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DATE: February 9, 2011

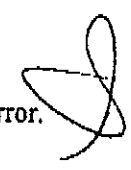
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FAX REGARDING: Spill Contingency Plan for the  
Hamlet of Sachs Harbour NT  
Water licence Number N7L3-1531.

Attached is my best attempt to provide  
this report to you. We will continue  
to try to improve upon the plan.  
For now this is what I was able to do.

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**Spill Contingency Plan for the Hamlet of Sachs Harbour, NT**

**Water Licence Number N7L3-1531**

**Created in December 2010**

**APPROVED BY COUNCIL: \_\_\_\_\_ FEBRUARY 8, 2011 \_\_\_\_\_**  
(DATE)

Prepared for and by the Hamlet of Sachs Harbour

## Preface

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## **I. Introduction and Project Details**

Under the *Northwest Territories Waters Act (NWTWA)* and Section 6 g (i) and (ii) of the *Northwest Territories Waters Regulations (NWTWR)* all applicants where the undertaking involves the handling or storage of petroleum products or hazardous materials, must prepare (i) a plan for the safe handling, storage and disposal thereof, and (ii) a contingency plan for their containment and for the clean-up thereof in the event of a spill.

### **1.1. General**

This Spill Contingency Plan provides for the prompt and coordinated response of the Hamlet to spills located on Hamlet property and to assist any agency located within the Hamlet of Sachs Harbour corporate boundaries.

Contact information: Hamlet of Sachs Harbour  
P.O. Box 90  
Sachs Harbour, NT  
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Phone: 867-690-4351  
Fax: 867-690-4802  
Email: hamlet\_sachs@airware.ca

Attention: Jackie Coulter - Senior Administrative Officer (SAO)

Alternate Contact: Lawrence Amos - Works Foreman

### **1.2. Effective date**

The effective date of this Spill Contingency plan is February 8, 2011.

Revision Dates: \_\_\_\_\_

### 1.3. Distribution list

This plan and the most recent revisions have been distributed to:

Table 1.1: Distribution list

Organization	Title	Date distributed
Canadian Coast Guard	519-383-3966	February 9, 2011
Environment Canada- Environmental Protection Fisheries and Ocean Canada	Carey Ogilvie- Head Phone: 867-669-4737 Unknown Phone: 867-777-0000	February 9, 2011
Government of NWT- Environmental Protection Division	Ken Hall-Manager Phone: 867-873-7654	February 9, 2011
Government of NWT- MACA	Lorrie Fyfe-Manager Phone: 867-777-7121	February 9, 2011
Hamlet of Sachs Harbour	Hamlet Foreman	February 9, 2011
Indian and Northern Affairs Canada- North Mackenzie District, NWT Region	Conrad Bactz-Manager Phone: 867-777-8901	February 9, 2011
Indian and Northern Affairs Canada- Water Resources	Robert Jenkins-Head Phone: 867-669-2574	February 9, 2011
Northwest Territories Water Board (NWTWB)	Eddie Dillon-Chair Phone: 867-678-2942	February 9, 2011

### 1.4. Purpose and scope

The purpose of this plan is to outline response actions for potential spills. 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 respond to a spill. It details spill response procedures that will minimize potential health and safety hazards, environmental damage, and clean-up requirements. The plan has been prepared to ensure quick access to all the information required in responding to a spill.

### 1.5. Sachs Harbour Environmental Policy

The Hamlet of Sachs Harbour has an Environmental Site Assessment that was done in September 2008 by IMG-Golder Corporation in Inuvik, Northwest Territories. The Hamlet of Sachs Harbour also has a Community Energy Planning Toolkit that was done in November 2006 by Arctic Energy Alliance. With these tools the Hamlet of Sachs Harbour plans to put together an Environmental Policy for the community.

The Hamlet of Sachs Harbour also has Emergency Plans, as follows:

1. Government of the Northwest Territories Peacetime Emergency Plan, dated March 14, 1991;

2. Bulk Fuel Storage Facility, Emergency Spill Action Plan – Issued by Petroleum Products Division, Public Works & Services, Government of the Northwest Territories. (Revised 2003).
3. Sachs Harbour Airport Emergency Plan done in November 2008 by Airports Division, Government of the Northwest Territories.

### 1.6. Sites descriptions

The Hamlet of Sachs Harbour is responsible for the operation and maintenance of their waste disposal facilities (Sewage Disposal Facilities and Solid Waste Disposal Facilities) and water supply facilities.

The Hamlet of Sachs Harbour is located on the southwestern coast of Banks Island, at latitude 72°58'00" North and longitude 125°14'00" West, in the Northwest Territories.

The Solid Waste Site is located at consists of 8 cells sorted into areas for domestic garbage, oils and barrels, burnable, small appliances and larger vehicles.

The Sewage Disposal Site is located consists of a natural lake with a dumping Shute.

The Water Treatment Plant is located at and is a natural lake with treatment station direct intake in to truck for delivery to the community.

