

Spill Contingency Plan

LNPG PROJECT

(Version 1.0)

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1.0 INTRODUCTION AND PROJECT DETAILS

Lake Winn Resources Corp. (“LWR”) and its primary contractor, Archer, Cathro & Associates (1981) Limited (“Archer Cathro”) have developed the LNPG Project – Spill Contingency Plan in accordance with the “Guidelines for Spill Contingency Planning” prepared by ‘Water Resources Division – Indian and Northern Affairs Canada 2007’.

This Spill Contingency Plan has been developed with the purpose of minimizing potential hazards to the environment, people and communities. This plan outlines the proper protocols to follow to minimize health & safety hazards, environmental effects and clean-up costs. It also serves as a guide to the duties of responders.

This Spill Contingency Plan will be in effect from April 2023 until April 2028. This is a living document that will be reviewed at minimum annually prior to the start of any site activities, with additional reviews as warranted.

1.1 ENVIRONMENTAL, HEALTH AND SAFETY (EHS) POLICY

LWR is committed to the concept of sustainable development and the protection of the environment and human health. Therefore, the management is committed to do everything possible to prevent injuries and to maintain a healthy environment. LWR is committed to effective waste management planning which includes, source reduction, reuse, recycle/recovery, treatment and release to the receiving environment.

The Environmental, Health and Safety covers following bullets:

- Senior managers are responsible for ensuring that all the requirements of this EHS are fully implemented.
- All managers and supervisors are responsible for ensuring that their employees are trained in safe work procedures, to undertake their assigned duties without accidents, injuries or harm to the environment and for ensuring that employees follow safe work methods and all related regulations.
- All personnel are required to support and comply with the EHS program, making safety, health and protection of the environment a part of their daily routine and ensuring that they follow safe work methods and relevant regulations.
- All personnel will be held accountable for implementing and adhering to the requirements of the EHS program.
- Pollution prevention practices and programs to achieve continuous improvement will be implemented as an ongoing requirement of the program.
- Where a conflict arises due to different standards or requirements between different regulations or standards, the more stringent of the two will apply.

The plan will be presented to all staff during their on-site orientation sessions. All employees and contractors are aware of the locations of the Spill Contingency Plan on the site of LNPG Project and in their offices located in Whitehorse and Vancouver. During the orientation meeting, training sessions are scheduled to ensure employees understand 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. LWR is committed to keeping personnel up to date on the latest technologies and spill response methods.

1.2 PROJECT DESCRIPTION

The aim of Li Project is to determine the extent and quality of lithium-tantalum bearing pegmatite dykes. The footprint left behind must be acceptable to the affected Aboriginal people for their future use and to ensure the safety of local wildlife and plants. This project is expected to span approximately five years, and all permits and licenses are in place for LWR's activities.

Activities for the Li Project will include helicopter supported diamond drilling, channel sampling, mapping, and prospecting. These activities will be conducted from a small camp located on the property of no more than 15 people.

1.3 SITE DESCRIPTION

The LNPG property comprises 3 mineral claims, which are located in southwestern Northwest Territories at latitude 62°11' north and longitude 125°54' west on NTS map sheet 105I/2 (Figure 1). The property covers an area of approximately 2519 ha (25.19 km²). The claims are registered in the name of Lake Winn Resources Corp.

The occurrence of lithium-bearing pegmatite dykes in the LNPG project area was first noted in 1961 by Canada Tungsten Mining Corporation Ltd. during a regional exploration program. Between 1977 and 2007 mapping, sampling, and prospecting was conducted by various operators. Six diamond drill holes were completed along ridges within the current property in 2007.

The LNPG property lies within the traditional territories of the Dehcho First Nations ("Dehcho") and Kaska Dena.

1.4 ADDITIONAL COPIES

Several copies of the Spill Contingency Plan (most recent version) are kept and available on site at all times. Copies are also held at the LWR and Archer Cathro offices in Whitehorse and Vancouver. Additional copies of the Waste Management Plan can be obtained by contacting LWR's agent, Archer, Cathro & Associates (1981) Limited at info@archercathro.com or by phone at 867-667-4415.

2.0 HAZARDOUS MATERIALS

Fuel and other hazardous materials stored on site will include:

- Diesel: up to 6,000 litres
- Gasoline: up to 200 litres
- Jet-A: Up to 3,000 litres
- Propane: up to eight 100 lb cylinders
- Motor Oil: up to 50 litres

2.1 MANAGEMENT OF VARIOUS HAZARDOUS MATERIALS

Planning for the potential for emergency situations is imperative, due to the remote nature of the site. Along with the preventative measures outlined below, adequate training of staff and contractors is paramount.

All hazardous materials (listed above) will arrive to site via helicopter. Once on site, handling of hazardous material will be supervised by an Archer Cathro employee. Anyone handling hazardous material on-site will be required to wear all necessary personal protective equipment such as protective flame-retardant clothing, steel toe boots, hard hats and safety glasses.

