump fuel into a suitable container or another tank until the tank is dry.
2. Culverts that have been potentially affected by the spill should be blocked off to minimize travel of the substance.
3. Dig a basin or construct a berm to stop and contain the pathway and flow of the spill.
4. Apply absorbent materials to contain and recover small volumes of spilled substance.
5. Spilled substance and/or material are to be collected and transported to an approved waste disposal facility in the appropriate matter.

8.3 Spot Spills

Spot spills are those that involve a small volume of substance in a controlled material over a small, contained surface area. For spot spills involving hazardous materials, the following steps may be taken by personnel:

- At least one spill kit will be kept at the 3 cell lagoon site during maintaining works take place.
- Immediately take action to clean up spill by implementing proper or suitable handling and containment procedures for the material spilled.
- Report spill to the SAO of Cape Dorset Hamlet
- Determine suitable methods for removal of contaminated soils and restoring site of the spill. Consult environmental and government agencies for assistance.
- Flag and record locations and information of spot spills for future reference and monitoring.
- In the case of a spot sewage spill, place lime over the sewage, collect and transport the material to the solid waste facility for proper disposal.

8.4 Spills in Proximity to a Water body

If a spill occurs in close proximity to a water body, take necessary actions to prevent the spill entering the nearby water body. Similar containment procedures discussed above in Section 10.2.5.2 can be used to assist with the likelihood of spills located near water bodies.

8.5 Existing Preventative Measures

The community is concerned about the environment and the possibility of a spill occurring and takes precautions when working with hazardous materials; however, no formal preventative measures are in place.

8.6 Additional Copies

Several copies of this plan will be kept in the Hamlet Office.

8.7 Process for Staff Response to Media and Public Inquires

All media enquiries are directed to the SAO of the Hamlet of Cape Dorset

9 RESPONSE ORGANIZATION

9.1 Response Personnel

The following table lists the personnel who will be involved in the spill response. Contact information is also provided.

Table 6. Response Personnel Contact Information

Name	Contact Information
John Hussey, Senior Administrative officer (SAO)	Ph-867-897-8943; Fax-867 897 8030 muncdsao@capedorset.ca
Bhabesh Roy; Regional Municipal Planning Engineer	Ph.- 867-899-7314;Fax -867-899-7328 e-mail: broy@gov.nu.ca

9.2 Flowchart of Response Organization and Communication Lines

The following flowchart outlines the chain of communication to be followed, upon discovery of a spill or release by an employee of the community.

