

**24 Hour
Iqaluit International Airport
Design and Build Joint Venture
Contact:
514 236-8378**

**SPILL CONTINGENCY PLAN
IQALUIT INTERNATIONAL AIRPORT IMPROVEMENT
PROJECT**

Iqaluit, Nunavut

Prepared for:

BOUYGUES-SINTRA JOINT VENTURE

June, 2015

Revision 1.1


O/Ref.: QE14-214-11

SPILL CONTINGENCY PLAN IQALUIT INTERNATIONAL AIRPORT IMPROVEMENT PROJECT

Prepared for:

IQALUIT INTERNATIONAL AIRPORT IMPROVEMENT PROJECT "IIAIP" BOUYGUES-SINTRA JOINT VENTURE

Prepared and reviewed by:



Greg Johnson, M.Sc.A, P.Eng.
Project Director – Northern Projects

Approved by:



Sylvain Laberge
Director – Northern Projects



June, 2015

REV. 1.1

O/Ref.: QE14-214-11

PREAMBLE

This Emergency and Spill Response Plan is for all works that are subject to a water licence for the Iqaluit International Airport Improvement Project.

The Plan will be updated and revised as necessary if operations are modified or if type and quantity of waste stored changes.

Formal distribution of the Plan has been made to:

Aboriginal Affairs and Northern Development Canada - Nunavut Field Operations
969 QIMUGJUK BUILDING
PO BOX 2200
IQALUIT (Nunavut) X0A 0H0
Fax: 867 979-6445

Additional copies and updates of this Plan may be obtained from:

Bouygues-Sintra Joint Venture

Att.: Michel Boulianne
4984 Place de la Savane
Montréal, QC, H4P 2M9
TEL: 514 341-5331
michel.boulianne@sintra.ca

TABLE OF CONTENTS

1. GENERAL	1
2. CONTAMINATED SOILS – TRANSPORT AND STORAGE.....	4
3. STORAGE OF LIQUID	5
4. TRANSPORT OF GASOLINE AND DIESEL	6
5. DUTIES AND RESPONSIBILITIES	7
6. TRAINING AND DRILLS	10
7. MATERIALS AND EQUIPMENT	11
8. SPILL RESPONSE PROCEDURES.....	12
8.1 Spills on Land.....	13
8.2 Spills on Water	13
9. POTENTIAL SPILL ANALYSIS.....	14
10. REPORTING REQUIREMENTS	19

LIST OF APPENDICES

Appendix A	Standard Nunavut Spill Report Form
------------	------------------------------------

LIST OF FIGURES

Figure 1: Site Plan Showing Locations of Site Works	2
Figure 2: Spill Response Team Organization Chart.....	9

LIST OF TABLES

Table 1 : Approximate Location of Area Impacted By the Airport Project.....	1
Table 2: Bouygues-Sintra Joint Venture management contact information.....	7
Table 3: Spill Kit Content	11
Table 4: Contact List for Spill Reporting	19

1. GENERAL

The spill emergency plan (Plan) was developed to assist in implementing measures to protect the environment and minimize impacts from spill events. It provides precise instructions to guide all personnel in emergency spill response situations. The Plan outlines procedures for responding to spills while minimizing potential health and safety hazards, environmental damage, and cleanup costs.

This Plan is required as part of the works subject to a water licence as part of the Iqaluit International Airport Improvement Project in Iqaluit, Nunavut.

The activities listed in this Plan will be located within the airport boundary. The following table presents the approximate location of the airport boundary:

TABLE 1: Approximate Location of Area Impacted by the Airport Project

<i>Coordinate</i>	<i>Latitude</i>	<i>Longitude</i>	<i>Description</i>
1	63°46'7.78"	68°33'45.96"	Northeastern Corner of Site
2	63°45'53.52"	68°34'45.42"	Northwestern Corner of Site
3	63°44'48.20"	68°32'32.54"	Southwestern Corner of Site
4	63°44'57.25"	68°31'52.53"	Southeastern Corner of Site

The Sylvia Grinnell River runs along the western side of the site. The river and the portion of the site that drains into it will not be affected by the works covered by this permit.

