Spill Contingency Plan

Type B Water Licence
Porritt Landing

Project	Porritt Landing Dredging
Location	Hay River, NT
Date of Submission	November 2024
Version #	4
Submitted by	Town of Hay River
Submitted to	MVLWB

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1. What is a Spill?

A spill is defined as a release of a substance that is likely to be an imminent environmental or human health hazard. In the event of a spill or other unauthorized discharge, on-site personnel should contact Earle Dumas (Town of Hay River) (Refer also to the contact information in Section 3), who will determine if the spilled substances should be immediately reported to the NWT 24-Hour Spill Line or is more minor in nature.

All immediately reportable spills and minor spills are to be documented including approximate quantity, product type, location, whether the spill in still in progress, odour, colour, and weather), along with cleanup responses and any outstanding concerns. This information may be required to be reported to a land-use or water licence inspector and/or included in an annual report to be submitted to fulfil requirements of a land use permit or water licence.

1.1 Immediately Reportable Spills

A spill is an immediately reportable spill if it meets or exceeds the volumes outlined in **Appendix D** of this Plan. A spill that meets or exceeds these volumes must be reported to the NWT 24-Hour Spill Report Line at +1 (867) 920-8130 using an NWT Spill Report Form in **Appendix C** of this Plan. The information submitted will be posted to the Government of the Northwest Territories (GNWT) Hazardous Materials Spills Database online at: http://www.enr.gov.nt.ca/node/3002. Spills can be more readily recovered when identified and reported.

1.2 Minor Spills

Spills with quantities less than those outlined in Appendix A do not need to be reported immediately to the NWT 24-Hour Spill Report Line but need to be tracked and documented so the relevant information can be submitted to the appropriate authority, either immediately upon request or at a pre-determined reporting interval. These can be recorded and tracked in a non-reportable spill log for task and clean up tracking.

If there is any doubt that the quantity spilled exceeds reportable levels outlined in Appendix A, the spill will be reported to the NWT 24-Hour Spill Report Line as per Section 1.1 above.

2. How to Report a Spill

Once it has been determined that a spill should be reported to the NWT 24-Hour Spill Line, the following steps should be taken:

1) The Site Supervisor is to fill out and fax or email the NWT Spill Report Form (in Appendix A) to the NWT 24-Hour Spill Line as follows:

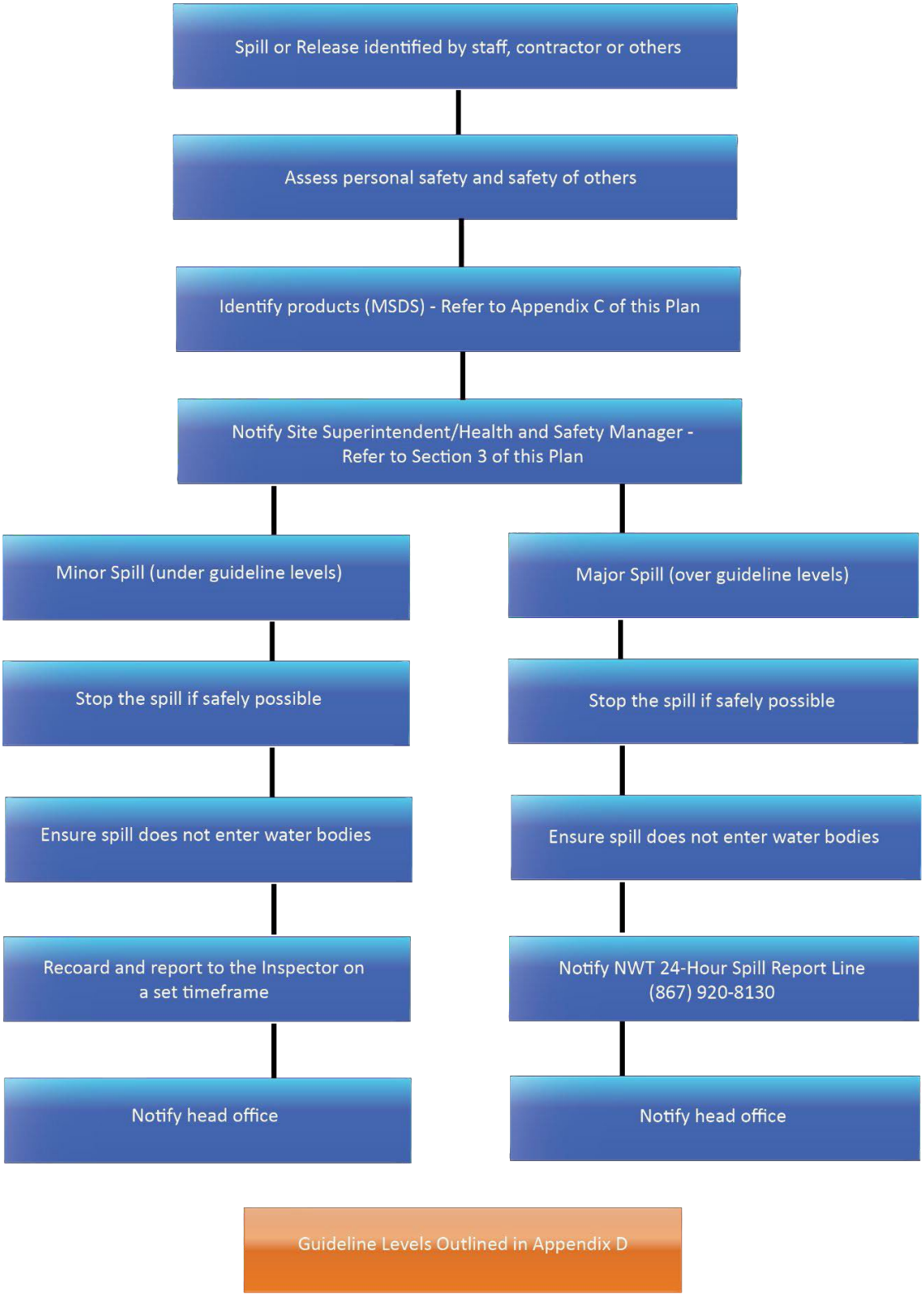
Table 1: NWT 24-Hour Spill Line Contact Information

NWT 24-Hour Spill Line Contact Information	
Phone	(867) 920 8130
Email	spills@gov.nt.ca

2) Review Figure 1: Chain of Command of the Key Response Personnel and Actions.

