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**SPILL CONTINGENCY PLAN FOR MONITORING WELL DRILLING
NORMAN WELLS LAND TREATMENT UNIT**

Submitted to:

Sahtu Land and Water Board
Box 1
Fort Good Hope, NT X0E 0H0

Submitted by:



BluMetric Environmental Inc.
3108 Carp Road, PO Box 430
Ottawa, Ontario K0A 1L0

November 2017

Project Number: 170518

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1. INTRODUCTION

BluMetric Environmental Inc. (BluMetric) has prepared this spill contingency plan for drilling activities being planned to establish monitoring wells at the airside Land Treatment Unit on the Norman Wells Airport property, in Norman Wells, Northwest Territories. The work is being done on behalf of Transport Canada. The plan demonstrates that BluMetric has appropriate response capabilities and measures in place to effectively address potential spills that may occur. A total of three monitoring wells will be drilled, and BluMetric will contract Midnight Sun Drilling Inc. to undertake all drilling activities.

Contact Information:

<p>BluMetric Environmental</p> <p><u>Physical address (courier packages):</u> 4916 49 Street Yellowknife, NT X1A 1P3 Tel: 867-873-3500 Fax: 867-873-3499 map</p> <p><u>Postal address:</u> P.O. Box 11086 Yellowknife, NT, X1A 3X7</p> <p>Project Manager: Andrea Jenney Senior Engineer (705) 525-6075 x25</p> <p><u>Yellowknife Office Numbers</u> Tel: 867-873-3500 Fax: 867-873-3499</p>	<p>Midnight Sun Drilling Inc.</p> <p><u>Physical address (courier packages):</u> 6 Chadburn Crescent Whitehorse, YT Y1A 5Z3 Tel: 867-873-3500 Fax: 867-873-3499</p> <p><u>Postal address:</u> 108 Elliot Street, Suite 413 Whitehorse, YT Y1A 6C4</p> <p>Contacts: Glenn Thiessen, Project Manager C: 403-650-8225 E: glenn@midnightsundrilling.com</p>
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Effective date of spill contingency plan: November 3, 2017



2. PURPOSE AND SCOPE

The purpose of this plan is to outline response actions for potential spills of any size, including a worst-case scenario. The plan identifies key personnel and their roles and responsibilities in the event of a spill, as well as 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 efforts. The plan has been prepared to ensure quick and easy access to all the information required in responding to a spill.

3. COMPANY ENVIRONMENTAL POLICY

BluMetric is committed to the concept of sustainable development and the protection of the environment and human health. The goal of BluMetric's environmental, health, and safety policy is to:

- protect employees, the public, and the environment;
- fully comply with all applicable legislation, regulations, and authorizations;
- work proactively with federal, territorial, and Aboriginal governments, other relevant organizations, and the general public, on all aspects of environmental protection;
- anticipate future spill control requirements and make provisions for them; and,
- keep employees, contractors, inspectors, Land and Water Boards, appropriate governments (Aboriginal, federal, and territorial), and the public, informed of any changes at the site, or with project activities.

During the orientation meeting, training sessions are scheduled to ensure employees have an understanding of the steps to be undertaken in the event of a spill. All employees and contractors are shown where spill kits are stored, are aware of their contents, and are trained in using spill equipment and responding to spills. BluMetric is committed to keeping personnel up-to-date on the latest technologies and spill response methods.

4. PROJECT DESCRIPTION

Transport Canada is planning to install three monitoring wells at the LTU on the Norman Wells Airport property. The work is being completed in order to monitor groundwater for environmental contaminants due to the presence of the LTU. The project will include borehole drilling, design and installation of monitoring wells, monitoring well development, surveying,



and groundwater sampling. Following well installation, a post-installation report and sampling results report will be provided to Transport Canada.

The monitoring wells are scheduled to be installed and sampled in November 2017.

5. SITE DESCRIPTION

The LTU is located airside on the Norman Wells Airport property, to the east of the runway. It was constructed to contain approximately 2,500 cubic metres (m³) of petroleum hydrocarbon (PHC) -impacted soils excavated from several contaminated sites on the Airport grounds, with dimensions of approximately 100 metres (m) by 50 m. The LTU is lined with a synthetic geomembrane to prevent leaching of contaminants into the subsurface. Monitoring wells located up-gradient and downgradient of the LTU were installed to evaluate the performance of the geomembrane liner. However, due to frost-jacking, these existing wells are no longer viable.