There is a drainage ditch that runs along the northeastern side of the runway. It starts approximately 550 metres north of the existing Taxiway A and joins another drainage ditch at the emergency access road. The drainage then continues approximately halfway between the runway and the apron. The water then passes under the existing Taxiway B and drains into Airport Creek. The area between the runway and the apron as well as Taxiway A and Taxiway B will be subject to works that will be covered by this permit.

To the east of the site there is a creek that drains along most of the northern edge of the airport that is locally referred to as Carney Creek. This creek drains into Frobisher Bay. This creek will be covered at the location of the new airport terminal to make room for a parking lot.



Figure 1: Site Plan Showing Locations of Site Works
Source: Google Maps, 2014

The spill emergency plan will be implemented to ensure that the containment cell respects all applicable laws, regulations and requirements from federal and territorial authorities. Bouygues-Sintra Joint Venture will obtain and comply with all required permits, approvals and authorizations required for the operations. The following applicable Regulations and documents constitute an integral part of the spill contingency plan:

The Canadian Environmental Protection Act controls hazardous substances from their production and/or import, their consumption, storage and/or disposal.

The federal Transportation of Dangerous Goods Act and Regulations ensure the protection of public health and safety, and the environment during the handling and transport of dangerous goods. The Regulations apply to all modes of transportation, by road, by sea, and by air.

The Nunavut Environmental Protection Act governs the protection of the environment from contaminants. The act defines offences and penalties as well as the powers of government inspectors.

The Nunavut Spill Contingency Planning and Reporting Regulations describe requirements for spill reporting and emergency planning.

The Land Transportation Emergency Response Guideline for Petroleum Spills developed by the Canadian Petroleum Products Institute outlines scope, emergency response code of practice, response time guidelines, response equipment and personnel capability requirements.

2. CONTAMINATED SOILS – TRANSPORT AND STORAGE

Contaminated soils will be excavated from their current location and transported to the containment cell. The total volume of contaminated soils to be excavated was 8,249 m³ (7,704 m³ of PHC soil and 545 m³ of arsenic soil). The soil will be excavated using a hydraulic excavator and placed into a truck with a leak-proof box. The contaminated soil will be placed in the truck box so that any contaminated soil that may fall during the filling will fall into an area that will have to be excavated in the future. If no such area is available then the area where the trucks are filled will need to be scrapped at the end of each working day.

Trucks will be monitored for leakage and any trucks that show signs of a major leak will be taken out of service until the hole is repaired.

Contaminated soil from the trucks will be placed directly into the containment cell to ensure that there is no chance for additional spillage outside of the containment area.

The entire transport route will be monitored and should a spill occur outside of the contaminated area, or the containment area, then the soil will be immediately removed by any means practicable.

Emergency spill response equipment (i.e., spill kits) will be installed at the excavation site and the containment cell area. The spill kits will be regularly inspected and maintained. All spill kits will contain the appropriate type, size and quantity of equipment for the volume and type of product present at the storage location as well as the environment likely to be affected by a spill (i.e., ground).

3. STORAGE OF LIQUID

As part of the spill emergency response plan, the Bouygues-Sintra Joint-Venture is responsible for implementing, through its management team, the following procedures:

Liquid Hydrocarbons will be stored at the construction workshop. The storage location has a capacity to hold a maximum of 20 drums. The storage site will be inspected daily, for signs of leakage or spills. The list of hydrocarbon products including the size and type of storage container and estimated volume to be stored at each location is listed below:

- Motor Oil – Under 200 L of multi-format plastic containers;
- Hydraulic Oil – Under 200 L of multi-format plastic containers.

In addition, 3,568 units of 205 L closed-top metal drums of bitumen placed by 4 units on a pallet are stored at the construction area landside of the airport.