3) Initiate Action Plan Procedures described in see Section 7.

Figure 1: Chain of Command of the Key Response Personnel and Actions



3. Project Details

The Town of Hay River (further referred to as TOHR has developed this Spill Contingency Plan (or Plan) for Porritt Landing Dredging in accordance with AANDC's Guidelines for Spill Contingency Planning) and to comply with the Environmental Protection Act R.R.N.W.T 1990.c.

3.1 Corporate Contact Information

The following Table 1 presents the key corporate contact information for TOHR/Rowes Construction.

Table 2: Contact Information

Position	Information
Company (Head Office)	Stephane Millette
	100 – 62 Woodland Dr, Hay River NT.
	(867) 875-8322
	recdirector@hayriver.com
Project Manager	Mark Horton
	55 Miron Drive, Hay River NT.
	(867) 876-0210
	markhorton@dimensionconsulting.net
Contractor	To be determined

Section 6 outlines the chain of command of the key response personnel and their general duties, work locations, and contact information when responding to a spill, release, or unauthorized discharge. Specific details of each position's duties are outlined further in Section 7: Action Plan Procedures.

In the event of a spill involving danger to human life or the environment the on-site supervisor will have the proper equipment to contact any regulatory agencies as well as co-ordinate the necessary equipment to contain any spilled materials.

Media and public inquiries are to be directed to TOHR SAO. If media or a member of the public arrives at on-site unexpectedly, they should be directed to PM. Prior to responding to any questions, on-site personal should make every effort possible to contact TOHR SAO to discuss the situation.

3.2 Effective Date

This Spill Contingency Plan is effective as of November 2024. While this Plan is undergoing a public review, the previous version of the Plan shall take precedence and be acted in accordance with until the Board approves a subsequent Plan version.

3.3 Revisions

The Spill Contingency Plan is a living document that will be reviewed annually, at a minimum, and prior to the start of any site activities, with additional reviews as warranted. Updates should be made to reflect changes such as fuel storage locations, new hazardous materials on-site, new construction, and new personnel and associated contact information. Table 3 presents a summary of the versions of this Plan and any revisions made; it is updated each time a revision is made to the Plan. This ensures stakeholders

have the most current copy of the Plan.

Table 3: Version and Revision History

DOCUMENT HISTORY			
Version #	**Revised Section(s)**	**Description of Revision**	**Issue Date**
V1	Entire document	Prepared first version of waste plan	March 5th, 2018
V2	Section 3.7	Updated Section 3.7 as per comments from public review and MVLWB requirements	May 24th, 2019
V3	Section 3 Section 4 Section 6 Section 7 Appendix A	Updated Spill Contingency plan to include Porritt Gabion Wall Project information for Type B WL amendment application. Updated project description and contact info in Section 3. Updated Section 4 to include information Gabion Upgrades including refueling area. Updated Section 6 to ensure proper contact info was present. Updated Section 7 and removed all reference to Rowes Construction the previous contractor. Added Site Map for Gabion Upgrade in Appendix A:	April 2022
V4	Entire Document	Minor administrative updates made throughout document to reflect Licence renewal application.	November 2024

3.4 Recipients

Table 4 identifies who the most recent revision of the Plan has been distributed to:

Table 4: Recipients of this Version of the Spill Contingency Plan

Name	Position
Stephane Millette	Town of Hay River- Recreation Director- Project Sponsor
Travis Wright	Town of Hay River- Emergency Services Director
Mark Horton	Dimension Consulting -Project Manager
TBD	Site Supervisor for Contractor

3.5 Copies of Current Version of the Plan

Copies of the most current version of the Spill Contingency Plan are available on-site at all times at the following locations:

- Supervisors pick-up truck/On site excavator
- Additional copies of the Spill Contingency Plan can be obtained by contacting the Town of Hay River.

3.6 Purpose and Scope

The purpose of this Spill Contingency Plan is to outline response actions for potential spills of any size, including worst case scenarios at the Porritt Landing Dredging Project by TOHR and all contractors. 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 and environmental damage and is a reference resource for when clean-up responses are required. The Plan has been prepared to ensure quick access to all the information required when responding to a spill.

3.7 Environmental, Health and Safety (EHS)

The Spill Contingency Plan will be presented to all staff (employees and contractors) during their on-site orientation sessions, including where copies of the Plan can be located on-site, training in using spill equipment, steps to be undertaken in the event of a spill, and where spill kits and related materials are located. Town of Hay River is committed to keeping personnel trained and fluent in the latest technologies and spill response methods. During excavation activities a floating silt curtain will be installed to limit the turbidity to the construction area, this curtain will be installed from shore to shore (approx. 28 meters). This curtain will act as an in place spill boom while any in-water work is occurring. Stockpile location will be bermed off with existing materials to contain any water and ensure no run-off into the Hay River. As the excavation and hauling portion of the project is controlled there is no risk of sediment loading into the Hay River as the stockpile location will not be over loaded. In the event we require more room for material stockpiling, excavation activities will stop and berm sections will be added. The erosion and sediment control measures for the project are outlined in detail in the MV2018L7-0002 - Town of Hay River- Erosion and Sediment Control- Plan V.1 - Porritt Landing.