In addition we operate the following Buildings:

The Airport and Runway

The Maintenance Garage

The Parking Garage

The Ajjaliaq Community Centre

The Hamlet Office Building and Parks Visitor Centre

The Arona

Storage Areas consist of the old freezer building and the old staff house

Outside recreation buildings consist of the Gazebo and one other storage shed.

### 1.7. Identification of special areas that can potentially be impacted

Following is a list of special places that will receive additional consideration should a spill occur in this area:

- Bodies of water within the community are the surrounding ocean around Banks Island effecting the shoreline along the hamlet; and
- Town infrastructure not owed by the Hamlet is: the School, Health Center, ENR, NWT Power Corp and Sachs Harbour Housing



### 1.8. Hazardous materials stored on site

All hazardous materials are stored at the Solid Waste Site.

Table 1.2: List of hazardous materials stored on-site, type of storage container, the normal and maximum storage quantities, and storage locations.

Material	Storage container	Average on-site	Maximum on-site	Storage location and uses

### 1.9. Preventive measures

Planning for an emergency situation is imperative. Due to the nature of the materials stored in the Hamlet of Sachs Harbour facilities, adequate training of staff is critical. The storage areas for hazardous materials are to be lined with impermeable liners and bermed with 110% containment. Planking can be used to protect the liner from the fuel drums and cylinders.

At this time, the Hamlet does not have any Spill Kits. See section 4 called "Resource Inventory" for details on spill kit contents. Does the Hamlet of Sachs Harbour Forman conducts monthly visual inspections to check for leaks or damage to the storage containers, as well as for stained or discolored soils around the storage areas and adjacent motorized equipment. If so, does he use a checklist to ensure no areas have been missed and results of the inspections are recorded by the Hamlet of Sachs Harbour? If a check list is used, you need to put it in schedule C.

### 1.10. Maps

1.10.1. Building, Roads, Airstrips and water Bodies

1.10.2. Storage Locations of each Hazardous Material and Spill Kit

1.10.3. Probable Spill Location

## 2. Response Organization

The Hamlet of Sachs Harbour has established procedures in the event of a spill.

### 2.1. Notification

- Any community employee or member of the public discovering a spill will immediately take steps to notify the Hamlet Foreman. If a spill is discovered during normal working hours, the employee will also contact the Hamlet of Sachs Harbour Office at 867-690-4351.
- If a spill is discovered after normal working hours, the person will use the most expedient method at his disposal to contact the Hamlet Foreman.
- The Hamlet Foreman will also notify the community's SAO as soon as possible if he/she haven't been notified already.
- The Hamlet of Sachs Harbour Forman or SAO is responsible for notifying the Government of the Northwest Territories 24 hour Spill Report Line at 1-867-920-8130, collect calls accepted.
- The Hamlet Foreman is responsible to fill out the NWT Spill Report (see appendix A).

### 2.2. Response Team Organization

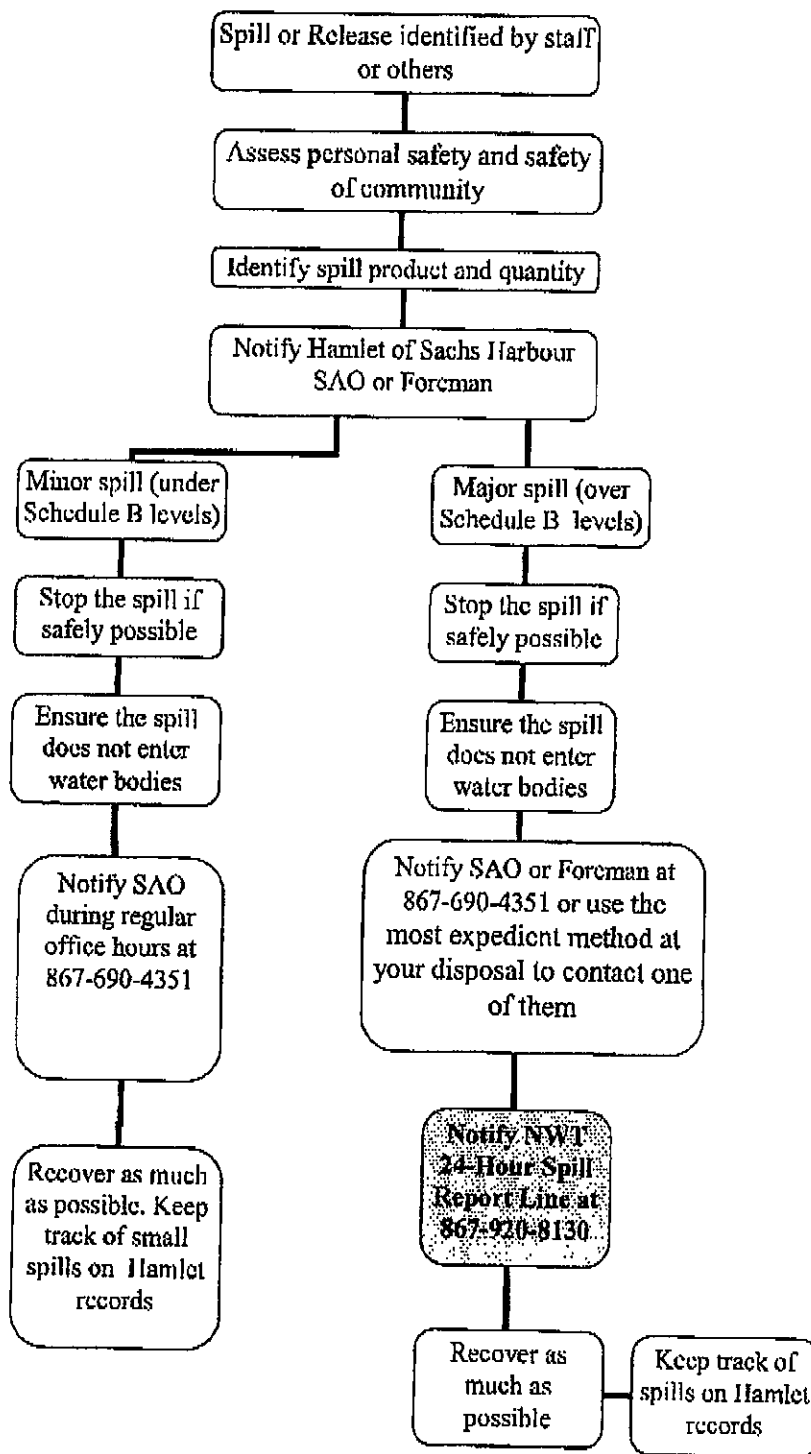
The flow chart depicted in Figure 2.1 identifies the response organization and when applicable their alternates, as well as the chain of command for responding to a spill or release. The duties of various response personnel are summarized, contact information is provided including 24-Hour phone numbers for responsible people and the location of communications equipment on site is discussed.