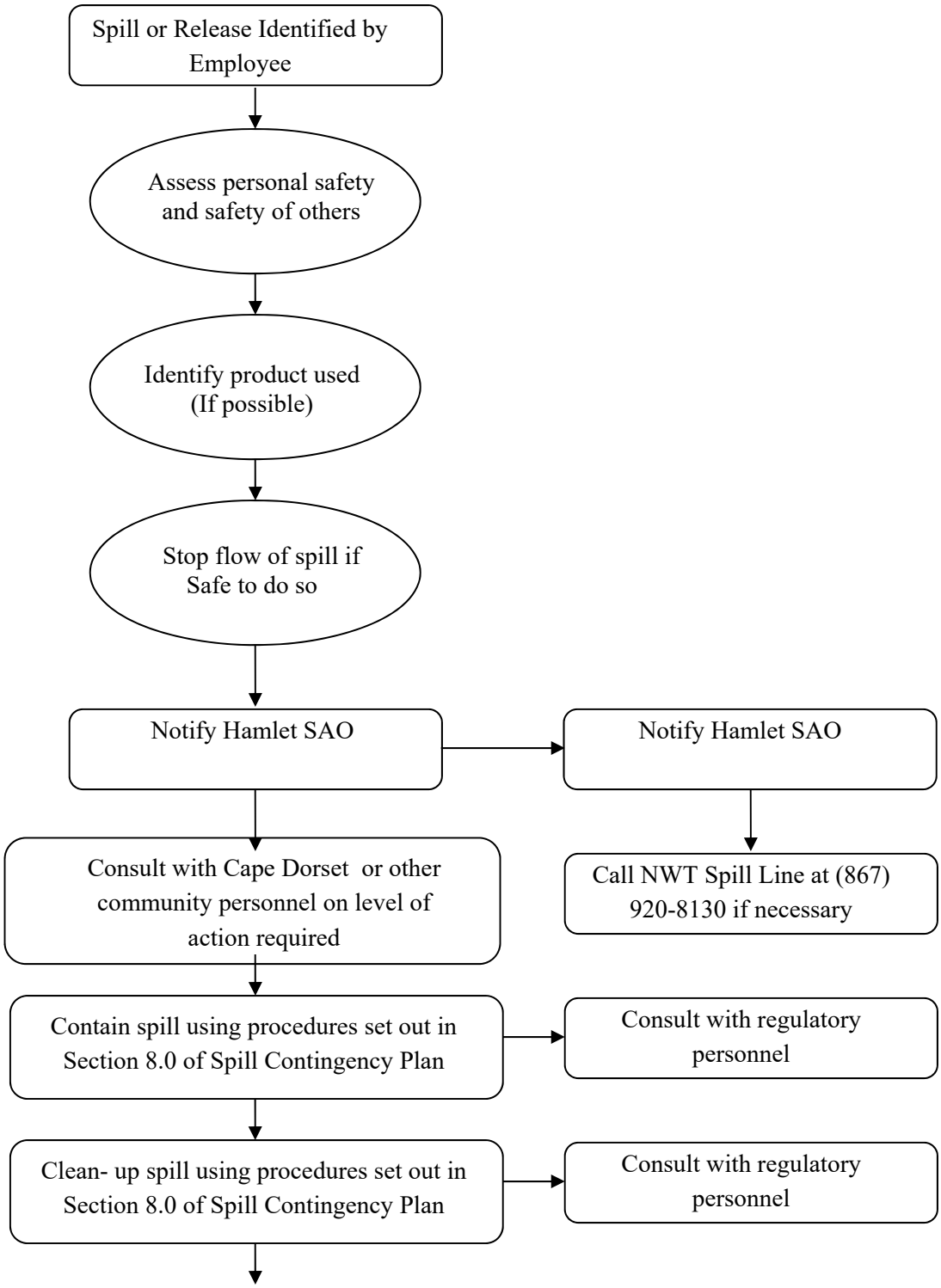

Figure 3: Flowchart of Spill Communication Lines

9.3 Summary of Available Communication Equipment

The following equipment is available in the community for communication purposes:

- Telephone with land line
- Computers with internet connection in ape Dorset Hamlet Office
- Fax machine

10 ACTION PLAN

10.1 Potential Environmental Impacts of Spill

Generally, for the hazardous materials discussed below, environmental impacts are lower during the winter, as snow is a natural sorbent and ice forms a barrier lining for eliminating soil or water contamination. Spills can be more readily recovered when identified and reported.

Gasoline:

Environmental Impacts:

- Harmful to wildlife and aquatic life
- Not readily biodegradable
- Has potential to bio accumulate in environment
- Volatilizes easily
- Runoff into water bodies must be avoided

Worst Case Scenario: All fuel drums open simultaneously and contents pour onto ground and surrounding environment.

Diesel:

Environmental Impacts:

- Harmful to wildlife and aquatic life
- Not readily biodegradable
- Has potential to bio accumulate in environment
- Burns slowly (more readily contained than volatile fuels)
- Runoff into water bodies must be avoided

Worst Case Scenario: All fuel drums open simultaneously and contents pour onto ground and surrounding environment.

Waste Oil and Miscellaneous Oils and Grease:

Environmental Impacts:

- Harmful to wildlife and aquatic life
- Not readily biodegradable
- Has potential to bio accumulate in environment
- Runoff into water bodies must be avoided

Worst Case Scenario: All storage drums open simultaneously and contents pour onto ground and surrounding environment.