An emergency spill response kit will be installed at each of the liquid storage location. The spill kits will be inspected and maintained during the inspection of the storage sites. All spill kits will contain the appropriate type, size and quantity of equipment for the volume and type of product present at the storage location as well as the environment likely to be affected by a spill (i.e., soil/water). The spill kits will include a fire extinguisher.

4. TRANSPORT OF GASOLINE AND DIESEL

The project will use a 5,000-litre and an 18,488-litre fuel truck to transport fuel for refuelling of equipment.

The truck will be equipped with a spill kit and fire extinguisher large enough to respond to any emergencies caused by a leakage or spillage from the truck. The spill kit will be inspected at the start of every shift to ensure that it is fully stocked. If any supplies are used during the shift they should be replaced during the fuel truck refilling.

Gasoline for hand tools and small engines will be transported on the site using red coloured UN approved Jerry cans being no more than 5 years old. The cans will be well identified with the product that it contains. Jerry cans will be inspected prior to use to ensure there is no damage or leakage. Jerry cans will be returned to a central storage location at the end of each shift. All Jerry cans storage locations shall be equipped with a spill kit in case of any spills.

Refuelling activities will require the use of spill trays or must be done in an area that includes secondary containment to contain any spills that may occur.

5. DUTIES AND RESPONSIBILITIES

As part of the spill emergency response plan, the Bouygues-Sintra Joint-Venture is responsible for implementing, through its management team, the following procedures:

- Training of site personnel in spill response procedures and the proper use of response equipment and materials;
- In the event of a spill, mobilize all available site personnel, equipment and tools, as required;
- Implement all required health and safety procedures at the site of the spill;
- Eliminate all fire hazards and potential ignition sources near the spill area;
- Control the source of the spill (i.e., reduce or stop product discharge);
- Contain the spilled product using the most appropriate methods and equipment (i.e., dykes, ditches, sorbent materials, containment booms, and other barriers);
- Evaluate the possibilities of recovering spilled materials;
- Obtain, if required, assistance from government agencies such as Environment Canada;
- Comply with all applicable guidelines and regulations;
- Conduct a preliminary assessment of environmental impacts;
- Report the spill to the Government of Nunavut Spill Report Line, within 24 hours of the event, and submit a written spill report using the appropriate form (see below for the list of information required in the report).

Table 2 presents the management team members responsible for overseeing emergency spill response operations and their contact information.

TABLE 2: Bouygues-Sintra Joint-Venture Management Contact Information

Position	Contact	Telephone Number
Incident Commander	Bindu Sankunny	403 461-7804
Backup Incident Commander	QSE Director	604 688-9255
Site Superintendent - SINTRA	Serge Veilleux	418 572-0118
Site Superintendent – Bouygues Building Canada	Thierry LeGrand	867 222-1469
Project Manager	Victor Trichet	514 207-8355
Construction Manager	Patrice Richard	514 236-4123 or 514 236-8378
Project Director	Bernard Senouci	418 817-3073

As part of the spill response plan, the Incident Commander is responsible for implementing the following procedures:

- Assume authority over the spill scene and personnel involved;
- Activate the Spill Response Plan;
- Evaluate the initial situation and assess the magnitude of the spill;
- Develop an overall plan of action;
- Report to the Project Manager and provide recommendations on resource requirements (additional manpower, equipment, material, etc.) to complete the cleanup effort. The responsibility of the Site Superintendent is to mobilise personnel and equipment to implement the cleanup.

