

# **FUEL TRANSPORT AND STORAGE MANAGEMENT PLAN**

**MEADOWBANK GOLD PROJECT  
NUNAVUT TERRITORY**

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**January, 2003**

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## **I. INTRODUCTION**

The original Fuel Transport and Storage Management Plan was developed by Cumberland Resources in 1999, prior to the installation of bulk fuel storage vaults at the Meadowbank site. Since the original document was prepared, several changes have occurred in the location and number of installed fuel vaults at the site, as well as the volumes and types of fuel stored. This document has been updated to account for these changes as well as changes that have occurred in Cumberland personnel and their responsibilities.

### **PURPOSE**

This Transportation Spill Contingency Plan is designed to promote environmental awareness and safety, as well as facilitate the efficient cleanup of spills as the result of transportation incidents while in transit between Baker Lake and Cumberland Resources Ltd. exploration site at the Meadowbank project, and at Cumberland's fuel storage facilities at the Meadowbank project involving the following substances:

- P-50 Diesel
- Jet A and/or Jet B turbo fuel
- Hydraulic Oil
- Lube Oil
- Waste Oil
- Propane
- Other materials hazardous to the safety of personnel and the environment

Principal objectives of the Spill Contingency Plan are:

1. To provide readily accessible emergency information to cleanup crews, Meadowbank project personnel, KIA, and government agencies in the event of a spill.
2. To comply with Cumberland Resources Ltd. environmental policy.
3. To comply with federal and territorial regulations pertaining to the preparation of contingency plans and notification requirements.
4. To promote the safe and effective recovery of spilled materials.
5. To minimize the environmental impacts of spills to water and/or land.
6. To facilitate the management of wastes according to environmental legislation.

### **SCOPE**

This Plan addresses the organization of Cumberland Resources Ltd. Meadowbank Gold Project spill response and related emergency measures. Alerting and notification procedures and cleanup strategies are outlined along with the duties and responsibilities of key spill response personnel. Emergency contacts are listed for Cumberland Resources Ltd., Cumberland contractors, and local government agencies. Emergency response equipment is listed that is available immediately (should a spill occur) from local freighting contractors, such as Peter's Expediting in Baker Lake.

Detailed information in support of this Transportation Spill Contingency Plan and ensuing spill response actions, is provided in the following appendices:

- Appendix A contains an up-to-date inventory of spill response equipment and kits available at various locations.
- Appendix B contains risk assessment and preventive measures.
- Appendix C contains NWT Spill Report Forms that are to be used to report spills.
- Appendix D contains load manifest forms with disclosure for TDG.
- Appendix E contains a fuel storage monitoring plan.
- Appendix F contains fuel handling and fuel spill response training course outlines.

## **Environmental Policy - Cumberland Resources**

Cumberland Resources Ltd. is committed to achieving a high standard of environmental care in conducting its mineral exploration activities.

Cumberland's environmental policy includes:

- Compliance with all applicable legislation including laws, regulations and standards. Where laws do not exist, appropriate standards will be applied to minimize environmental impacts resulting from exploration activities.
- Open communication with government, the community and employees on environmental issues.
- Development and adherence to management systems that adequately identify, monitor and control environmental risks associated with Cumberland's exploration activities.
- Assurance the employees are aware of their responsibilities and comply with Cumberland's environmental policy and field guide.

ON BEHALF OF  
THE BOARD OF DIRECTORS

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Kerry M. Curtis, P. Geo.  
Interim President and C.E.O.

January, 2003

## **SITE DESCRIPTION**

The Meadowbank Gold Project is located at 65° 01' 30" N latitude and 96° 04' 20" W longitude, approximately 70km north of the Hamlet of Baker Lake, Nunavut. The transportation of fuel to the site is accomplished over a winter road that begins at Baker Lake and ends at the exploration site (see attached figure). The route covers a combination of lake ice and tundra most of which is under federal jurisdiction. The portion of the route closest to the Project Site lies within Inuit owned land (IOL BL-14) and land use in the area is administered by the Kivalliq Inuit Association. The haul route distance from Baker Lake to the Meadowbank Project exploration camp is approximately 100 km. This transportation route has been used by Cumberland to transport fuel and other supplies for eight years (1995 - 2002) with negligible environmental impacts.