Sewage:

Environmental Impacts:

- Human health hazard, and unsightly appearance
- High nutrient concentrations could negatively impact water bodies and runoff into water bodies must be avoided

Worst Case Scenario: Full sewage truck releases all of its contents onto ground and surrounding environment.

10.2 Procedures

10.2.1 Procedures for Initial Actions

The following list of actions should be followed by the first person on the scene:

- Ensure safety of all personnel
- Identify the product spilled
- Assess the hazards and risks to persons in the vicinity of the spill
- If possible, without further assistance, control the danger to human life
- If it is safe to do so, and if possible, stop the spill (i.e. shut off pump, replace cap, tip drum upward, etc.)
- Gather information on the status of the situation, including:
    - Estimated size of spill
    - Estimated migration route
- Contact SAO of the Cape Dorset Hamlet office, as per flowchart in **Figure 3.**

10.2.2 Spill Reporting Procedures

Spills should be reported immediately to the SAO of the Hamlet of Cape Dorset. Together they will determine if the spill is to be reported to the NWT 24-Hour Spill Line at 867-920-8130.

Copies of the Spill Report form are available in each spill kit and at the back of this manual. The form will be filled out by the Public Works Foreman (or designate), and faxed or emailed to the NWT Spill Line. Contact information is as follows:

Territorial 24-Hour Spill Line
Phone: (867) 920-8130
Fax: (867) 873-6924
Email: spills@gov.nt.ca

10.2.3 Procedures for the Protection of Human Health and Safety

Following a spill, the health and safety of workers as well as the general public is a priority. Actions taken will depend on the type of spill.

- ***In the event of a chemical spill***: Restrict public access to the spill area. Workers involved in the clean-up of the spill should wear personal protective equipment (PPE).
- ***In the event of a flammable or combustible material spill***: Evacuate adjacent buildings and restrict public access to the spill area. Remove sources of ignition if safe to do so (no smoking, flares, sparks or flames in the area). Never walk through or touch the spilled material. De-energize electrical equipment from a remote location if safe to do so. If ignition sources cannot be removed safely, evacuate the area immediately and report the spill situation. All equipment used when handling the material must be grounded. Only spark-arresting equipment should be used during clean-up of the spill. PPE should also be worn by workers involved in the clean-up. Refer to the product Material Safety Data Sheet (MSDS) for further instruction.
- ***In the event of a sewage spill***: Restrict public access (including pets and animals) to the spill area.

10.2.4 Procedures for Containing and Controlling Spill

General procedures noted below will be used to contain and control all spills. Specific procedures for spills on land, water, snow and ice follow.

- First anticipate what will be affected by the spill.
- Assess direction and speed of spill, and any factors that could affect these.
- Determine best location for containing spill.

10.2.5 Spill Response Procedures to various Media; Hydrocarbon Spills

Three procedures for hydrocarbon spills have been developed depending on the media on which the spill has occurred. The following sections outline procedures for hydrocarbon or other waste spills occurring on land (soil, gravel, sand, rock and vegetation), water, or snow/ice.

10.2.5.1 Spills on Land

For spills on land (soil, gravel, sand, rock, and vegetation), the following procedure should be followed:

1. Extinguish all sources of ignition (i.e., shut off engines, no smoking).
2. If possible, identify the spilled material.
3. Make sure the area is safe for entry and the spill does not represent a threat to the health or safety of the responder or others at the spill site.
4. Assess whether the spill can be readily stopped or brought under control and if safe and possible, stop the source of the spill (i.e., plug hole, close valve, install upright container) or place tarp under spill source and build up tarp edges to contain spill.
5. If the spill is sufficiently large that it cannot be controlled with the materials at hand, the spill should be reported immediately.
6. Stop spilled liquids from spreading or entering waterways using absorbent materials or a soil dyke down slope from the spill.
7. Contact facility supervisor and report the spill.
8. If possible with materials at hand, clean up remaining spilled material and store in a secure container for disposal. Do not flush area with water.
9. If possible, pump any contained liquid into drums.
10. Complete a Spill Reporting Sheet.
11. Contact: Emergency Spill Hotline: Phone: (867) 920-8130, Fax (867) 873-6924 for additional advice.
12. Contact: Crown-Indigenous Relation And Northern Affairs Canada Water Resources Inspector: Phone: (867) 975-4289 to report the spill.
13. Submit to the Crown-Indigenous Relations and Northern Affairs Canada Water Resources Inspector, a detailed report including the GPS location of the spill, no later than thirty (30) days after initially reporting the event.