The responsibilities of the Project Manager with support from the HAZMAT Manager (QSE Manager) include the following:

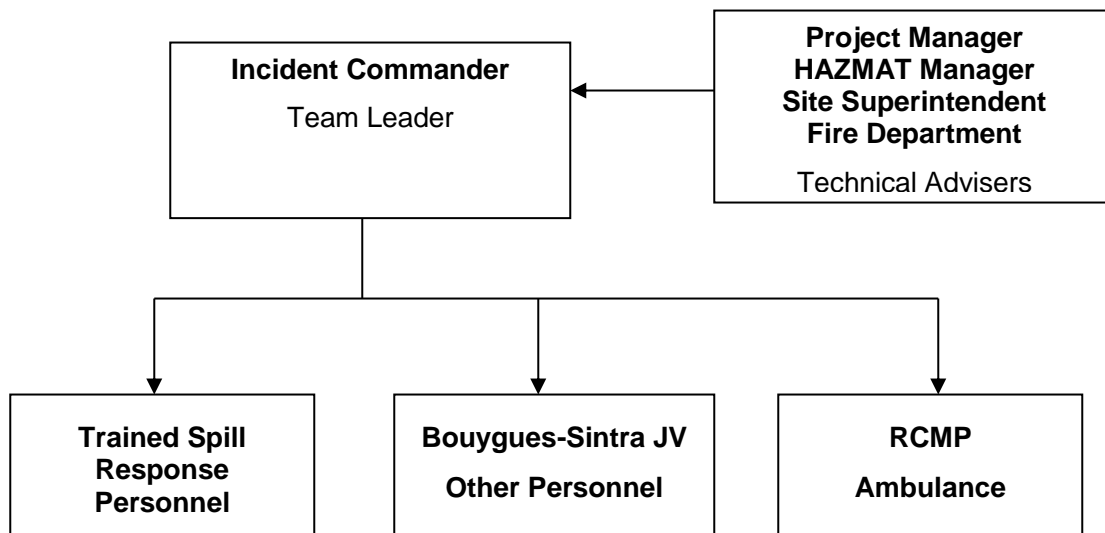
- Report the spill to NT-NU 24-hour Spill Report Line at 867 920-8130;
- Provide liaison with Management to keep them informed of cleanup activities;
- Obtain additional required resources not available on-site for spill response and cleanup;
- Act as the spokesperson with government agencies as well as the public and the media as appropriate;
- Document the cause of the spill and effectiveness of the cleanup effort, and implement the appropriate measures to prevent a recurrence of the spill;
- Prepare and submit follow-up documentation required by appropriate regulators;
- Ensure that the spill is cleaned up and all follow-up communication and reports are filed with the GN Environment Department and Environment Canada offices.

The responsibilities of the HAZMAT Manager (QSE Manager) include the following:

- Work with the Operations Manager on regulatory follow-up as necessary;
- Act as the spokesperson with government agencies as well as the public and the media on any significant spill events.

Once a spill event is reported, the Incident commander, will establish a specific strategy for containing and controlling the spill and to initiate the cleanup activities. The Project Manager and HAZMAT Manager (QSE Manager) as well as other external resources such as the Iqaluit Fire Department may act as technical advisers prior to and during the intervention. The trained Spill Response Team will conduct all emergency spill response operations under the leadership of the Incident commander. During the cleanup phase of the intervention other site personnel (e.g., heavy equipment operators, labourers, etc.) may be involved in the intervention. Figure 2 presents an organization chart of the Spill Response Team.

Figure 2: Spill Response Team Organization Chart



6. TRAINING AND DRILLS

All site personnel will be informed that any spill of contaminated soils, whatever the extent, has to be reported immediately to the Incident commander.

The Incident commander will select a certain number of workers to form the Spill Response Team. Crew members will be trained in emergency spill response procedures and operations. Training will include knowledge in the:

- Properties of the contaminated soils;
- Common causes of spills;
- Environmental effects of spills;
- Worker health and safety during emergency interventions;
- Personal protective equipment and clothing;
- Spill response procedures and techniques on land; and,
- Spill response equipment and materials.

Training will also include analysis of potential spill events that are more likely to occur during waste management operations. Spills are more likely to be caused by:

- Human error during the handling of hazardous waste containers;
- Rupture of waste containers from accidental damage, deterioration or equipment failure.

Training will include spill response drills and classroom training.