5.1 LIST OF HAZARDOUS MATERIALS ON SITE

There is no fuel stored in or around the vicinity of the LTU, currently. Hazardous materials, in the form of diesel fuel, will only be on-site during the duration of the drilling period and installation of the monitoring wells, which is estimated to be completed in two days.

Table 1: Hazardous Material On-site

Material	Storage Container	Maximum On-site	Storage Location and Uses
Diesel Fuel	450-litre tank on back of pickup truck, in double-walled tank	450-litre tank	Used to fuel drill rig.

Other equipment on-site will include a Multi Power Locust Tracked Geotechnical Air Rotary Drill Rig, and either a CanRoss 20-litre universal spill kit or an Enpac overpack spill kit. The CanRoss 20-litre universal kits contain five socks, nitrile gloves, safety goggles, disposal bags and an instruction booklet.

Details of the spill kits are attached in Appendix A.

Spill kits are located wherever fuel is used. Portable drip trays and appropriately-sized fuel transfer hoses with pumps are used when re-fueling motorized equipment, to avoid any leaks/drips onto the ground surface.



6. PROCESS FOR STAFF RESPONSE TO MEDIA AND PUBLIC INQUIRIES:

The company has established procedures for dealing with media and public inquiries. All inquiries are to be directed to Andrea Jenney, Project Manager for BluMetric, at the headquarters office in Sudbury, Ontario. If the Project Manager is not available, there will be another staff member available to act in this position. If a reporter or member of the public arrives at the site unexpectedly, the official in charge of responding to their questions will be the Project Manager.

The Project Manager/Field Supervisor should always keep the Project Manager informed of any news or updates of potential interest to the media or general public, such that BluMetric is prepared to deal with inquiries any time.

If a spill has occurred, a NWT Spill Report may need to be filled out depending on the size of the spill (see Appendix B-2). This information is available for the public to view upon request by contacting the NWT Spill Line, or by viewing the GNWT Hazardous Materials Spills Database [online](#).

6.1 RESPONSE ORGANIZATION

The flow chart depicted in Figure 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 environmental or human health hazard, or meets or exceeds the volumes outlined in Appendix C. 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 BluMetric and submitted to the appropriate authority, either immediately 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.

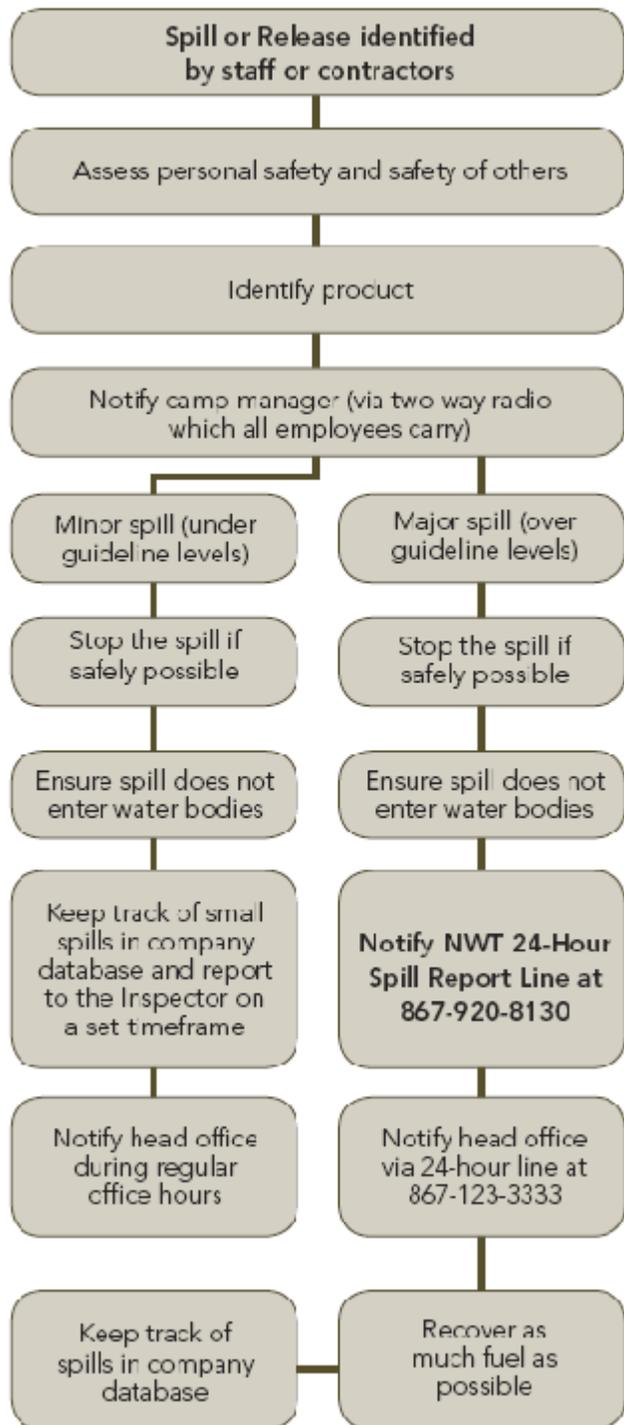
Cell phones will be available to all personnel in the field. In the event of a spill involving danger to human life, these phones will be used to contact emergency response personnel in Norman Wells.