10.2.5.2 Spills on Water

For spills on water, the following procedure should be followed:

1. Extinguish all sources of ignition (i.e., shut off engines, no smoking).
2. If possible, identify the spilled material.
3. Make sure the area is safe for entry and the spill does not represent a threat to the health or safety of the responder or others at the spill site.
4. Assess whether the spill can be readily stopped or brought under control and if safe and possible, stop the source of the spill (i.e., plug hole, close valve, upright container).
5. If the spill is sufficiently large that it cannot be controlled with the materials at hand, spill report the spill immediately.

6. Use sorbent booms to contain spill for recovery, place sorbent sheets on water within boomed perimeter. For narrow waterways, place one or more booms across the waterway, downstream of the spill location and anchor boom ends on each bank. Store saturated sorbent sheets and booms in drums for disposal.
7. Contact facility supervisor and report the spill.
8. If possible with materials at hand, clean up remaining spilled material and store in a secure container.
9. Complete a Spill Reporting Sheet.
10. Contact: Emergency Spill Hotline: Phone: (867) 920-8130, Fax (867) 873-6924 for additional advice.
11. Contact: Crown Indigenous Relations and Northern Development Canada Water Resources Inspector: Phone: (867) 975-4289 to report the spill.
12. Submit to the Crown Indigenous Relations and Northern Development Canada Water Resources Inspector detailed report including the GPS location of the spill, no later than thirty (30) days after initially reporting the event.

10.5.2.3 Spills on Snow and Ice

Spills on ice present the potential for immediate access of the contaminants to water therefore, immediate response to the spill is essential. For spills on snow and ice, the following procedure should be followed:

1. Extinguish all sources of ignition (i.e., shut off engines, no smoking).
2. If possible, identify the spilled material.
3. Make sure the area is safe for entry (i.e., ice thickness) and the spill does not represent a threat to the health or safety of the responder or others at the spill site.
4. If the spill is sufficiently large that it cannot be controlled with the materials at hand, the spill should be reported immediately.
5. Assess whether the spill can be readily stopped or brought under control and if safe and possible, stop the source of the spill (i.e. plug hole, close valve, install upright container) or place tarp under spill source and build up tarp edges to contain spill.
6. Stop spilled liquids from spreading or entering waterways using absorbent materials or a snow/soil dyke.
7. Contact facility supervisor and report the spill.
8. If possible with materials at hand, clean up remaining spilled material and store in a secure container (i.e., drum, polyethylene bags). Store impacted snow in drums for disposal.
9. Contact: Emergency Spill Hotline: Phone: (867) 920-8130, Fax (867) 873-6924 for additional advice.
10. Contact: Crown Indigenous Relations and Northern Development Canada Water Resources Inspector: Phone: (867) 975-4289 to report the spill.
11. Submit to the Crown Indigenous Relations and Northern Development Canada Water Resources Inspector r, a detailed report including the GPS location of the spill, no later than thirty (30) days after initially reporting the event.

10.5.2.4 Additional Spill Delineation/Monitoring

As a result of a large spill in which not all of the spilled material can be readily recovered as described above, additional delineation in the form of a subsurface investigation (i.e., test pits, boreholes, and monitoring wells) may be required to determine the lateral and vertical extents of the impacts to the subsurface soil and/or groundwater. The additional delineation/monitoring information will be used to develop an appropriate remediation plan. In such cases, a qualified environmental consultant should be retained to provide advice with respect to how to proceed with the additional assessment.