An immediately reportable spill is defined as a release of a substance that is likely to be an imminent human health or environmental hazard or meets or exceeds the volumes outlined in appendix B. It must be reported to the NWT 24-Hour Spill Report Line at 867-920-8130. Any spills less than these quantities do not need to be reported immediately to the spill reporting line. Rather, these minor spills will be tracked and documented by the Hamlet and submitted to the appropriate authority upon request or at a pre-determined reporting interval. If there is any doubt that the quantity spilled exceeds reportable levels, the spill will be reported to the NWT 24-Hour Spill Report Line.

In the event of a spill involving danger to human life the closest phones or CB radios will be used to contact emergency response personnel in the Hamlet of Sachs Harbour.

The person that discovers the spill will inform the SAO or Hamlet Forman and, they will report the spill to the NWT 24-Hour Spill Report Line as necessary. The Hamlet Forman will also inform the Hamlet office of minor spills that are under the thresholds identified on Schedule B for tracking on the Hamlet records. If spills occur outside regular office hours, the Hamlet Forman should be contacted using the most expedient method available to contact him.

Figure 2.1: Flow Chart of response



### 3. Action Plan

#### 3.1. Potential spill sizes and sources

In this section the potential spill event and spill volume are presented for the primary hazardous materials stored in the Hamlet of Sachs Harbour facilities. The most likely spill discharge volume is indicated and the spill clean up procedures will focus on spills of this quantity. A worst case scenario is also presented.

##### 3.1.1. Sewage spills from trucks

Sewage holding tanks could fail from hairline cracks, corrosion and collision or from wear and tear due to the environment. Routine inspections consist of looking for sewage coming out of the tanks from crack or failure of the tank wall. Owners should visually inspect their tanks several times a year. Failure of a Sewage Truck or any equipment used while pumping sewage into the truck from a tank or out of the truck to the sewage disposal facility can also be prevented by routine inspections by the owner of all equipment and connections. The Hamlet is responsible of cleaning in the event of a spill. The Hamlet of Sachs Harbour has one (1) sewage truck of 2500 gallons (11,365.225 liters), which mean that in the event of a spill, the spill is likely to be under 2500 gallons (11,365.225 liters).

##### 3.1.2. Sewage spills from Sewage Disposal Facilities

The truck turn-around pad and sewage discharge chute associated with sewage disposal facility structures, and drainage courses are inspected on an annual basis by the Hamlet Foreman. In addition, during the summer months the integrity of the structures is visually checked by the Hamlet staff. In the event of a spill, the spill is likely to be under the capacity of the sewage treatment facility which is dumped into a natural lagoon.

##### 3.1.3. Spills from fuel storage

Many buildings within the Hamlet have fuel storage for home and building heating. There could be minor leaking or large puncture from drum or tank in/outside fuel storage areas. Piping failure is also a source of spills from fuel storage tanks. In the event of a spill at a privately owned structure, owners are responsible for the cleaning of the spill, unless the spill threatens a special area like the school. Should this happen, the Hamlet's response will be to protect that special area. The discharge of the spill is likely to be under 1200 liters and in the worst case scenario the spill will be from the full fuel storage tank.