7. MATERIALS AND EQUIPMENT

In order to prevent spills and to provide adequate response in case of spill events, Bouygues-Sintra Joint-Venture will maintain on-site the appropriate type and quantity of response equipment and materials.

Two spill kits will be strategically placed primarily in areas of contaminated soil excavation and placement to facilitate immediate first response in the event of a release to land. The content of the spill kits is listed in Table 3.

TABLE 3: Spill Kit Content

Spill Kit	Minimum Contents	Quantity
1 yd ³ capacity For Contaminated Soil Excavation Areas	1 yd ³ Quatrex Bag	1
	Shovel	2
	Pairs of gloves	2
QUATREX SPILL KIT Q 106 or equivalent For Fuel trucks	Sorbent pads of 15" X 19" X 12 oz	25
	Sorbent booms 3" x 12'	1
	Sorbent socks 3" X 48"	3
	Granular sorbent (7 L)	1
	Disposal bags 30" x 50"	2
3* 45 gallon capacity	45 gallon plastic drum	3
	Sorbent pads of 15" X 19" X 12 oz	300
	Sorbent socks 3" X 48"	15
	Sorbent booms 5" x 10'	6
	Epoxy sticks	3
	Disposal bags 40" x 60" x 6 mil	9
	Pairs of nitrile gloves	6

In addition to the spill response material listed above, a loader, excavator, bulldozer and a dump truck are available to aid in spill response and recovery efforts.

8. SPILL RESPONSE PROCEDURES

A spill is defined as the discharge of contaminated soil or any hazardous liquid out of its containment and into the environment. Potential hazards to humans, vegetation, and wildlife vary in severity, depending on several factors including nature of the material, quantity spilled, location and season. Contaminated soils and hazardous liquids are the main groups of waste materials that may be spilled (for soil 1 truckload between 10 and 15 m³ maximum and for hazardous liquids 1 fuel truck load of 18,488 L) and therefore spill response procedures will focus on these types of materials.

All site personnel will be briefed on the procedures to be followed to report a spill and initiate spill response. The first person to notice a spill will take the following steps:

1. Immediately warn other personnel working near the spill area;
2. Evacuate the area if the health and safety of personnel is threatened;
3. Notify the Incident commander, who will initiate the spill response operations;
4. In the absence of danger, and before the spill response team arrives at the scene, take any safe and reasonable measure to stop, contain and identify the nature of the spill.

All spill response interventions carried out by the spill response team will follow these general procedures:

Source Control - Reduce or stop the flow of product without endangering anyone. This may involve very simple actions such as sealing a puncture hole with almost anything handy (e.g., a rag, a piece of wood, tape, etc.);

Protection - Evaluate the potential dangers of the spill in order to protect sensitive ecosystems and natural resources. Block or divert the spilled material away from sensitive receptors. This can also be achieved by using various types of barriers;

Clean up the Spill – Recover and containerize as much soil as possible. Recover and containerize/treat contaminated soil, water, and snow;

Report the Spill - Provide basic information such as date and time of the spill, type and amount of product discharged, location and approximate size of the spill, actions already taken to stop and contain the spill, meteorological conditions and any perceived threat to human health or the environment. Reporting requirements are presented in Section 10.

Response procedures specific to spills on land and snow are presented in the following sections. Because of the nature of the contaminated soil and because the soils will not be crossing any water bodies, response to spills on water are not discussed in this Plan.

Procedures will vary depending on the season. Spill response operations, techniques, equipment and materials are further detailed in the spill response training course manual.

8.1 Spills on Land

Response to spills on land will include the general procedures previously detailed. The main spill control techniques involve the immediate removal of any contaminated soil. Barriers should be used to prevent any water from contacting the contaminated soils until they have been removed. Any areas where a major amount of soil has spilled (a truck load of soil or more) should be tested to confirm that all of the contaminated soils have been removed.