Following reporting of the spill to the Project Manager/Field Supervisor, he/she will report spills to the NWT 24-Hour Spill Line as necessary. The Project Manager will also inform the head office for tracking spills in company databases, and notify the head office in the event of media inquiries. The 24-hour emergency head office number is 867-123-3333.



Figure 1: Flow chart of response organization (details of each step will be provided in the procedures for initial actions under Section 3 Action Plan)



6.2 POTENTIAL SPILL SIZES AND SOURCES FOR EACH HAZARDOUS MATERIAL ON SITE

In Table 2, a list of potential discharge events, with associated discharge volumes and directions, is presented for the primary hazardous materials present on-site. The most likely discharge volume is indicated and the spill clean-up procedures will focus on spills of this quantity. A worst-case scenario is also presented.

Table 2: Potential Discharge Event

Material (sources)	Potential Discharge Event	Discharge Volume (worst-case)	Direction of Potential Discharge
Diesel fuel (drill rig)	<ol style="list-style-type: none"> 1. Leaking from drill rig. 2. Over pumping of fuel from diesel tank in truck into drill rig (worst-case). 	450 litres	Toward any nearby watercourses in the area from drill site (potential for underground seepage to lake or stream).

6.3 POTENTIAL ENVIRONMENTAL IMPACTS OF SPILL (INCLUDE WORST-CASE SCENARIO)

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

6.3.1 Diesel Fuel

Environmental impacts: Diesel may be harmful to wildlife and aquatic life. It is not readily biodegradable and has the potential for bioaccumulation in the environment. Diesel burns slowly and the risk to the environment is reduced during recovery, as burn can be more readily contained compared with volatile fuels. Runoff into water bodies must be avoided.

Worst-case scenario: The tank within the truck is punctured and the entirety of contents seeps into surrounding soil and water bodies. This could cause illness or death to aquatic life and indirectly affect wildlife feeding from the land and water.



7. PROCEDURES

7.1 PROCEDURES FOR INITIAL ACTIONS:

- Ensure safety of all personnel.
- Assess spill hazards and risks.
- Remove all sources of ignition.
- Stop the spill if safely possible, e.g. shut off pump, replace cap, patch leaking hole. Use the contents of the nearest spill kit to aid in stopping the spill if it is safe to do so. Tyvek suits and chemical master gloves are located in the spill kit and should be worn immediately if there is any risk of being in contact with fuel.
- No matter what the volume is, notify the Project Manager via cell phone.
- Contain the spill – use contents of spill kits to place sorbent materials on the spill, or use shovel to dig dike to contain spill. Methods will vary depending on the nature of the spill. See Section C for more details.

7.2 SPILL REPORTING PROCEDURES

In the case of a spill or emergency, the 24 Hour Northwest Territories Spill Report Line should be contacted first by the Proponent, who will then involve ECCC Emergencies when appropriate. For information relating to the environmental enforcement and reporting requirements under the Canadian Environmental Protection Act and the Fisheries Act please contact ECCC Environmental Enforcement at 867-669-4730. The ECCC National Environmental Emergencies Centre (NEEC) will provide technical and scientific environmental advice and assistance to the lead agency, in the event of an environmental emergency. A lead agency is described as the governmental authority that regulates or has authority over the activity from which the emergency originated. NEEC can be contacted at 1-866-283-2333.