3.8 Project Description

The aim of the Porritt Landing Project is to ensure there is adequate water depth to safely launch and dock recreational watercraft within this park land area. The current water depth will not allow a safe docking area for watercraft as there have been water levels less than 300mm. The Town of Hay River will be conducting:

- Installation, operation, and maintenance of marina including the boat launch, gabion retaining structure, sheet pile retaining wall, and other structures;
- Dredging;
- Shoreline remediation to address riverbed erosion; and,
- Installation and maintenance of a floating dock.

3.9 Site Description

Porritt Landing is currently used as a boat launch and dock for recreational watercraft. It currently has a sheet pile retaining wall that installed many years ago as well as a floating dock system that is installed in the spring and removed in the fall. There is currently a parking lot for vehicle and boat trailers as well a picnic table area with fire pits. Porritt Landing Boat Launch is located on Vale Island and provides access to the Hay River and Great Slave Lake. The facility is operated by the Town of Hay River and is an important recreational infrastructure for the area as it is the only public boat launch available for the Hay River area. New docks were installed in 2018 to improve usability and access for users.

4. Inventory of Spill Response Resources

4.1 Fuels and Hazardous Materials

There will be no fuel stored on site except for tidy tanks in pick-ups.

Table 5: Fuel and Hazardous Materials

Material	Type of Storage Container	Amount Normally On-Site	Maximum Amount On-Site	Use
Porritt landing				
Diesel	Tidy Tank	350L	350L	Equipment

Equipment to be used (make and model dependent on successful bidder)

- Tracked excavator
- Bobcat
- Dump Truck
- Pick-up truck

4.2 Designated Refueling Area

All equipment will be refueled at the designated refueling area presented in Appendix A. This location is a minimum of 35m from the water. The designated refueling area will have a spill kit in place and secondary containment if required. Other hazardous materials may be found on-site in smaller quantities include equipment lubricants, engine and hydraulic oils will be stored in the designated refueling area.

Brief description of disposal plans for each waste type:

- All hydrocarbon impacted soils and water will be hauled to Carter Industries Bio Pad for treatment.
- Oily debris (rags, sorbent material) will be sealed in bags and delivered to the Hay River Landfill Hazardous Material Area for proper disposal

4.3 Spill Kits Locations and Contents

Tables 6 and 7 identifies the locations and types of spill kits available on-site, and their contents.

Table 6: Spill Kit Locations

Location	Quantity and Type	Purpose
Excavator	300 L capacity kit	fuel/oil
Trucks	300 L capacity kit	Fuel/oil

Table 7: Spill Kit Contents

Items	Quantity and Notes	Type of Kit
20L pail: ▪ 15 hydrocarbon absorbent pads ▪ 2 absorbent socks (3" x 48") ▪ 1 plug and dyke (10oz jar) ▪ 3 heavy duty yellow disposal bags (33"x35"x6mil) ▪ 2 pair of nitrile gloves ▪ 2 pairs of plastic safety goggles ▪ 1 spill clean-up instruction sheet ▪ 220L/205L mobile facility spill response kit ▪ 100 hydrocarbon absorbent pads ▪ 10 absorbent socks (3"x 48") ▪ 1 plug in dyke (1lb.jar) ▪ 8 heavy duty disposal plastic bags (33"x45"x 6mil) ▪ 2 pair of nitrile gloves ▪ 1 spill cleanup instructions ▪ Neoprene storm drain cover (36"x36"x1/8")	These are the 2 types of spill kits we will have on Site .	

4.4 Miscellaneous

Table 8 identifies the earthmoving and other miscellaneous equipment on-site which could be used to respond to spills.

The TOHR currently has an as and when equipment contract with local contractors for all types of equipment. In the event of additional equipment requirements, we could mobilize to site within 1 hour.

4.5 Off-site Resources

Table 9 identifies the off-site resources and contacts available for responding to spills.

Table 8: Off-site Resources and Contacts

Name	Organization/ Position	Contact	Notes
NWT 24-Hour Spill Report Line	GNWT	Phone: (867) 920-8130	Triggers multiple governmental and private organizations for spill response
		Fax: (867) 873-6924	
CANUTEC 24-Hour Emergency	Canadian Transport Emergency Centre – Transportation of Dangerous Goods Directorate - Transport Canada	Phone: (613) 996-6666	Triggers multiple governmental and private organizations for spill response for dangerous goods
Inspector	Wendy Bidwell (GNWT)	Phone:(867)446-3775	GNWT ENR Water Licence Inspector
Environment Canada (Emergency)	Yellowknife	Phone: (867) 669-4725	
GNWT Environmental Protection Division	North Slave Region	Phone: (867) 767-9238	For spills, fires, and wildlife emergencies
	Dehcho Region	Phone: (867) 695-7450	
	Sahtu Region	Phone: (867) 587-3500	
	South Slave Region	Phone: (867) 872-6400	
	Inuvik Region	Phone: (867) 678-6650	
GNWT Environmental Health Officer	Yellowknife	Phone: (867) 669-4725	
Earle Dumas	SITE SUPERINTENDENT	PHONE 867-875-7030	To contact the NWT Spill Line and Corporate
HRFD	SITE MEDIC	PHONE867-874-2222	
TOHR	CORPORATE – HEAD OFFICE	PHONE867-874-6522	
Rowe Construction	Hay River N.T.	PHONE867-875-8442	To contact the NWT Spill Line
NEAREST COMMUNITY	Hay River		
OTHER			
	Fort Simpson	(867) 695-1111	

RCMP	Yellowknife	(867) 873-1111	
Fire Department	Hay River	(867) 874-2222	
	Fort Simpson	(867) 695-2222	
	Yellowknife	(867) 873-2222	
Ambulance	Hay River	(867) 874-9333	
	Fort Simpson	(867) 695-7000	
	Yellowknife	(867) 873-2222	

5. Preventative Measures to Reduce Risks of Spills

Planning for an emergency situation is imperative, due to the nature of the materials stored on-site as well as the remoteness of the site. Adequate training of staff and contractors is paramount. Spills may be the result of any of the following occurrences:

- Leaks, ruptures, material contraction or expansion, or material failures;
- Mechanical failure;
- Improper storage;
- Vandalism;
- Human error; and/or
- Acts of nature.