8.2 Spills on Water

Response to spills on water will include the general procedures previously detailed. The main spill control techniques involve the immediate stopping of the drainage of liquid into the water body and containment of the liquid on the water body. Barriers should be used to prevent any liquid from flowing into a water body. Any areas where a major amount of liquid has spilled should be tested to confirm that all of the contaminants have been removed.

9. POTENTIAL SPILL ANALYSIS

In order to prepare for emergency spill response, potential spill analysis was conducted on the worst case scenario. The exercise serves to identify potential risk areas, as well as to determine the fate of spilled products and their environmental effects. The potential spill scenario identified for this activity is:

1. Spill of contaminated soil resulting from the roll-over of a truck.

This spill scenario is analysed in detail in the following page.

➤ SCENARIO #1: SPILL CONTAMINATED SOIL CAUSED BY A TRUCK ROLL-OVER

Description of incident: Spill of the contaminated soil from the truck box during a roll-over;

Potential causes: resulting from operation over uneven ground or while lifting the dump box when not level, human error, accident;

Hazardous products spilled: contaminated soil;

Maximum volume spilled: 15 m³;

Estimated time to spill entire volume: 10 seconds;

Immediate receiving medium: other soil;

Most probable direction of contamination migration: since the area where the operations will occur is relatively flat the soil will remain next to the truck box;

Distance and direction to nearest receiving body of water: drainage ditch approximately 50 m south-southeast of the containment area;

Resources to protect: drainage ditch, which is over 1.4 km away from the site. It should be noted that the operations will not pass over or near to the drainage ditch, and since the contamination is soil there is no risk of it spreading quickly;

Estimated emergency spill response time: 5 minutes after spill is noticed;

Spill response procedures: Bring another truck and an excavator to the spill area. Excavate the contaminated soils into the truck and dispose of in the containment area.

Safety hazards associated with the spill event: The greatest risk is during the initial turn-over of the truck. Keeping personnel away from operating machinery will limit this risk. Once the contaminated soil is on the ground the risks are greatly reduced. Risks to personnel (from inhalation and dermal contact) can be prevented by the proper use of personnel protective equipment;

Measures and procedures to prevent such events from occurring: include regular inspection of vehicles and heavy equipment on site, setting speed limits on the work site and further limiting speed over rough or uneven areas, proper training of heavy equipment operators, safety orientation of workers, and use of a spotter when backing up.

➤ **SCENARIO #2: DRUM STORAGE AREA**

The drum storage area will consist of a levelled pad where pallets of Petroleum/Oil/Lubricant (POL) drums will be staged / stockpiled. All pallets of drums will be somewhat independent and, therefore the spillage of one drum should not affect the others.

Description of incident: Two potential situations could occur that would cause a spill:

1. The accidental spillage of fuel during transfer into intermediate storage tanks, or
2. The rupture of drums, possibly from a violent impact caused by the collision of a vehicle or piece of heavy equipment;

Potential causes: Collision with a drum by heavy equipment or a vehicle, vandalism;

Hazardous products spilled: Petroleum, oil, lubricants, glycol;

Maximum volume spilled: In the first case, the spilled volume would be, at worst, 45 gallons (205 L), which represents the entire volume of one drum. In the other case, we can assume that the impact would occur at mid-height on two stacked pallets and, at worst, sixteen drums would be affected. Therefore the spilled volume should not exceed a total volume of 720 gallons (3,273 L);

Estimated time to spill entire volume: In either case the spillage flow rate would be moderate to high and we can assume that the entire volume would be spilled within 15 to 20 minutes;

Immediate receiving medium: soil;

Most probable direction of contamination migration: The general direction of migration would be along the natural drainage pathway. The high water mark is to be located minimum 100 metres down-gradient from the drum storage area. It is unlikely that the spilled fuel would reach any water body because the porous soil surrounding the storage area would soak up part of fuel, and also because the low slope will not allow for rapid flow of fuel, thereby providing enough time for the spill response procedures to take effect;