Report the spill immediately to Project Manager/Field Supervisor, who will determine if spill is to be reported to the NWT 24-Hour Spill Line at 867-920-8130.

Each spill kit, as well as the Project Manager/Field Supervisor, will have copies of the NWT Spill Report form to be filled out (see Appendix C). Fill out and fax or email the Spill Report to the staff of the NWT 24-Hour spill line. Also fax or email the report to the head office.

NWT 24-Hour Spill Line Phone: (867) 920-8130

NWT 24-Hour Spill Line Fax: (867) 873-6924

NWT 24-Hour Spill Line Email: spills@gov.nt.ca

BluMetric Head Office: Andrea Jenney (705) 525-6075 x25



Physical address:

4916 49 Street
Yellowknife, NT X1A 1P3
Tel: 867-873-3500
Fax: 867-873-3499

7.3 PROCEDURES FOR CONTAINING AND CONTROLLING THE SPILL (E.G. ON LAND, WATER, SNOW. ETC.)

- Initiate spill containment by first determining what will be affected by the spill.
- Assess speed and direction of spill and cause of movement (water, wind, and slope).
- 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.

7.4 SPECIFIC SPILL CONTAINMENT METHODS FOR LAND, ICE, AND SNOW ARE OUTLINED BELOW

7.4.1 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.

Dykes

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 sorbents can be used to soak up fuels before they migrate away from the source of the spill.



Trenches

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 frozen ground, which will then provide containment layer for the spilled fuel. Fuel can then be recovered using a pump or sorbent materials.

7.4.2 Containment of 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

Dykes can be used to contain fuel spills 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 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/snow mixture can then be shoveled into barrels or bags, or collected with sorbent materials.

7.4.3 Worst-case Scenarios

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

7.5 PROCEDURES FOR TRANSFERRING, STORING, AND MANAGING SPILL RELATED WASTES.

In most cases, spill cleanups are initiated at the far end of the spill and contained moving toward the centre 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 plastic bags for future disposal. All materials mentioned in this section are available in the spill kits located in the on-site vehicle. 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 C, spilled petroleum products and materials used for containment will be placed into empty waste oil containers and sealed for proper disposal. In the event of a spill, they will be disposed of at a community landfill with the permission of the community. Where disposal at a community landfill is not possible, the waste containers will be transported to, and disposed of, at the nearest approved disposal facility.

7.6 PROCEDURES FOR RESTORING AFFECTED AREAS

Once a spill of reportable size has been contained, BluMetric will consult with the lead agency Inspector assigned to the file to determine the level of cleanup required. The 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 revegetation.

8. RESOURCE INVENTORY

8.1 ON-SITE RESOURCES

Individuals on-site will include a driller, drill helper/mechanic, and a BluMetric Environmental Technician or Scientist.

Spill kits will be present at all drill sites during drilling activities. The contents are described in Appendix A.

8.2 OFF-SITE RESOURCES

Depending on the severity of the spill, a government official would be able to reach the site the same day that the spill occurred.



In the case of a spill or emergency, the 24 Hour Northwest Territories Spill Report Line should be contacted first by the Proponent, who will then involve ECCC Emergencies when appropriate. **For information relating to the environmental enforcement and reporting requirements under the Canadian Environmental Protection Act and the Fisheries Act please contact ECCC Environmental Enforcement at 867-669-4730.** The ECCC National Environmental Emergencies Centre (NEEC) will provide technical and scientific environmental advice and assistance to the lead agency, in the event of an environmental emergency. A lead agency is described as the governmental authority that regulates or has authority over the activity from which the emergency originated. **NEEC can be contacted at 1-866-283-2333.**

NWT 24-Hour spill line
(867) 920-8130

GNWT Lands Inspector
(867) 587-7200

Environment Canada Environmental Enforcement
(867) 669-4730

GNWT Environmental Protection Division
(867) 873-7654

GNWT Environmental Health Office
(867) 777-4840

RCMP (Norman Wells)
(867) 587-1111

Health Centre (Norman Wells)
(867) 587-6688

Respectfully submitted,
BluMetric Environmental Inc.