Worst Case Scenarios:

Worst case scenarios include a dyke or trench overflowing and a large spill on water that cannot be contained with materials available in the community. In the first case, a trench or collection pit could be constructed downstream to collect the fuel. In the second case, an emergency response team would need to be called, with appropriate equipment to deal with the spill.

10.2.5.5 Procedures for 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 for proper disposal. The containers of impacted water and snow should be sealed and stored until disposal at an approved facility can be arranged.

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

10.2.5.6 Procedures for Restoring Affected Areas

Once a spill has been contained, community personnel will consult with regulatory personnel assigned to the file to determine the level of clean-up required. Regulatory personnel may request that a site specific study be conducted, to ensure appropriate clean-up levels are met.

11 RESOURCE INVENTORY

11.1 On-site Resources

Spill Kit and Training Requirements

The following section presents the recommended minimum requirements for the content and number of spill kits that should be present.

11.1.1 Spill kit

Each spill kit should be inspected regularly to ensure that it contains, as a minimum, the following:

- 1 – 205 litre, open top steel drum with a lid, bolting ring and gasket;
- 1 Spark proof shovel;
- 1 package of 10 disposable 5 mil polyethylene bags (approx. 65 cm x 100 cm);
- 4 – 12.5 cm (approx. 5") x 3 m (approx. 10') sorbent (oil-absorbing) booms;
- 10 kg bag of sorbent particulate;
- 1 bail of 50 cm x 50 cm (approx.) sorbent sheet (100 Sheets/bail);
- 1 x 5m x 5m approx. plastic tarp;
- 2 pairs of oil resistant gloves; and,
- 2 pairs of splash protective goggles.

11.1.2 Additional Spill Response Supplies

In addition to the materials contained in the spill kits, an inventory of the following supplies should be available for use if required.

- 10 – 205 litre, open top steel drum with a lid, bolting ring and gasket;
- 2 Spark proof shovels;
- 5 packages of 10 disposable 5 mil polyethylene bags (approx. 65 cm x 100 cm);
- 10 – 12.5 cm x 3 m sorbent (oil-absorbing) booms;
- 5 x 10 kg bags of sorbent particulate;
- 5 bails of 50 cm x 50 cm (approx.) sorbent sheet (100 Sheets/bail);
- 2 pairs of oil resistant gloves; and,
- 2 pairs of splash protective goggles.

11.1.3 Spill Kit Locations

The spill kit, with the exception of the shovel, can be contained within the 205 L drum which should be sealed securely to protect the contents. The drum should also be accessible without the use of tools (i.e., bolt ring only finger tight). The bolt ring should be inspected regularly to ensure that it turns freely and lubricated if it does not. At least one spill kit should be clearly identified and readily available during any maintenance work undertaken at the wastewater treatment facility.

11.1.4 Hamlet Spill Kit Availability

The number of spill kits available throughout the Hamlet and their storage locations should be determined during the preparation of an overall Spill Contingency Plan for the Hamlet. As indicated in Section 8.3 (above), at least one spill kit should be readily available during maintenance activities at the wastewater treatment facility.

11.1.5 Additional Training

To ensure the effectiveness of the SRP, the following actions should be followed:

1. The SRP should be reviewed, as a minimum, on an annual basis and updated as required by changes in operation and/or technology.
2. The SRP should be distributed to the personnel on the site.
3. The personnel should be informed of the locations of all potentially hazardous materials and their associated Material Safety Data Sheets (MSDS).
4. The personnel should be trained in the use of the MSDS and the techniques and materials used to contain and remediate spilled materials.
5. The personnel should be informed as to the importance of first response with respect to the protection of human health and safety, the environment, property, wildlife and the ecosystem by reducing the impact of spills.