Distance and direction to nearest receiving body of water: drainage ditch approximately 50 m south-southeast of the containment area;

Resources to protect: Carney Creek, which is over 1.4 km away from the site. It should be noted that the operations will not pass over or near to the creek, and since the contamination is soil there is no risk of it spreading quickly;

Estimated emergency spill response time: The spill would be communicated by the witness of the scene to the incident commander, or in his absence, the backup incident commander. The latter would then go down the chain of command and advise the appropriate persons of the immediate actions to be taken. Radio communication is to be used at all times on the site and key team members will carry a radio with them at all times. The drum storage area can be reached from any other area of the site within a maximum of 15 minutes;

Spill response procedures: The personnel responsibilities are outlined in previous sections of this document. The witness of the spill would be advised to try to stop the source of the spill, while waiting for backup help to arrive; his actions would be immediate. The Contractor site Technical Advisor would coordinate the spill response activities carried out by the containment unit. Members of this unit would be mobilized to the spill site.

Mobilization of containment equipment to the spill site can be carried out rapidly. A bucket loader can reach the site of the spill within a matter of minutes. Stockpiles of sand and gravel are also located in the vicinity, if required for berm construction. Spill response kits containing sorbent material will be kept next to the drum storage location. Containment would be carried out by the construction of soil berms and the installation of sorbent booms. After containment, clean-up equipment can be mobilized to the site. Excavators, loaders and dump trucks are all available as part of the project works. Should none be available, local contractors with the necessary equipment in town will be hired. There is a vacuum trailer unit in Iqaluit available for the collection of the free product resulting from a spill;

Safety hazards associated with the spill event: These include the risk of fire. This can be minimized by preventing personnel from smoking near the spill scene. Risks to personnel (from inhalation and dermal contact) can be prevented by the proper use of personnel protective equipment;

Measures and procedures to prevent such events from occurring: include regular inspection of the drum storage area and containment system, and safety rules concerning the use of vehicles and heavy equipment on site, especially in close proximity of this area (e.g., speed limits, training of heavy equipment operators, restricted area posting, safety orientation of workers, etc.).

➤ **SCENARIO #3: FUEL DELIVERY**

Description of incident: The fuel delivery operations (fuel truck) to supply fuel to heavy equipment and to carry fuel from the fuel truck to the site operating areas have some risk of spillage. Any accident involving the fuel delivery truck could result in the loss of its entire volume of fuel. Such an accident could occur almost anywhere on site, any place the fuel truck have access to;

Potential causes: Damage to the truck, accident with another vehicle, roll-over of the truck;

Hazardous products spilled: Diesel fuel;

Maximum volume spilled: This would be the volume of the storage tank on the back of the fuel truck. The largest truck holds 18,488 L;

Estimated time to spill entire volume: Depends on nature of incident, anywhere from 10 to 15 minutes to an hour;

Immediate receiving medium: Soil possibly a water body depending on where the incident occurs;

Most probable direction of contamination migration: The spill will proceed down gradient from the spill location. The direction will depend on the topography of the area where the spill occurs;

Distance and direction to nearest receiving body of water: In general, heavy equipment works at least 31 metres away from the high water mark of any body of water, except for in water works. Fuel delivery will not be conducted when equipment is closer than 31 m to the high water mark of any bodies of water. Any fuel spill at that distance would not rapidly reach the receptor. Should an incident occur over a culvert or a bridge then the distance may be as short as a few metres;

Resources to protect: Any nearby water bodies or drainage ditches, structures and minimize the area of impacted soils;

Estimated emergency spill response time: The personnel responsibilities are outlined in previous sections of this document. The witness of the spill would be advised to try to stop the source of the spill, while waiting for backup help to arrive; his actions would be immediate. The Contractor site Technical Advisor would coordinate the spill response activities carried out by the containment unit. Members of this unit would be mobilized to the spill area. It is anticipated that an initial mobilisation to a spill site would take no more than 10 minutes;

Spill response procedures: Any spills would be communicated by the witness of the scene to the incident commander, or in his absence, the backup incident commander. The latter would then go down the chain of command and advise the appropriate persons of the immediate actions to be taken. Radio communication will be used at all times on the site and key team members will carry a radio with them at all times.