Dan Tucholski, B.Sc.
Environmental Scientist



Andrea Jenney, P.Eng.
Senior Engineer



Appendix A

Spill Kit Details





POLY-OVERPACK® 95 SALVAGE DRUM IS YOUR OVERPACK REALLY A SALVAGE DRUM?

Our Poly-Overpack® 95 meets Group 1 packaging standards and salvage drum regulations. Unlike competing overpacks, our Poly-Overpack® 95 safely contains a wide range of hazardous materials including: acids, corrosives and damaged parts—in 55-gallon drums.

Tight, secure and leak-free container closing is simple; place any long object, like a wooden 2x4", in the handy lid slots and turn to screw the lid down tightly.

Meets performance-oriented packaging requirements of US DOT and UN regulations.



- Twist-down lid for safe closure
- Closed cell gasket in lid seals closure
- Castellations in lid allow for easy closing with pole or wooden 2x4"
- Double wall lid gives added strength
- Molded area allows for easy gripping and lifting by material handling equipment
- Ribbed design provides extra strength
- 100% UV-protected polyethylene provides protection over a wide range of chemicals

POLY-OVERPACK® 95

Part #	Top Dia. in. (cm)	Bottom Dia. in. (cm)	Ht. in. (cm)	Weight lb. (kg)	Spill Cap. gal. (L)	Load Cap. lb. (kg)
1237-YE	31.38 (80)	25.75 (65)	41.5 (105)	48 (21.8)	95 (359.6)	650 (295)

Regulations: UN 1H2/X295/S, DOT 49 CFR 173.3(c), EPA, SPCC and NPDES



POLY-OVERPACK® 110 SALVAGE DRUM IDEAL FOR DISTORTED OR BOWED DRUMS.

Containing irregular drums is not a problem with this handy-sized overpack. With all the great performance features of the Poly-Overpack® 95, but built taller to handle misshapen drums.

POLY-OVERPACK® 110

Part #	Top Dia. in. (cm)	Bottom Dia. in. (cm)	Ht. in. (cm)	Weight lb. (kg)	Spill Cap. gal. (L)	Load Cap. lb. (kg)
1240-YE	31.5 (80)	25.75 (65)	45 (114)	51 (23)	103 (390)	650 (295)

Regulations: UN 1H2/X295/S, DOT 49 CFR 173.3(c), EPA, SPCC and NPDES

DRUM LIFTER

Salvage drum loading is one of the trickiest drum handling jobs. This lifter makes it easy! Unique slim design allows unit to be used where clearance is tight. Works great for general drum handling, too. Jaw has only one moving part, making it practically maintenance free.

DRUM LIFTER

Part #	Weight lb. (kg)	Load Cap. lb. (kg)
3100-BU	22 (9.9)	1,000 (453.7)

- Lifts open-head or tight-head pails and drums
- Slim design for loading drums into salvage drums
- 1,000 lb. handling capacity



Roller Technique: Place damaged drum and overpack on their sides with metal rollers underneath drum (i.e. water pipe). Roll drum most of the way inside. Slowly turn overpack upright.



Angle Roll Technique: Place overpack and drum on side with the two angled in a wide vee. Roll together, working the drum inside the overpack. When inward progress stops, reverse the angle and roll the other way. Turn upright when drum is inside the overpack.



Inverted Overpack Technique: Place damaged drum on overpack lid. Slide overpack over the drum. Rotate upright.



Upright Overpack Technique: Remove overpack lid while using Part #: 3100-BU to raise and lower drum. Reduces risk and increases use.



**UNIVERSAL
SPILL KIT**

For Chemicals, Oil
and Solvent Spills

Caution:

Use only for the purposes intended. Do not use for anything other than the purposes intended. Do not use for anything other than the purposes intended. Do not use for anything other than the purposes intended.

**TROUSSE DE
DEVERSEMENT
UNIVERSEL**

Pour les déversements de produits
chimiques, d'huiles et de solvants

Attention :

Ne pas utiliser pour des usages autres que ceux prévus. Ne pas utiliser pour des usages autres que ceux prévus. Ne pas utiliser pour des usages autres que ceux prévus. Ne pas utiliser pour des usages autres que ceux prévus.