Fuel will be in 205 litre drums and will either be flown in during the summer in heavy wall steel drums or pressurized cylinders (propane) and stored in a lined and bermed central storage location, with 110% containment, at least 100 m from any watercourse. On site storage will be storing drums with bungs at 9 and 3 and inspected daily for leaks. Additional empty drums with a combined total capacity of at least 10% of the total fuel stored on site will be available for fuel transfer in case of a potential leak. Liquid fuels will be transferred using a hand pump.

In any case where storage areas cannot achieve a 100 m buffer from any high watermark of any waterbody or watercourse, an area will be selected that provides the least amount of risk to water bodies, while maintaining operational suitability.

Replenishment will be on an as-needed basis and fuel transfer will occur within small berms in the unlikely event of spillage. Portable trays and fuel transfer hoses will be used for aircraft and vehicle replenishment. To avoid any leaks from fuel transmission, all fuel lines, hoses, fittings and valves are to meet or exceed industry standards.

Propane will be attached to vertical posts in 100lb cylinders. There will not be more than 9,200 litres of fuel stored on site at any time. All fuel storage sites will have prominently displayed contact information for the NWT Spill Report hotline, cleanup information and spill kits. This information will also be posted at satellite telephones. All camp personnel have access to two-way radio.

Waste oil is stored securely (likely in empty 20L pails) and will be shipped off-site for processing at an appropriate waste facility.

Other hazardous materials found on-site in very small quantities are in storage buildings and/or the kitchen. These include lubricants/oil/grease for the maintenance of motorized equipment and general

cleaning products for kitchen/bathroom/office use.

Spill kits are located wherever hazardous material is stored or used. Section 5.1 lists details on spill kit contents. The site superintendent or designate will conduct visual inspections to check for leaks and damages to the fuel storage containers and transfer equipment, as well as check for stained or discolored soils around the fuel storage areas and motorized equipment. The visual inspections will be included in the superintendent's weekly checks. For example, lids and caps are checked for tight seals. A checklist is used to ensure no areas have been missed and results of the inspections are recorded in the LWR's database. Regular maintenance and oil checks of all motorized equipment will also be undertaken to avoid preventable leaks.

Material Safety Data Sheets (MSDS) will be provided for all substances used on-site. All MSDS on-site will be filed in an MSDS binder. An MSDS binder will be available on-site at all times. LWR will provide MSDS for each hazardous material, which are included in Appendix A.

3.0 SPILL PROCEDURE

When a potential spill has been identified:

1. Ensure safety of all personnel.
2. Assess spill hazards and risks.
3. Remove all sources of ignition.
4. Stop the spill if safely possible e.g. shut off pump, replace cap, tip drum upward, patch leaking holes, etc. 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.
5. No matter what the volume is, notify the project manager via two-way radio (all employees carry these, as well as on-site contractors if they are not accompanied by an employee).
6. 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.

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 +1 (867) 920 8130. Any spills less than these quantities do not need to be reported immediately to the spill reporting line. Rather, these minor spills will be tracked and documented by the company and submitted to the appropriated 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.

An emergency satellite phone is located in the office on-site. In the event of a spill involving danger to human life, this phone will be used to contact the Health & Safety Manger, Project Manager and emergency response personnel in Fort Simpson or Watson Lake. In addition, all employees and contractors carry two-way radios for communication with the site superintendent and other staff on

site.

Following reporting of the spill to the site superintendent, the superintendent will report spills to the NWT 24-Hour Spill Line as necessary. The site superintendent will also inform Archer Cathro's Whitehorse and Vancouver office for tracking spills in the company's database and notify the Project Manager in the event of media inquiries.

The company's emergency Whitehorse office number is 867-332-6142

If a spill has occurred and a NWT Spill Report needs to be filled out, see Appendix B. 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 at:

http://www.enr.nt.ca/live/pages/wpPages/Hazardous_Materials_Spill_Database.aspx

3.1.1 Minor Spill:

1. Stop or contain spill (if safe to do so).
2. Ensure spill does not enter any water bodies.
3. Document spill date, type and outcomes.
4. Notify Operations Manager.

3.1.2 Major Spill:

1. Stop or contain spill (if safe to do so).
2. Ensure spill does not enter any water bodies.
3. Document spill.
4. Notify Operations Manager.
5. Call NWT Spill Report Line (867) 920-8130.

3.2 PERSONNEL & RESPONSIBILITIES:

1. Pilots – Report any spills or leaks associated with aircraft operations directly to Operations Manager.
2. Site Maintenance Personnel/Project Geologist/Contractors – Check & document fuel storage containers for leaks or damage, on a daily basis. Make sure spill kits are properly supplied and up to date. Report any leaks or spills directly to the AGL Operations Manager.
3. Operations Manager – When spills or leaks are detected, ensure safety of humans and the environment, assess the situation. Communicate to other personnel (if necessary), call in emergency personnel (if necessary), document and report spill to relevant authorities and management.

3.3 PROCEDURES FOR SPILL REPORTING

Report spill immediately to site superintendent, who will determine if spill is to be reported to the NWT 24-Hour Spill Line at +1 (867) 920 8130.

Each spill kit, as well as the on-site office and site superintendent, will have copies of the NWT Spill Report form to be filled out (Appendix B). 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 Archer Cathro office in Whitehorse.