Mobilization of containment equipment to the spill site can be carried out rapidly. Sorbent booms may be required to contain the oil slick and prevent further spreading or migration to any discharge stream. If the construction of an oil-water separator in the discharge stream is necessary, the following equipment and materials would be required: heavy equipment (loader or excavator), sand and gravel, piping, and tarp/geomembrane. All these equipment and materials could be mobilized within 20 to 30 minutes. If the fuel reaches a discharge stream, spill response measures may have to be implemented further downstream. After containment, clean-up equipment will be mobilized to the area. Excavators, loaders and dump trucks are all available as part of the project works. Should none be available, local contractors with the necessary equipment in town will be hired including a vacuum unit, if required. However, due to the size of temporary fuel tanks used for delivery/supply, potential impacts from spills are likely to be rapidly contained;

Safety hazards associated with the spill event: These include the risk of fire. This can be minimized by preventing personnel from smoking near the spill scene. Risks to personnel (from inhalation and dermal contact) can be prevented by the proper use of personnel protective equipment;

Measures and procedures to prevent such events from occurring: These include regular safety rules concerning the use of vehicles site, especially in close proximity to sensitive areas (e.g., speed limits, training of truck drivers, etc.).

10. REPORTING REQUIREMENTS

Quantities of hazardous substances spilled which require reporting are listed in Schedule B of the Nunavut Spill Contingency and Reporting Regulation. For example, all flammable liquid (Class 3) spills of volume equal to or greater than 100 L (half a drum) require reporting.

After the initial field emergency response to the spill event, the spill will be reported to the 24-hour Spill Report Line:

24-Hour Spill Report Line

Tel. 867 920-8130

or

Fax 867 873-6924

Additionally, the spill must be reported to AANDC to the following person:

Erik Allain

Manager Field Operations

Tel. 867 975-4295

Fax: 867 975-6445

Should the spill be of a nature, or in a location, that affects airport activities, the airport authorities will also be notified of the spill immediately following the notification of the Spill Report Line and AANDC.

Failure to report a spill can lead to fines. It is the responsibility of the Project Manager to prepare the proper reports and transmit them to regulatory authorities. Table 4 presents an additional contact list for spill reporting.

TABLE 4: Contact List for Spill Reporting

Department	Person	E-mail	Telephone
GN-DOE	Kristi Low	klowe@gov.nu.ca	867 975-7748
Fire Department (general)	-	-	867 979-5655
Fire Department (emergency)	-	-	867 979-4422
RCMP - Iqaluit	-	-	867 979-0123
Ambulance	-	-	867 979-4422

Afterwards, the spill event will be reported in writing using the standard Spill Report Form presented in Appendix A.

The written report will include the following information:

- Date and time of the incident;
- Location or map coordinates and direction of spill movement if not at steady-state;
- Party responsible for the spill; Type and estimated quantities of spilled contaminant(s);
- Specific cause of the incident;
- Status of the spill indicating if spilled materials are still moving or now at steady-state;
- Approximate surface of contaminated area;
- Factors affecting spill or recovery such as temperature, wind, etc.;
- Status on containment actions indicating whether a) naturally, b) booms, dykes or other, c) no containment has been implemented;
- Corrective action taken or proposed, to clean, contain or dispose spilled material;
- Whether assistance is required and in what form;
- Whether the spill poses a hazard to persons or property (i.e., fire, drinking water);
- Comments and recommendations;
- Name, position and employer of the person reporting the spill; and,
- Name, position department of the person to whom the spill is reported.

APPENDIX A

STANDARD NUNAVUT SPILL REPORT FORM



NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

EMAIL: spills@gov.nt.ca