It is recommended that the Hamlet of Cape Dorset retains one spill kit and the spill kit should contain the followings:

- 30 socks/booms (3" x 4')
- 30 pillows (2L)
- 24 dispersal bags
- 4 pairs gloves
- 2 pairs goggles
- 6 pairs Tyke coveralls
- 4 shovels
- 2 spill signs
- 2 repair putty
- 1 Emergency Response Guidebook
- 1 Safety and Compliance Directory
- 1 Spill Response Pocket Guide

This response kit is designed to contain and collect up to 56 gallons of spilled oil. Additional volumes will be accommodated with the use of absorbent products that will be maintained in inventory in sufficient quantities.
The following heavy equipment is also available in the community for spill containment:

- Loader
- Dozer

11.1.6 General Safety Practices and Site Rules

The following is a list of site rules that should be followed to maintain safe working conditions during a spill response:

1. Eating, drinking, chewing gum and smoking are prohibited in contaminated or potentially contaminated areas, or where the possibility for the transfer of contamination exists. This would include areas of active excavation and metal removal.

2. Personnel who have worked on-site shall wash their hands and face thoroughly with soap and water and remove themselves from the spill area prior to eating, drinking or smoking.

3. All field crew workers should be aware of potentially dangerous situations that they should avoid (i.e. the presence of strong, irritating or nauseating odours). Field crew workers should also be Familiar with the physical characteristics of the site including:

- wind direction in relation to areas of known contamination;
- accessibility to equipment and vehicles;
- communications; and,
- Site access.

12.0 Offshore Resources

The Following are the offshore Resources are available;

Table : 7 Outside Emergency Contacts

Agency	Function	Phone Number
Territorial 24 hours Spill Line	Reporting	867-920-8130
Hamlet	On –Site Supervisor	867-897-8943
CIRNAC	Emergency	867-975-4289
Health Centre	Medical Emergency	867-897-8820
RCMP	Security, Vandalism	867-897-1111
ECCC Environmental Protection	Emergency	867-669-4730
GN Environmental Health Officer	Emergency	867-897-4817
Fire	Fire, accident or Rescue	867-897-8888
First Air	Transportation	1-800-267-1247

13.0 Record Keeping and Closure

13.1 Record keeping:

Records of any spills, spill response activities, follow-up inspections, monitoring, and any additional remedial work must be kept. These records should be stored at the Hamlet office and kept by the Operations Manager or SAO. These records will assist with the annual review of the SCP, operations and maintenance practices at all facilities, and spill response requirements.

Every year by March 31, the Hamlet is required to submit an Annual Report to the NWB. The Hamlet is required
to provide a list of all spills and a summary of follow-up action taken for each spill. Therefore, at a minimum, the following records should be kept:

- Reports of all spills and spill reports submitted to the 24-Hour Emergency Spill Report Line;
- Types and quantities of spill contaminants;
- All spill follow-up activities;
- Inspections of spill kit contents and replacement records for any items; and,
- Records of spill response training for all Hamlet spill responder personnel.

13.2 Closure

This Spill Response Plan has been prepared for the entire boundary of the Hamlet of Cape Dorset especially for the environmental and building facilities. It does not replace, nor is intended to replace, the general provision of the applicable Federal and Territorial statutes regarding workplace safety or any protocols previously established by the Hamlet. Instead, it may be used to augment any existing plans.

APPENDIX:

Appendix- A: Spill Reporting Form and Instruction sheet

REFERENCE:

- Dillon Consulting Limited. “P lake Sewage Lagoon System”, produced for Department of Community and Government Services, Government of Nunavut, January 2006.

APPENDIX-A

SPILL REPORTING FORM AND INSTRUCTION SHEET

Instructions for Completing the NT-NU Spill Report Form

This form can be filled out electronically and e-mailed as an attachment to spills@gov.nt.ca. Until further notice, Please verify receipt of e-mail transmissions with a follow-up telephone call to the spill line. Forms can also be printed and faxed to the spill line at 867-873-6924. Spills can still be phoned in by calling collect at 867-920-8130.