NWT 24-Hour Spill Line	
Phone	(867) 920 8130
Fax	(867) 873 6924
Email	spills@gov.nt.ca
Archer, Cathro & Associates (1981) Limited	
Phone Whitehorse office	(867) 667-4415
Phone Company Safety Manager	(867) 332-6142
Email Project Manager	info@archercathro.com

Spill Report Contacts

4.0 ACTION PLAN

4.1 INITIAL RESPONSE

Person identifying a leak or spill shall:

1. Assess personal safety and identify material spilled.
2. Refer to MSDS sheets.
3. Determine immediate hazards.
4. Communicate to all on-site personnel.
5. Secure the site.
6. Remove potential ignition sources (if safe to do so).
7. Determine if the spill can be controlled or stopped.
8. Stop the flow from the source of the leak (if possible).
9. Document the situation:
 - a) Identifier's name
 - b) Date, time and location
 - c) Material type and spill quantity
 - d) Cause of spill (if possible)
 - e) Weather conditions
 - f) Immediate hazards (human or environmental)
 - g) Safety issues to be dealt with prior to action (safety, PPE, ignition sources)
10. Contact Project Manager, identify location and request assistance.
11. Project Manager contacts NWT Spill Report Line and completes Spill Report Form.
12. All responders will act to contain or stop the spill and clean up any contaminants.

4.2 CONTAINMENT OF 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 or non-existent. It is important that all measures be undertaken to avoid spills reaching open water bodies.

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

4.2.2 Trenches

Trenches can be dug out to contain spills as long as the top layer of soil is thawed. Shovels pickaxes 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.

4.3 CONTAINMENT OF 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.

4.3.1 Booms

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 water body to create a circle around the spill. If the spill is away from the shoreline, a boat will need to be used to reach the spill and 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.

4.3.2 Weirs

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.

4.3.3 Barriers

In some situation 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.

Note that 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 Aboriginal Affairs and Northern Development Canada or lead agency inspector.

4.4 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 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.

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.

4.5 PROCEDURES FOR RESTORING AFFECTED AREAS

Once a spill of reportable size has been contained, LWR and Archer Cathro will consult with the Aboriginal Affairs and Northern Development Canada (AANDC) or Mackenzie Valley Land and Water Board (MVLWB) or Lead Agency Inspector assigned to the file to determine the level of clean-up 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 re-vegetation.

5.0 RESOURCE INVENTORY

5.1 ON-SITE RESOURCES

Spill kits are located throughout the LNPG Project site. Spill kits will be located at all refueling locations, camp, fuel storage, at the drill and at the water pump. The contents of a typical spill kit are listed below the table below. Spill kit contents may vary from those listed below, however, industry standards must be maintained. Additional sorbent cloth will be available on site.

Contents of Conventional Spill Kits	
Tyvek splash suits	1 utility knife
Pairs of chemical master gloves	1 field notebook and pencil
10 large bags with ties for temporary use	1 rake
2 oil only booms (5"x10")	1 pickaxe
50 oil only mats (16"x20")	1 shovel
Sorbent socks	1 instruction binder
10 sorbent pads	Empty drums
2 large tarps and rolls of PE sheeting	Hatch removal sock
1 roll duct tape	

5.2 OFF-SITE RESOURCES

The following table lists the Project Management Team and applicable contacts for spill response. By calling one of the listed contacts, the emergency spill response plan is enabled.

Lake Winn Resources Corp. (Head Office)	(604) 689-1799
Archer Cathro (Whitehorse Office)	(867) 667-4415
Archer Cathro (Safety Coordinator)	(867) 332-6142
NWT Spill Report Line (24 Hour) EMAIL: spills@gov.nt.ca	(867) 920 8130
CANUTEC (24-hour)	(613) 996 6666
RCMP – Fort Simpson	(867) 695 1111
RCMP – Ross River	(867) 969 2677
Nursing Station (Fort Simpson)	(867) 695 7000
Nursing Station (Ross River)	(867) 969 4444

6.0 TRAINING PROGRAM

6.1 OUTLINE OF TRAINING PROGRAM

The employee and contractor training program was developed by Archer Cathro's Health & Safety Manger and has been distributed by the site superintendent. The following points are key steps in that program:

- All individuals entering the site are required to participate in an orientation session
- During this session, all locations of the spill plan and spill kits are provided on a map in hard copy
- An overview of the plan is provided by the site superintendent or designate leading the orientation session
- Specific training sessions, including mock spill exercises, are scheduled for individuals directly involved in handling hazardous materials as well as the steps involved in the event of a spill, including the proper use of spill kits
- All employees and contractors are required to have their basic first aid training as well as WHMIS training before working on the site
- Supervisors are required to have first aid training as well as transport of dangerous goods training

Appendix A

Material Safety Data Sheets (MSDS)

Appendix B

[Spill Report Form \(NU & NT\)](#)

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:	Remarks:		
Lead Agency:					
First Support Agency:					
Second Support Agency:					
Third Support Agency:					

Appendix C

Immediately Reportable Spill Quantities

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
		9.0

Substance	Reportable Quantity	TDG Class
Miscellaneous products, substances or 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: 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