### 3.1.4. Fuel spill from motorized equipment

Fuel spills can occur when overfilling motorized equipment, spills can also come from drum or hose while filling the motorized equipment, from drum in/outside the storage area. Fuel spills from accidents involving personal vehicles and fuel carriers will be addressed as they pertain to special areas. Clean up will be the responsibility of the individuals or organizations involved. Regular maintenance and oil checks of all motorized equipment are also undertaken to avoid preventable leaks. The discharge of the spill is likely to be less than 300 Liters.

### 3.1.5. Propane spill

Propane is extremely volatile and is the most flammable material stored on site, thus the Fire Department should be the first responder in all cases. All non-responders must be kept well away from the area.

Propane spill can occur when the cylinder has a leak in or outside fuel storages area, when propane lines not properly connected to equipment (i.e. kitchen stove, dryer). The complete volume of the cylinder will be released if a leak develops; therefore safety during emergency response to a propane spill is of the utmost concern.

### 3.1.6. Waste Oil or Lubricating Oil spill

Waste Oils or lubricating oil spill could come from a variety of sources including new supplies but mainly from waste oils stored in drums that are leaking. The discharge of the spill is likely to be under 45gallong (204.574 liters)/drum. In the worst case scenario the complete cotenant of the drum will spill.

## 3.2. **Procedures for Initial Action**

1. Be alert and consider your personal safety first;
2. Assess the hazard to persons in the vicinity of the spill and where possible take action to control danger to human life (ensure safety of everyone);
3. Assess the situation and make arrangements for first aid and removal of injured personnel. Take the necessary action where possible to secure the site to protect human safety;
4. Assess spill hazards and risks;
5. Identify the material or products involved in the spill;
6. If applicable and only if it is safe to do so, remove or shut off all ignition sources;
7. If safe try to take the appropriate action to stop the spill (e.g. shut off pump, replace cap, tip drum upward, patch leaking hole, create a ditch to stop flow etc). Use the contents of the nearest spill kit to aid in stopping the spill if it is safe to do so;
8. Take all necessary action to contain or prevent the spread of the spilled (e.g. use contents of spill kits to place sorbent material on the spill, or use shovel to dig dike to contain spill. Methods will vary depending on the nature of the spill);
9. Gather information on the status of the situation;
10. No matter what the volume is, contact the Hamlet Foreman and SAO to report the spill;

11. As soon as possible and if required, contact the NWT 24 Hour Spill Report Line at 1-867-920-8130;
12. If required, complete a spill report form (attached in appendix A).

### 3.3. Procedures for Containing and Cleaning up the Spill

First, initiate spill containment by first determining what will be affected by the spill. Second, assess speed and direction of spill and cause of movement (water, wind and slope). Third, determine best location for containing spill, avoiding any water bodies. Have a contingency plan ready in case spill worsens beyond control or if the weather or topography impedes containment.

#### 3.3.1. Sewage infrastructure

1. Any person who sees a liquid flowing or seeping from a sewage holding tank, a sewage truck or a connection from the truck to a hose or the lagoon should report this to the Hamlet Foreman, the homeowners and the trucking company.
2. The Hamlet Foreman should, upon notification, determine the extent and size of the spill. Therefore, the Hamlet Foreman is responsible to take the appropriate action and use the reporting procedures to notify the proper authorities. Since spills of sewage involve an infectious substance that may cause health problems, the local nursing station and Environmental Health Officer should be notified of the spill.
3. If the area in which the spill occurred is accessible to the public or domestic pets, the contaminated area must be clearly marked or cordoned off to restrict access. Keep children and interested bystanders away from cleanup activities.
4. If the spilled material can't be recovered using hand tools, a commercial vacuum / pump truck should be called to remove all visible liquid and solid material. Any spill resulting from the failure of a sewage truck or its connections would necessitate the procurement of vacuum trucks to contain the sewage while any soil or ground material contaminated by the spill is recovered and properly disposed of according to an Environmental Health Officer.
5. Protective clothing (at a minimum, rubber or latex gloves and rubber boots) should be worn when cleaning up a sewage spill. (Dispose of gloves and wash rubber boots when leaving spill site).
6. When the area is visibly clean, lime will be spread on the ground where the spill took place under the instructions of an Environmental Health Officer. Lime can be obtained from a variety of hardware stores. Please note that hydrated lime is a caustic material and can be dangerous to handle and apply. Lime should only be used or applied by people experienced in using this material.
7. If no lime is available, a chlorine/water solution (bleach) should be applied to the spill area to disinfect. To make a 5% chlorine solution, add 3/4 cup (180 ml) Clorox bleach to one (1) gallon of water. Only use bleach that has "sanitizes" or "kills germs" on the label. Do not mix cleaning/disinfecting products or

chemicals. Cleaning products can react with one another to produce toxic vapor or liquid substances.