This section of the Spill Contingency Plan outlines TOHR preventative measures to be taken when receiving, handling, storing, using, transferring, and disposing of fuels and hazardous materials.

All fuels and hazardous materials will arrive to site via equipment fuel tanks. Personnel handling fuels and hazardous materials on-site will be required to wear all necessary personal protective equipment (PPE).

Re-fueling trays will be used always for re-fueling. All fuel and hazardous material storage areas disposal locations should be selected in consultation with a land-use or water inspector (as applicable). These disposal areas will be located more than 100m from any watercourse. If this buffer cannot be achieved, another area will be selected that provides the least amount of risk to watercourses and the receiving environment, while maintaining operational suitability. These areas/locations will be regularly inspected by Site Supervisor or designate, to ensure proper functioning and regulatory compliance.

Fuel storage areas will have secondary containment (e.g., be lined and bermed, and/or double walled fuel tanks or containers), with 110% containment. Smaller amounts of standard hazardous materials (e.g., vehicle and engine maintenance materials) will also be available on-site and will be stored in a secure manner. **There will be no bulk fuel stored on-site for this project.**

To avoid any leaks during fuel transfers, all fuel lines, hoses, fittings and valves are to meet or exceed industry standards.

Spill kits will be located wherever fuels and hazardous materials are stored or used. Maps of these locations are in Appendix B of this Plan.

The Site Supervisor, or designate, will conduct ongoing/daily visual inspections. The inspections should be documented to ensure that all fuel and hazardous material storage areas and on-site greywater disposal locations are inspected, including, the following:

- Leaks and any damages to the fuel and hazardous material storage containers and transfer equipment;
- Stained or discolored soils within and around the fuel and hazardous material storage areas, motorized equipment, and on-site greywater disposal locations;
- Lids and caps should be checked for tight seals;
- Water is appropriately managed and not ponding

6. Key Response Personnel and Duties

In general, all positions include the following duties:

- Ensuring the safety of all persons in the vicinity – if necessary, remove staff from the area affected by the spill immediately and restrict further access;
- Making every effort to identify the spilled product;
- Consulting appropriate MSDS and determine principal types of health and safety hazards associated with this product or material;
- Maintaining open lines of communication;
- Wearing appropriate PPE when working on or near the spill;
- If safe to do so, stopping the leak(s);
- Trying to contain the spill;
- Clean up spilled material; and
- Disposing materials in an appropriate and approved manner.

Figure 1 summarizes the chain of command of the key response personnel and their general duties, work locations, and contact information when responding to a spill or release.

7. Action Plan Procedures

7.1 Potential environmental impacts of spill

Overall, for the hazardous material discussed below impacts are lower during the winter as snow is a natural sorbent and ice forms a barrier limiting or eliminating soil contamination, thus spills can be more readily recovered when identified and reported.

- Gasoline
    - Environmental impacts: Gasoline may be harmful to wildlife and public. It is not readily biodegradable and has the potential for bioaccumulation in the environment. Gasoline is quick to volatize. Spills are to be barricaded and cleaned up immediately.
- Diesel fuel
    - Environmental impacts: Diesel may be harmful to wildlife and public. It is not readily biodegradable and has the potential for bioaccumulation in the environment. Diesel burns slowly and thus risk to the environment is reduced during recovery as burn can be readily contained compared with volatile fuel.

For most of the containment procedures outlined, spilled petroleum products and materials used for containment will be placed into empty waste oil containers and sealed for proper disposal at an approved disposal facility.

7.2 Containing and cleaning up the Spill

Figure 2 depicts a very basic example only that shows the basic key steps to be taken in a spill incident. Due to topography, quantity of material spilled, weather conditions, and staff and equipment immediately available, sub-steps of the spill response can vary.

Figure 2: Basic Example of Spill Response

	**Identify , Assess**
	**Contain , Notify**
	**Absorb, Ensure extent of spill**
	**Clean-up, Dispose of or store securely**

7.2.1 Spills on Land

Spills on land include spills on rock, gravel, soil and/or vegetation. 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.

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. A plastic tarp can be placed on and at the base of the dyke such that fuel can pool up and subsequently be removed with sorbent materials or by pump into barrels or bags. If the spill is migrating very slowly a dyke may not be necessary and sorbent can be used to soak up fuels before they migrate away from the source of the spill.

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 be recovered using a pump or sorbent materials.

7.2.2 Spills on 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.

Booms are commonly used to recover fuel floating on the surface of lakes or slow-moving streams. They are released from the shore of a watercourse 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 then 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 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 or bags for disposal.

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 or plastic bags.

In some situations, barriers made of netting or fence material can be installed across a stream, and sorbent materials placed at the base to absorb spilled fuel. Sorbents will need to be replaced as soon as they are saturated. Water will be allowed to flow through. This is very similar to the weir option discussed above.

In some cases, it may be appropriate to burn fuel or to let volatile fuels such as gasoline evaporate after containment on the water surface. This should only be undertaken in consultation with and after approval from the lead agency inspector (ENTER INSPECTOR TYPE: Government of the Northwest Territories – for non-federally managed areas and Indigenous and Northern Affairs Canada – for federally managed areas).

7.2.3 Spills on Ice

Spills on ice are generally the easiest spills to contain due to the predominantly impermeable nature of the ice. For small spills, sorbent materials are used to soak up spilled fuel. Remaining contaminated ice/slush can be scraped and shoveled into a plastic bag or 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.