1-888-847-7100

SK-U5

90-00480

UNIVERSAL SPILL KIT
TROUSSE DE DEVERSEMENT UNIVERSEL
CAPACITY / CAPACITE - 20 LITRES
1 PER USE / 1 PER USAGE
CAN-ROSS PRODUCTS

2020480



ENPAC



POLY-OVERPACK[®] 95

PART / PIEZA NO: 1237-YE

1H2/X295/S/10/USA/M4339

1H2T/Y295/S/10/USA/M4339

SALVAGE DRUM BARRIL DE SALVAMIENTO

SEE WWW.ENPAC.COM FOR CLOSURE INSTRUCTIONS

WEIGHT / PESO: 48 LBS / 21.5 KG

CAPACITY : CAPACIDAD: 95 GAL / 360 LITERS

HANDLING CAPACITY / CARGO NOMINAL: 650 LBS / 295 KG

El usuario es responsable de la compatibilidad química

*User responsible for chemical compatibility.

www.enpac.com

ENPAC LLC, Eastlake, Ohio 44095

Appendix B

Spill Volume Reporting



Reportable Quantities for NWT Spills

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

Substance	Reportable Quantity	TDG Class
Explosives	Any amount	1.0
Compressed gas (toxic/corrosive)		2.3/2.4
Infectious substances		6.2
Sewage and Wastewater (unless otherwise authorized)		6.2
Radioactive materials		7.0
Unknown substance		None
Compressed gas (Flammable)	Any amount of gas from containers with a capacity greater than 100L	2.1
Compressed gas (Non-corrosive, non-flammable)		2.2
Flammable liquid	≥100 L	3.1/3.2/3.3
Flammable solid	≥ 25 kg	4.1
Substances liable to spontaneous combustion		4.2
		4.3
Water reactant substances		
Oxidizing substances	≥ 50 L or 50 kg	5.1
Organic peroxides	≥1 L or 1 kg	5.2
Environmentally hazardous substances intended for disposal		9.0
Toxic substances	≥ 5 L or 5 kg	6.1
Corrosive substances		8.0
Miscellaneous products, substances or		9.0

Substance	Reportable Quantity	TDG Class
organisms		
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 ₂ S) Sweet natural gas	Uncontrolled release or sustained flow of 10 minutes or more	None
Flammable liquid Vehicle fluid	≥ 20 L When released on a frozen water body that is being used as a working surface	3.1/3.2/3.3 None
Reported releases or potential releases of any size that: <ul style="list-style-type: none"> 1. are near or in an open water body; 2. are near or in a designated sensitive environment or habitat; 3. Pose an imminent threat to human health or safety; or 4. Pose an imminent threat to a listed species at risk or its critical habitat 	Any amount	None

Appendix C

NWT Spill Response 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:	<input type="checkbox"/> Original Spill Report OR <input type="checkbox"/> Update # _____ to the Original Spill Report	Report Number:	
	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: <input type="checkbox"/> NT <input type="checkbox"/> Nunavut <input type="checkbox"/> 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: <input type="checkbox"/> 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: <input type="checkbox"/> EC <input type="checkbox"/> CCG/TCMSS <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> AANDC <input type="checkbox"/> NEB <input type="checkbox"/> Other: _____			Significance: <input type="checkbox"/> Minor <input type="checkbox"/> Major <input type="checkbox"/> Unknown		File Status: <input type="checkbox"/> Open <input type="checkbox"/> Closed
Agency:		Contact Name:		Contact Time:	
Lead Agency:					
First Support Agency:					
Second Support Agency:					
Third Support Agency:					
Remarks:					

Appendix D

Drill Specification



Midnight Sun Drilling Inc.

#413-108 Elliot Street, Whitehorse, Y.T.

867.633.2626 www.midnightsundrilling.com

Rig 3 - 2016 Multi Power Locust Tracked Geotechnical Air Rotary Drill Rig



SPECIFICATIONS

Geotechnical, Environmental, Air Rotary, Diamond Coring

6" Solid Stem, 4 1/4" I.D. Hollow Stem Augers

4" ODEX casing, 3 1/2" Rock Drilling, NQ3 Coring

SPT Autohammer, CPT, DCPT, Shelbytubes, 2" & 3" Spoons

CRREL Permafrost Coring (Cold Regions Research Engineering Laboratory)

7500 foot pounds of Torque, 12 feet of head travel

Fully self sufficient with Tilt up auger racks/ Tooling storage

Complies with all safety protocols, DROPS, Positive Air Shutoff

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Rig 3 - 2016 Geotechnical Air Rotary