8. Notify the Hamlet of Sachs Harbour when the clean up is done.
9. When the spill area has been cleaned (24 hours after the chlorine solution or hydrate lime has been spread), the barriers can be removed and access to the area restored.
10. Any repairs or replacement of the failed tank should take place under acceptable engineering standards.

### 3.3.2. Lagoon dam structure

The lagoon is designated as an exfiltration lagoon. Liquid flows continuously through and under the lagoon berm and is directed toward further treatment in the wetlands.

1. Any person who sees a liquid flowing from a breach (a hole) in the lagoon dam structures should report this to the Hamlet Foreman.
2. The Hamlet Foreman should, upon notification, determine the extent and size of the problem. Therefore, the Hamlet Foreman is responsible to take the appropriate action and use the reporting procedures to notify the proper authorities.
3. Any spill resulting from the failure of a lagoon dam structure would likely necessitate the construction of a berm to contain the sewage while either temporary or permanent repairs are carried out on the failed structure. A qualified Engineer and contractor would be engaged to undertake the work.
4. Rebuilding the dam or establishing a cofferdam with course materials, clay and sandy materials would contain the spill. Any sewage should be contained with berms or impoundment basins and pumped back into the lagoon. Any repairs to the failed structure would take place to acceptable engineering standards.

### 3.3.3. Containment of Spill on open water

Spills on water such as rivers, streams or lakes are the most serious types of spills as they can negatively impact water quality and aquatic life. All measures need to be undertaken to contain spills on open water.

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

1. In the event of a spill, any person who found it should report this to the Hamlet Foreman.
2. The Hamlet Foreman should, upon notification, determine the source, the extent and size of the spill. Therefore, the Hamlet Foreman is responsible to take the

- appropriate action and use the reporting procedures to notify the proper authorities.
3. If the area in which the spill occurred is accessible to the public or domestic pets, the contaminated area must be clearly marked or cordoned off to restrict access. Keep children and interested bystanders away from cleanup activities.
  4. Protective clothing (at a minimum, rubber or latex gloves and rubber boots) should be worn when cleaning up a spill. (Dispose of gloves and wash rubber boots when leaving spill site).
  5. Assess speed and direction of spill.
  6. Determine best location for containing spill.
  7. For floating materials, a surface boom shall be deployed. Booms are commonly used to recover fuel floating on the surface of a lake or slow moving streams. They are released from the shore of a water body to create a circle around the spill. If the spill is away from the shoreline a boat will need to be used to reach the spill and the boom can be set out. More than one boom may be used at once. Booms may also be used in streams and should be set out at an angle to the current. Booms are designed to float and some have sorbent materials built into them to absorb fuels at the edge of the boom. Fuel contained within the circle of the boom will need to be recovered using sorbent materials or pumps and placed into barrels for disposal. If a boom can't be installed, weirs may be constructed, especially in shallow areas.
  8. Weirs can be used to contain spills in streams and to prevent further migration downstream. Plywood or other materials found on site can be placed into and across the width of the stream, such that water can still flow under the weir. Spilled fuel will float on the water surface and be contained at the foot of the weir. It can then be removed using sorbents, booms or pumps and placed into barrels.
  9. The On-Scene Coordinator will have to judge whether the impact of the spill will be most reduced by carrying out a containment procedure or by immediately attempting to remove any containers from the water. This will depend on the equipment available and how long it will take for additional equipment to arrive. Removed containers should be placed on an impermeable contained surface (example poly liner in a depression) or an overpack drum to prevent further seepage.

#### 3.3.4. Containment of Spills on Ice

Spills on ice are generally the easiest spills to contain due to the predominantly impermeable nature of the ice.

For spills on ice, containment procedures will vary depending on whether the material stays on the ice or sinks into it.



1. In the event of a spill, any person who found it should report this to the Hamlet Foreman. The Hamlet Foreman should, upon notification, determine the source, the extent and size of the spill. The Hamlet Foreman is responsible to take the appropriate action and alert the necessary people.
2. Use the reporting procedures to notify the proper authorities.
3. If the area in which the spill occurred is accessible to the public or domestic pets, the contaminated area must be clearly marked or cordoned off to restrict access. Keep children and interested bystanders away from cleanup activities.
4. Protective clothing (at a minimum, rubber or latex gloves and rubber boots) should be worn when cleaning up a spill. (Dispose of gloves and wash rubber boots when leaving spill site).
5. Assess speed and direction of spill.
6. Determine best location for containing spill.
7. Spills on ice can be affected by the strength of the ice and the floating or sinking characteristics of the materials. The safe bearing capacity of ice has to be carefully assessed. For good ice the following thickness table can be used to estimate the load capacity:

Thickness		Load	
Mm	Inches	Kg	Tons
80	3	181	.2
150	6	907	1.0
230	9	5443	6.0
500	20	9071	10
760	30	18143	20
1010	40	36287	40