Dykes can be used to contain fuel spills on ice. By collecting surrounding snow, compacting and mounding it to form a dyke down slope of the spill, a barrier is created thus helping to contain the spill. If the quantity of spill is fairly large, a plastic tarp can be placed over the dyke such that the spill pools at the base of the dyke. The collected fuel can then be pumped into barrels or collected with sorbent materials.

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 or bags.

Burning should only be considered if other approaches are not feasible and is only to be undertaken with the permission of the lead agency inspector: Government of the Northwest Territories – for non-federally managed areas and Indigenous and Northern Affairs Canada – for federally managed areas) but should be avoided at all costs.

7.2.4 Spills on Snow

Snow is a natural sorbent, thus as with spills on soil, spilled fuel can be more easily recovered. Generally, small spills on snow can be easily cleaned up by raking and shoveling the contaminated snow into plastic bags or empty barrels and storing these at an approved location.

Dykes can be used to contain fuel spill on snow. By compacting snow down slope from the spill and mounding it to form a dyke, a barrier or berm is created, thus helping to contain the spill. If the quantity of the spill is large, a plastic tarp can be placed over the dyke such that the spill pools at the base of the dyke. The collected fuel/snow mixture can then be shoveled into barrels or bags or collected with sorbent materials.

7.2.5 Worst-Case Scenario

Dealing with spilled fuel which exceeds the freeboard of a dyke or barrier would present a possible worst-case scenario for the Project. To contain the overflow, a trench or collection pit would have to be created downstream of the spill to contain the overflow.

Another worst-case scenario would be an excessive spill on water that may be difficult to contain with the booms present at the site. In this case, an emergency response mobile unit would have to be called in to deal with the spill using appropriate equipment.

7.3 Transferring, Storing, and Managing Spill-related Wastes

In most cases, spill cleanups are initiated at the far end of the spill and contained moving towards the center of the spill. Sorbent socks and pads are generally used for small spill cleanups. 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.

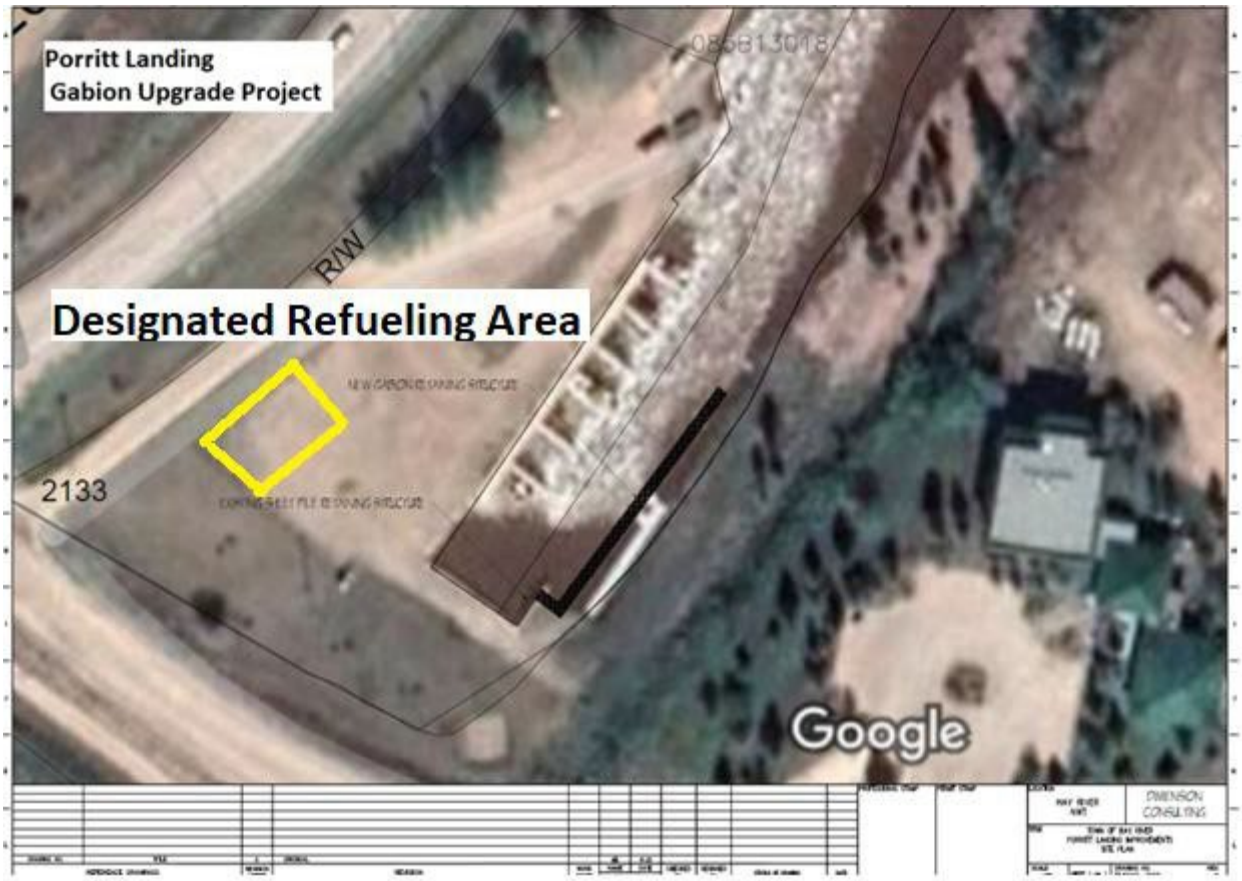
Used sorbent materials are to be placed in plastic bags for future disposal. All materials mentioned in this section are available in the spill kits located at the fuel storage areas, in trucks, the mechanic shop and in the camp. Following clean-up, any tools or equipment used will be properly washed and decontaminated or replaced if this is not possible.

For most of the containment procedures outlined, spilled petroleum products and materials used for containment will be placed into empty waste oil containers and sealed for proper disposal at an approved disposal facility.