A. Report Date/Time	The actual date and time that the spill was reported to the spill line. If the spill is phoned in, the Spill Line will fill this out. **Please do not fill in the Report Number**: the spill line will assign a number after the spill is reported.

B. Occurrence Date/Time	Indicate, to the best of your knowledge, the exact date and time that the spill occurred. Not to be confused with the report date and time (see above).
C. Land Use Permit Number /Water Licence Number	This only needs to be filled in if the activity has been licenced by the Nunavut Water Board and/or if a Land Use Permit has been issued. Applies primarily to mines and mineral exploration sites.
D. Geographic Place Name	In most cases, this will be the name of the city or town in which the spill occurred. For remote locations – outside of human habitations – identify the most prominent geographic feature, such as a lake or mountain and/or the distance a n d direction from the nearest population center. **You must include the geographic coordinates** (Refer to Section E).
E. Geographic Coordinates	This only needs to be filled out if the spill occurred outside of an established community such as a mine site. Please note that the location should be stated in degrees, minutes and seconds of Latitude and Longitude.
F. Responsible Party Or Vessel Name	This is the person who was in management/control/ownership of the substance at the time that it was spilled. In the case of a spill from a ship/vessel, include the name of the ship/vessel. Please include full address, telephone number and e-mail. Use box K if there is insufficient space. **Please note that, the owner of the spilled substance is ultimately responsible for any spills of that substance, regardless of who may have actually caused the spill.**
G. Contractor involved?	Were there any other parties/contractors involved? An example would be a construction company who is undertaking work on behalf of the owner of the spilled substance and who may have contributed to, or directly caused the spill and/or is responding to the spill.
H. Product Spilled	Identify the product spilled; most commonly, it is gasoline, diesel fuel or sewage. For other substances, avoid trade names. Wherever possible, use the chemical name of the substance and further, identify the product using the four digit UN number (e.g.: UN1203 for gasoline; UN1202 for diesel fuel; UN1863 for Jet A & B)
I. Spill Source	Identify the source of the spill: truck, ship, home heating fuel tank and, if known, the cause (e.g.: fuel tank overfills, leaking tank; ship ran aground; traffic accident, vandalism, storm, etc.). Provide an estimate of the extent of the contaminated/impacted area (e.g.: 10 m^2)
J. Factors Affecting Spill	Any factors which might make it difficult to clean up the spill: rough terrain, bad weather, remote location, lack of equipment. Do you require advice and/or assistance with the cleanup operation? Identify any hazards to persons, property or environment: for example, a gasoline spill beside a daycare centre would pose a safety hazard to children. Use box K if there is insufficient space.
K. Additional Information	Provide any additional, pertinent details about the spill, such as any peculiar/unique hazards associated with the spilled material. State what action is being taken towards cleaning up the spill; disposal of spilled material; notification of affected parties. If necessary, append additional sheets to the spill report. Number the pages in the same format found in the lower right hand corner of the spill form: e.g. "Page 1 of 2", "Page 2 of 2" etc. **Please number the pages to ensure that recipients can be certain that they received all pertinent documents.** If only the spill report form was filled out, number the form as "Page 1 of 1".
L. Reported to Spill Line by	Include your full name, employer, contact number and the location from which you are reporting the spill. Use box K if there is insufficient space.
M. A	ıtify any alternate contacts. This information assists regulatory agencie
N. F	ve

Northwest Territories Nunavut Canada

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	REPORT NUMBER -
B	OCCURRENCE DATE: MONTH – DAY – YEAR	OCCURRENCE TIME	☐ UPDATE # TO THE ORIGINAL SPILL REPORT	
C	LAND USE PERMIT NUMBER (IF APPLICABLE)	WATER LICENCE NUMBER (IF APPLICABLE)		
D	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM THE NAMED LOCATION	REGION ☐ NWT ☐ NUNAVUT ☐ ADJACENT JURISDICTION OR		
E	LATITUDE DEGREES MINUTES SECONDS	LONGITUDE DEGREES MINUTES SECONDS		