8. If the spill does not penetrate the ice, and the ice is safe to work on, sorbent materials are used to soak up spilled fuel. Remaining contaminated ice/slush can be scraped and shoveled into a barrel. However, all possible attempts should be made to prevent spills from entering ice covered waters as no easy method exists for containment and recovery of spills if they seep under ice.
9. If the spill penetrates the ice, dykes can be used to contain fuel spills on ice. By collecting surrounding snow, compacting it, mounding it and watering it down to form a dyke down slope of the spill, a barrier is created thus helping to contain the spill. The collected fuel can then be pumped into barrels or collected with sorbent materials.
10. For significant spills on ice, trenches can be cut into the ice surrounding and/or down slope of the spill such that fuel is allowed to pool in the trench. It can then

be removed via pump into barrels, collected with sorbent materials, or mixed with snow and shoveled into barrels.

### 3.3.5. Containment of Spills on Snow

Snow is a natural sorbent, thus as with spills on soil, spilled can be more easily recovered. Therefore, snow should be used as much as possible when it is available.

1. In the event of a spill, any person who found it should report this to the Hamlet Foreman. The Hamlet Foreman should, upon notification, determine the source, the extent and size of the spill. The Hamlet Foreman is responsible to take the appropriate action and alert the necessary people.
2. Use the reporting procedures to notify the proper authorities.
3. If the area in which the spill occurred is accessible to the public or domestic pets, the contaminated area must be clearly marked or cordoned off to restrict access. Keep children and interested bystanders away from cleanup activities.
4. Protective clothing (at a minimum, rubber or latex gloves and rubber boots) should be worn when cleaning up a spill. (Dispose of gloves and wash rubber boots when leaving spill site).
5. Assess speed and direction of spill.
6. Determine best location for containing spill.
7. Small spills on snow can be easily cleaned up by raking and shoveling the contaminated snow into empty barrels, and storing these at an approved location.
8. Dykes can also be used to contain fuel spills on snow. By compacting snow down slope from the spill, mounding it to form a dyke and watering it down, a barrier is created thus helping to contain the spill. The collected fuel/snow mixture can then be shoveled into barrels, or collected with sorbent materials.

### 3.3.6. Containment of Spills on Land

Spills on land include spills on rock, gravel, soil and/or vegetation. It is important to note that soil is a natural sorbent, thus spills on soil are generally less serious than spills on water as contaminated soil can be more easily recovered. Generally spills on land occur during the late spring, summer or fall when snow cover is at a minimum. It is important that all measures be undertaken to avoid spills reaching open water bodies.

1. In the event of a spill, any person who found it should report this to the Hamlet Foreman. The Hamlet Foreman should, upon notification, determine the source, the extent and size of the spill. The Hamlet Foreman is responsible to take the appropriate action and alert the necessary people.
2. Use the reporting procedures to notify the proper authorities.

3. If the area in which the spill occurred is accessible to the public or domestic pets, the contaminated area must be clearly marked or cordoned off to restrict access. Keep children and interested bystanders away from cleanup activities.
4. Protective clothing (at a minimum, rubber or latex gloves and rubber boots) should be worn when cleaning up a spill. (Dispose of gloves and wash rubber boots when leaving spill site).
5. Assess speed and direction of spill.
6. Determine best location for containing spill.
7. In all cases of liquid spills, the initial containment step is to prevent further dispersion. This is done with cut-off ditches and dyking with soil as needed around the spill utilizing mobile heavy equipment. If necessary, absorbents (example Zorbal, Hazorb Pillows, peat moss, sawdust) or gelling agents (example - Chemgel) should be spread to prevent further spread or seepage.
8. Dykes can be created using soil surrounding a spill on land. These dykes are constructed around the perimeter or down slope of the spilled fuel. A dyke needs to be built up to a size that will ensure containment of the maximum quantity of fuel that may reach it. Fuel that pool up can be removed with sorbent materials or by pump into barrels. If the spill is migrating very slowly a dyke may not be necessary and sorbents can be used to soak up fuels before they migrate away from the source of the spill.
9. If you can't build a dyke, trenches can be dug out to contain spills as long as the top layer of soil is thawed. Shovels pick axes or a loader can be used depending on the size of trench required. It is recommended that the trench be dug to the bedrock or permafrost, which will then provide containment layer for the spilled fuel. Fuel can then be recovered using a pump or sorbent materials. Once the soil has been removed it should be replaced with clean soil to avoid slumping.

### 3.3.7. Fire or Explosion

1. In all cases the first step is to clear people from the surrounding area. Particular care must be taken to prevent inhalation of vapors that are products of combustion.
2. When fire is associated with a spill of hazardous material, the local fire department must be the first responder to fire and explosion occurrence in all cases.
3. The fire department will take all the necessary measures to extinguish the fire.
4. If necessary, the fire department will construct dykes down slope from liquid spills, to minimize spreading of fire and contain unburned fluid. Foam, CO2 or water will then be used as appropriate for the fire.