7.4 Restoring Affected Areas, Status Updates, and Cleanup Completion

Once a spill of reportable size has been contained, TOHR will consult with the Lead Agency Inspector assigned to the file to determine the level of clean-up required. An Inspector 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 re-vegetation.

Appendix A – Site Maps


Porritt Landing
Gabion Upgrade Project
Designated Refueling Area
R/W
2133
Google


N
R/W
NEW GABION RETAINING STRUCTURE
EXISTING SHEET PILE RETAINING STRUCTURE
10m
Google
HAY RIVER
NWT
DIMENSION CONSULTING
TOWN OF HAY RIVER
PORRITT LANDING IMPROVEMENTS
SITE PLAN
THR22-002

Appendix B – Material and Safety Data Sheets (MSDS)

SAFETY DATA SHEET

DIESEL FUEL

000003000395

Version 3.1 Revision Date 2017/04/20 Print Date 2017/04/20

SECTION 1. IDENTIFICATION

Product name	:	DIESEL FUEL
Synonyms	:	Seasonal Diesel, #1 Diesel, #2 Heating Oil, #1 Heating Oil, D50, Arctic Diesel, Farm Diesel, Marine Diesel, Low Sulphur Diesel, LSD, Ultra Low Sulphur Diesel, ULSD, Mining Diesel, Naval Distillate, Dyed Diesel, Marked Diesel, Coloured Diesel, Furnace special, Biodiesel blend, B1, B2, B5, Diesel Low Cloud (LC), Marine Gas Oil, Marine Gas Oil Dyed.
Product code	:	102762, 102763, 102755, 102302, 102744, 101801, 100678, 100677, 101802, 100107, 100668, 100658, 100911, 100663, 100652, 100460, 100065, 101796, 101793, 101795, 101792, 101794, 101791, 100768, 100643, 100642, 100103, 101798, 101800, 101797, 101788, 101789, 101787, 102531, 100734, 100733, 100640, 100997, 100995, 100732, 100731, 100994
Manufacturer or supplier's details		Petro-Canada P.O. Box 2844, 150 - 6th Avenue South-West Calgary Alberta T2P 3E3 Canada
Emergency telephone number		Suncor Energy: +1 403-296-3000; Canutec Transportation: 1-888- 226-8832 (toll-free) or 613-996-6666; Poison Control Centre: Consult local telephone directory for emergency number(s).

Recommended use of the chemical and restrictions on use

Recommended use	:	Diesel fuels are distillate fuels suitable for use in high and medium speed internal combustion engines of the compression ignition type. Mining diesels, marine diesels, MDO and naval distillates may have a higher flash point requirement.
Prepared by	:	Product Safety: +1 905-804-4752

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	Bright oily liquid.
Colour	Clear to yellow (This product may be dyed red for taxation purposes)
Odour	Mild petroleum oil like.

GHS Classification

Flammable liquids : Category 3

Acute toxicity (Inhalation)	Category 4
Skin irritation	Category 2
Carcinogenicity	Category 2
Specific target organ toxicity - single exposure	Category 3 (Central nervous system)
Specific target organ toxicity - repeated exposure	Category 2 (Liver, thymus, Bone)
Aspiration hazard	Category 1

GHS label elements

Hazard pictograms

Signal word: Danger

Hazard statements:

Flammable liquid and vapour.
May be fatal if swallowed and enters airways.
Causes skin irritation.
Harmful if inhaled.
May cause drowsiness or dizziness.
Suspected of causing cancer.
May cause damage to organs (Liver, thymus, Bone) through prolonged or repeated exposure.

Precautionary statements:

Prevention:
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Keep container tightly closed
Ground and bond container and receiving equipment.
Use explosion-proof electrical/ ventilating/ lighting/ equipment.
Use non-sparking tools.
Take action to prevent static discharges.
Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
Wash skin thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:
IF SWALLOWED: Immediately call a POISON CENTER/doctor.
IF ON SKIN (or hair) Take off immediately all contaminated clothing. Rinse skin with water.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
IF exposed or concerned: Get medical advice/ attention.

Do NOT induce vomiting.
If skin irritation occurs:Get medical advice/ attention.
Take off contaminated clothing and wash it before reuse.
In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
Storage :
Store in a well-ventilated place. Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Store locked up.
Disposal:
Dispose of contents/ container to an approved waste disposal plant

Potential Health Effects

Primary Routes of Entry	Eye contact Ingestion Inhalation Skin contact Skin Absorption
Target Organs	Skin Eyes Respiratory Tract
Inhalation	May cause respiratory tract irritation. Inhalation may cause central nervous system effects. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.
Skin	Causes skin irritation.
Eyes	Causes eye irritation.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. Aspiration hazard if swallowed- can enter lungs and cause damage.
Aggravated Medical Condition	None known

Other hazards

None known.

IARC	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH	Confirmed animal carcinogen with unknown relevance to humans

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture Mixture

Hazardous components

Chemical name	CAS-No.	Concentration
fuels, diesel	68334-30-5	70 - 100%
fuel oil no. 2	68476-30-2	
kerosine (petroleum)	8008-20-6	
kerosine (petroleum), hydrodesulfurized	64742-81-0	
Alkanes, C10-20-branched and linear	928771-01-1	0 - 25%
Soybean oil, Methyl ester	67784-80-9	0 - 5%
Rape oil, Methyl ester	73891-99-3	
Fatty acids tallow, Methyl esters	61788-61-2	

SECTION 4. FIRST AID MEASURES

If inhaled

Move to fresh air.
Artificial respiration and/or oxygen may be necessary.
Seek medical advice.

In case of skin contact

Incase of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Wash skin thoroughly with soap and water or use recognized skin cleanser.
Wash clothing before reuse.
Seek medical advice.

In case of eye contact

Remove contact lenses.
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Obtain medical attention.