### **3.4. Procedures for Transferring, Storing, and Managing Spill-Related Wastes**

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

In most cases, spill cleanups are initiated at the far end of the spill and contained moving toward the source of the spill. Sorbent socks and pads are generally used for small spill clean up. A pump with attached fuel transfer hose can suction spills from leaking containers or large accumulations on land or ice, and direct these larger quantities into empty drums. Hand tools such as cans, shovels, and rakes are also very effective for small spills or hard to reach areas. Heavy equipment can be used if deemed necessary, and given space and time constraints.

Used sorbent materials are to be placed in barrels for future disposal. All materials mentioned in this section are available in the spill kits located at the Hamlet office and Hamlet Forman truck. Following clean up, any tools or equipment used will be properly washed and decontaminated, or replaced if this is not possible.

For most of the containment procedures outlined in Section 3.3, spilled petroleum products and materials used for containment will need to be placed into containers such as empty waste oil/fuel containers and sealed for proper disposal. Contaminated soil, snow or any hazardous material should be disposed in a specific area of the solid waste facility. After the clean up of a sewage spill, the contaminant should be disposed at the sewage waste facility.

### **3.5. Procedures for Restoring Affected Areas, Providing Inspectors with Status Updates and Cleanup Completion**

Once a spill of reportable size has been contained, the Hamlet of Sachs Harbour will consult with the regulatory authorities to determine the level of cleanup required. The Regulator may require a site specific study to ensure appropriate clean up levels are met. Criteria that may be considered include natural biodegradation of oil, replacement of soil and revegetation. Also, the soil will be remediated to meet Government of Northwest Territories (GNWT) soil criteria and water will be addressed so that it meets the Canadian Council of Ministers of the Environment (CCME) requirements for the protection of aquatic life.

## 4. Resource Inventory

### 4.1. On-Site Resources

Spill kits are indicated in figure 1.6. The contents are described below. In addition, earth moving and other equipment located in the Hamlet of Sachs Harbour is also listed below.

#### 4.1.1. Contents of Spill Kits

N/A

#### 4.1.2. Earth moving and other equipment

Hamlet Loader, Graders and Trucks will be made available.

#### 4.1.3. Tool kit

N/A

### 4.2. Off-Site Resources

Canadian Coast Guard		519-383-3966
Environment Canada	Emergencies Duty Office	1-866-845-6047*
Environment Canada	Northern Division	1-867-920-8130*
Fisheries and Oceans Canada (Inuvik)	Manager	1-867-777-7520
GNWT Environment and Natural Resources		1-867-678-6650
GNWT territorial emergency Management	Measures Office	867-873-7554*
Hamlet of Sachs Harbour	SAO	867-690-4351
Hamlet of Sachs Harbour	Foreman	867-690-3011
Hamlet of Sachs Harbour Health Center		867-690-4181
Indian and Northern Affairs Canada	Inspcctior	1-867-777-8900
Inuvialuit Land Administration	Main Office	1-867-977-7100
NWT 24-Hour Spill Line**		1-867-920-8130*
NWT Emergency Services Division-MACA	Manager	1-867-873-7554*
NWT Power Corporation		867-690-4546
RCMP		867-690-1111
Environmental Health		1-867-777-7250 or

Officer		1-867-777-7220
Tele-Care Health Line		1-888-255-1010
Volunteer Fire Hall		867-690-2222

\*24 Hour phone line

\*\* Can be call collect

## **Training Program**

Training will comprise of the following:

In the past we used the Emergency Plan to train and practice the procedures.

In the future we will improve on our Emergency Plan train and retrain the staff and practice the procedures.

New Employees Orientation is to be advised of and review the spill procedures.

Old Employees Reviews of Spill procedures and practices.

## 5. References

Water Resources Division Indian and Northern Affairs Canada. (2007). *Guideline for Spill Contingency Planning*.

Green Engineering Ltd. (2010). *Background Report for the Hamlet of Sachs Harbour*.