If swallowed

Rinse mouth with water.
DO NOT induce vomiting unless directed to do so by a physician or poison control center.
Never give anything by mouth to an unconscious person
Seek medical advice.

Most important symptoms and effects, both acute and delayed

None known

Protection of first-aiders

First Aid responders should pay attention to self-protection and use the recommended protective clothing
It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	Dry chemical Carbon dioxide (C02) Water fog. Foam
Unsuitable extinguishing media	Do NOT use water jet.
Specific hazards during fire-fighting	Cool closed containers exposed to fire with water spray.
Hazardous combustion products	Carbon oxides (CO, C02), nitrogen oxides (NOx), sulphur oxides (SOx), sulphur compounds (H2S), smoke and irritating vapours as products of incomplete combustion.
Further information	Prevent fire extinguishing water from contaminating surface water or the ground water system.
Special protective equipment for firefighters	Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Use personal protective equipment. Ensure adequate ventilation. Evacuate personnel to safe areas. Material can create slippery conditions.
Environmental precautions	If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	Prevent further leakage or spillage if safe to do so. Remove all sources of ignition. Soak up with inert absorbent material. Non-sparking tools should be used. Ensure adequate ventilation. Contact the proper local authorities.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Use only with adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment Avoid spark promoters. Ground/bond container and equipment These alone may be insufficient to remove static electricity. Avoid contact with skin, eyes and clothing. Do not ingest

	Keep away from heat and sources of ignition. Keep container closed when not in use.
Conditions for safe storage	Store in original container. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep in a dry, cool and well-ventilated place. Keep in properly labelled containers. To maintain product quality, do not store in heat or direct sunlight

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
kerosine (petroleum)	8008-20-6	TWA	200 mg/m3 (total hydrocarbon vapor)	CA BC OEL
		TWA	200 mg/m3 (total hydrocarbon vapor)	CA ABOEL
		TWA	200 mg/m3 (total hydrocarbon vapor)	ACGIH
kerosine (petroleum), hydrodesulfurized	64742-81-0	TWA	200 mg/m3 (As total hydrocarbon vapour)	ACGIH
		TWA	200 mg/m3 (As total hydrocarbon vapour)	ACGIH

Engineering measures Use only in well-ventilated areas.
Ensure that eyewash station and safety shower are proximal to the work-station location.

Personal protective equipment

Respiratory protection: Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Filter type: organic vapour cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air-purifying respirators is limited. Use a positive-pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstances where air-purifying respirators may not provide adequate protection.

Hand protection Material	neoprene, nitrile,polyvinyl alcohol (PVA), Viton(R). Consult your PPE provider for breakthrough times andthe specific glove that is best for you based on your use patterns. It should be realized that eventually any material regardless of their imperviousness, will get permeated by chemicals. Therefore, protective gloves should be regularly checked for wear and tear. At the first signs of hardening and cracks, they should bechanged.
Remarks	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Eye protection	Wear face-shield and protective suit for abnormal processing problems.
Skin and body protection	Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.
Protective measures	Wash contaminated clothing before re-use.
Hygiene measures	Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash face, hands and any exposed skin thoroughly after handling.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Bright oily liquid.
Colour	Clear to yellow (This product may be dyed red for taxation purposes)
Odour	Mild petroleum oil like.
Odour Threshold	No data available
pH	No data available
Pour point	No data available
Boiling point/boiling range	150 - 371 °C (302 - 700 °F)
Flash point	> 40 °C (104 °F) Method: closed cup
Auto-Ignition Temperature	225 °C(437 °F)
Evaporation rate	No data available
Flammability	Flammable in presence of open flames, sparks and heat Va-

	pours are heavier than air and may travel considerable distance to sources of ignition and flash back. This product can accumulate static charge and ignite.
Upper explosion limit	6%(V)
Lower explosion limit	0.7%(V)
Vapour pressure	7.5 mmHg (20 °C /68 °F)
Relative vapour density	4.5
Relative density	0.8- 0.88
Solubility(ies)	
Water solubility	insoluble
Partition coefficient: n-octanolf.Nater	No data available
Viscosity	
Viscosity, kinematic	1.3 - 4.1 eSt (40 °C/104 °F)
Explosive properties	Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Runoff to sewer may createfire or explosion hazard.

SECTION 10. STABILITY AND REACTIVITY

Possibility of hazardous reactions	Hazardous polymerisation does not occur. Stable under normal conditions.
Conditions to avoid	Extremes of temperature and direct sunlight
Incompatible materials	Reactive with oxidising agents and acids.
Hazardous decomposition products	May release COx, NOx, SOx, H2S, smoke and irritating vapours when heated to decomposition.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure
Eye contact
Ingestion
Inhalation
Skin contact
Skin Absorption

Acute toxicity

Product:

Acute oral toxicity	Remarks No data available
Acute inhalation toxicity	Remarks: No data available
Acute dermal toxicity	Assessment: The substance or mixture has no acute dermal toxicity Remarks: No data available

Components:
fuels, diesel:

Acute oral toxicity	LD50 (Rat) 7,500 mg/kg,
Acute dermal toxicity	LD50 (Mouse): 24,500 mg/kg,

fuel oil no. 2:

Acute oral toxicity	LD50 (Rat) 12,000 mg/kg,
Acute inhalation toxicity	LC50 (Rat) 4.1 mg/1 Exposure time 4 h Test atmosphere :dust/mist

kerosine (petroleum):

Acute oral toxicity	LD50 (Rat): > 5,000 mg/kg,
Acute inhalation toxicity	LC50 (Rat) > 5 mg/1 Exposure time: 4 h Test atmosphere :dust/mist
Acute dermal toxicity	LD50 (Rabbit): > 2,000 mg/kg,

kerosine (petroleum), hydrodesulfurized:

Acute oral toxicity	LD50 (Rat) > 5,000 mg/kg,
Acute inhalation toxicity	LC50 (Rat): > 5.2 mg/1 Exposure time 4 hrs Test atmosphere :dust/mist
Acute dermal toxicity	LD50 (Rabbit) > 2,000 mg/kg,

Skin corrosion/irritation

Product:

Remarks: No data available

Serious eye damage/eye irritation

Product:

Remarks: No data available

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

STOT- single exposure

No data available

STOT -repeated exposure

No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish	Remarks: No data available
Toxicity to daphnia and other aquatic invertebrates	Remarks No data available
Toxicity to algae	Remarks No data available
Toxicity to bacteria	Remarks: No data available

Persistence and degradability

Product:

Biodegradability	Remarks: No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues	The product should not be allowed to enter drains, water

courses or the soil.
Offer surplus and non-recyclable solutions to a licensed dis-pcsal company.
Waste must be classified and labelled prior to recycling or dispcsal.
Send to a licensed waste management company.
Dispose of as hazardous waste in compliance with local and national regulations.
Dispose of product residue in accordance with the instructions of the person responsible for waste dispcsal.

Contaminated packaging	Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA-DGR

UN/ID No.	UN 1202
Proper shipping name	Diesel fuel
Class	3
Packing group	III
Labels	Class 3 - Flammable Liquid
Packing instruction (cargo aircraft)	366

IMDG-Code

UN number	UN 1202
Proper shipping name	DIESEL FUEL
Class	3
Packing group	III
Labels	3
EmSCode	F-E, S-E
Marine pollutant	no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

National Regulations

TDG

UN number	UN 1202
Proper shipping name	DIESEL FUEL
Class	3
Packing group	III
Labels	3
ERG Code	128
Marine pollutant	no

SECTION 15. REGULATORY INFORMATION

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR

The components of this product are reported in the following inventories:

DSL	On the inventory, or in compliance with the inventory
TSCA	All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.
EINECS	On the inventory, or in compliance with the inventory

SECTION 16. OTHER INFORMATION

For Copy of SOS	Internet: www.petro-canada.ca/msds Canada-wide telephone 1-800-668-0220; fax 1-800-837-1228 For Product Safety Information: 1 905-804-4752
Prepared by	Product Safety: +1 905-804-4752
Revision Date	2017/04/20

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

Appendix C: NWT Spill Report Form

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: MM DD YY	Report Time:	■ Original Spill Report **OR** ■ Update #_____to the Original Spill Report	**Report Number:**
B	Occurrence Date: MM DD YY	Occurrence Time:		
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: ■ NT ☐ Nunavut ☐ Adjacent Jurisdiction or Ocean	
E	Latitude: _____Degrees _____Minutes _____Seconds		Longitude: _____Degrees _____Minutes _____Seconds	
F	Responsible Party or Vessel Name:	Responsible Party Address or Office Location:		
G	Any Contractor Involved:	Contractor Address or Office Location:		
H	Product Spilled: ☐ Potential Spill	Quantity in Litres, Kilograms or Cubic Metres:	U.N. Number:	
I	Spill Source:	Spill Cause:	Area of Contamination in Square Metres:	
J	Factors Affecting Spill or Recovery:	Describe Any Assistance Required:	Hazards to Persons, Property or Environment:	
K	Additional Information, Comments, Actions Proposed or Taken to Contain, Recover or Dispose of Spilled Product and Contaminated Materials:			

L	Reported to Spill Line by:	Position:	Employer:	Location Calling From:	Telephone:
M	Any Alternate Contact:	Position:	Employer:	Alternate Contact Location:	Alternate Telephone:

REPORT LINE USE ONLY

N	Received at Spill Line by:	Position:	Employer:	Location Called:	Report Line Number:

Lead Agency: ☐ EC ☐ CCG/TCMSS ☐ GNWT ☐ GN ☐ ILA ■ AANDC ☐ NEB ☐ Other: _____	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:			

Appendix D: Reportable Quantities for NWT Spills

Note: L = litre; kg = kilogram; PCB = Polychlorinated Biphenyls; ppm = parts per million

Substance	Reportable Quantity	TDG Class
Explosives Compressed gas (toxic/corrosive) Infectious substances Sewage and Wastewater (unless otherwise authorized) Radioactive materials Unknown substance	Any amount	1.0 2.3/2.4 6.2 6.2 7.0 None
Compressed gas (Flammable) Compressed gas (Non-corrosive, non-flammable)	Any amount of gas from containers with a capacity grater than 100L	2.1 2.2
Flammable liquid	≥100 L	3.1/3.2/3.3
Flammable solid Substances liable to spontaneous combustion Water reactant substances	≥ 25 kg	4.1 4.2 4.3
Oxidizing substances	≥ 50 L or 50 kg	5.1
Organic peroxides Environmentally hazardous substances intended for disposal	≥1 L or 1 kg	5.2 9.0
Toxic substances	≥ 5 L or 5 kg	6.1
Corrosive substances Miscellaneous products, substances or organisms		8.0 9.0
PCB mixtures of 5 or more ppm	≥ 0.5 L or 0.5 kg	9.0
Other contaminants--for example, crude oil, drilling fluid, produced water, waste or spent chemicals, used or waste oil, vehicle fluids, wastewater.	≥ 100 L or 100 kg	None
Sour natural gas (i.e., contains H_2S) Sweet natural gas	Uncontrolled release or sustained flow of 10 minutes or more	None
Flammable liquid Vehicle fluid	≥ 20 L	3.1/3.2/3.3 None

Substance	Reportable Quantity	TDG Class
	When released on a frozen water body that is being used as a working surface	
Reported releases or potential releases of any size that: are near or in an open water body; are near or in a designated sensitive environment or habitat; Pose an imminent threat to human health or safety; or Pose an imminent threat to a listed species at risk or its critical habitat	Any amount	None