Google Earth, 2010

### Schedule A: NT-NU Spill Report Form



## NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE

TEL: (867) 926-8130

FAX: (867) 973-0924

EMAIL: spills@gov.nt.ca

REPORT LINE USE ONLY

<b>A</b>	REPORT DATE: MONTH - DAY - YEAR		REPORT TIME		<input type="checkbox"/> ORIGINAL SPILL REPORT OR <input type="checkbox"/> UPDATE # _____ TO THE ORIGINAL SPILL REPORT	REPORT NUMBER
	OCCURRENCE DATE: MONTH - DAY - YEAR		OCCURRENCE TIME			
<b>B</b>	LAND USE PERMIT NUMBER (IF APPLICABLE)		WATER LICENSE NUMBER (IF APPLICABLE)			
<b>C</b>	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION					
<b>D</b>	REGION <input type="checkbox"/> NWT <input type="checkbox"/> NUNAVUT <input type="checkbox"/> ADJACENT JURISDICTION OR OCEAN					
<b>E</b>	LATITUDE			LONGITUDE		
	DEGREES	MINUTES	SECONDS	DEGREES	MINUTES	SECONDS
<b>F</b>	RESPONSIBLE PARTY OR VESSEL NAME			RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION		
<b>G</b>	ANY CONTRACTOR INVOLVED			CONTRACTOR ADDRESS OR OFFICE LOCATION		
<b>H</b>	PRODUCT SPILLED		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES	U.N. NUMBER		
	SECOND PRODUCT SPILLED (IF APPLICABLE)		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES	U.N. NUMBER		
<b>I</b>	SPILL SOURCE		SPILL CAUSE		AREA OF CONTAMINATION IN SQUARE METRES	
<b>J</b>	FACTORS AFFECTING SPILL OR RECOVERY		DESCRIBE ANY ASSISTANCE REQUIRED		HAZARDS TO PERSONS, PROPERTY OR ENVIRONMENT	
<b>K</b>	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PREPARED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS					
<b>L</b>	REPORTED TO SPILL LINE BY	POSITION	EMPLOYER	LOCATION CALLING FROM	TELEPHONE	
<b>M</b>	ANY ALTERNATE CONTACT	POSITION	EMPLOYER	ALTERNATE CONTACT LOCATION	ALTERNATE TELEPHONE	
REPORT LINE USE ONLY						
<b>N</b>	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (613) 926-8130	
LEAD AGENCY = EC = CCR = GSWT = SN = CA = INAC = NES = TC			SIGNIFICANCE = MINOR = MAJOR = UNKNOWN		FILE STATUS = OPEN = CLOSED	
AGENCY	CONTACT NAME		CONTACT TIME	REMARKS		
LEAD AGENCY						
FIRST SUPPORT AGENCY						
SECOND SUPPORT AGENCY						
THIRD SUPPORT AGENCY						



### 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](mailto: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 867-873-5924. Spills can still be phoned in by calling collect at 867-920-8130.

<b>A. Report Date/Time</b>	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. <b>Please do not fill in the Report Number:</b> the spill line will assign a number after the spill is reported.
<b>B. Occurrence Date/Time</b>	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).
<b>C. Land Use Permit Number / Water Licence Number</b>	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.
<b>D. Geographic Place Name</b>	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 and direction from the nearest population center. You must include the geographic coordinates (Refer to Section E).
<b>E. Geographic Coordinates</b>	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.
<b>F. Responsible Party Or Vessel Name</b>	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. <b>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.</b>
<b>G. Contractor Involved?</b>	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.
<b>H. Product Spilled</b>	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 (eg: UN1203 for gasoline; UN1202 for diesel fuel; UN1863 for Jet A & B)
<b>I. Spill Source</b>	Identify the source of the spill: truck, ship, home heating fuel tank and, if known, the cause (eg: fuel tank overflow, leaking tank; ship ran aground; traffic accident, vandalism, storm, etc.). Provide an estimate of the extent of the contaminated/impacted area (eg: 10 m <sup>2</sup> )
<b>J. Factors Affecting Spill</b>	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.
<b>K. Additional Information</b>	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: eg. "Page 1 of 2", "Page 2 of 2" etc. <b>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".</b>
<b>L. Reported to Spill Line by</b>	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.
<b>M. Alternate Contact</b>	Identify any alternate contacts. This information assists regulatory agencies to obtain additional information if they cannot reach the individual who reported the spill.
<b>N. Report Line Use Only</b>	Leave Blank. This box is for the Spill Line's use only.

## Schedule B: Immediately Reportable Spill Quantities

TDG Class	Substance for NWT 24 Hour Spill Line	Immediately Reportable Quantities
1 2.3 2.4 6.2 7 None	Explosives Compressed gas (toxic) Compressed gas (corrosive) Infectious substances Radioactive Unknown substance	Any amount
2.1 2.2	Compressed gas (flammable) Compressed gas (non-corrosive, non-flammable)	Any amount of gas from containers with a capacity greater than 100 L
3.1 3.2 3.3	Flammable liquids	> 100 L
4.1 4.2 4.3	Flammable solids Spontaneously combustible solids Water reactant	> 25 kg
5.1 9.1	Oxidizing substances Miscellaneous products or substances excluding PCB mixtures	> 50 L or 50 kg
5.2 9.2	Organic peroxides Environmentally hazardous	> 1 L or 1 kg
6.1 8 9.3	Poisonous substances Corrosive substances Dangerous wastes	> 5 L or 5 kg
9.1	PCB mixtures of 5 or more ppm	> 0.5 L or 0.5 kg
None	Other contaminants (e.g. crude oil, drilling fluid, produced water, waste or spent chemicals, used or waste oil, vehicle fluids, waste water, etc.)	> 100 L or 100 kg
None	Sour natural gas (i.e. contains H <sub>2</sub> S) Sweet natural gas	Uncontrolled release or sustained flow of 10 minutes or more

In addition, all releases of harmful substances, regardless of quantity, are to be reported to the NWT 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.