## **FACILITY DESCRIPTION**

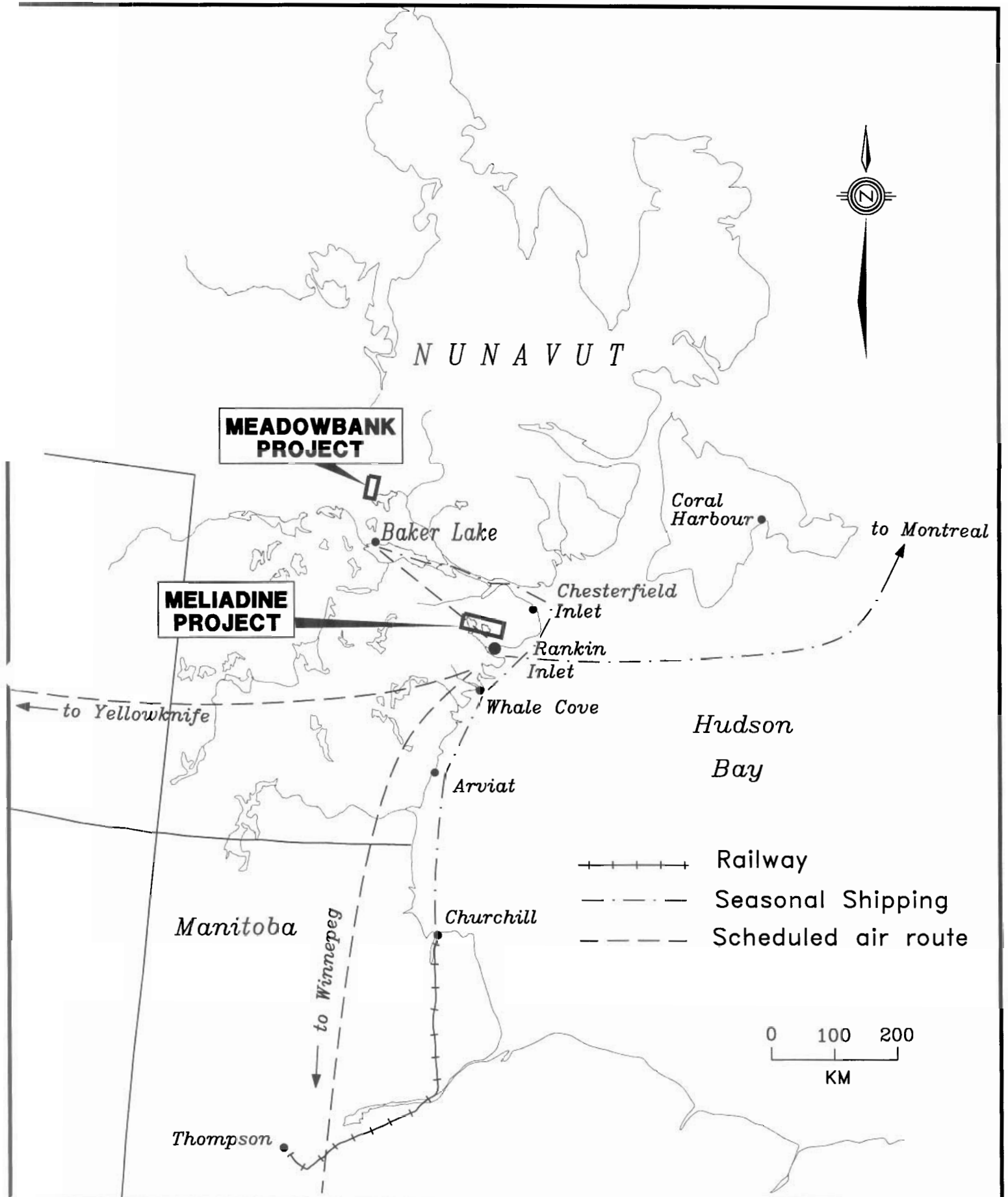
Nine skid-mounted double-walled cylindrical fuel vaults are installed at the Meadowbank site located about 70 km north of Baker Lake, Nunavut. Five 50,000l tanks and four 75,000l tanks are currently in use at the site. The 50,000 litre tanks have the following dimensions: Length - 7.34 m (secondary tank), 6.48 m (primary tank), Diameter - 3.20 m (outside secondary), Maximum fill capacity - 48,224 l, Skid assembly - 8.48 m X 2.44 m. The 75,000 litre tanks, have the following dimensions: Length - 11.71 m (secondary tank), 10.59 m (primary tank); Diameter - 2.90 m (outside secondary); Maximum fill capacity - 71,250 l; Skid assembly - 13.04 m X 2.90 m. Both sizes of tanks are mounted on steel skids, which are supported by timbers resting on a bed of gravel and sand.

Two of the 50,000 litre fuel vaults are installed at the south camp located on an island in Third Portage Lake. These tanks have been installed and in operation since 1999. The remaining three 50,000 litre tanks and the four 75,000 litre tanks are installed at the north camp in close proximity to the proposed mill site for the development of Meadowbank. The three 50,000 litre tanks were installed at the site in 2002, while the four 75,000 litre tanks were installed in the spring of 2003.

## **TYPE AND AMOUNT OF CONTAMINANT**

The five 50,000 litre fuel vaults are used exclusively for diesel fuel storage and have a total combined capacity of 241,120 litres. Three of the four 75,000 litre fuel vaults are used for diesel storage (combined 213,750 litre capacity), while the fourth tank is used for Jet-B aviation fuel and has a capacity of 71,250 litre.

The storage facilities on the island are capable of storing up to 96,448 litres, while the storage facilities in the north camp are capable of containing 358,422 litres of bulk diesel fuel and 71,250 litres of Jet-B aviation fuel. Other fuel supplies such as gasoline is stored in 205 l metal drums, as the amount required at present does not justify the use of fuel vaults.



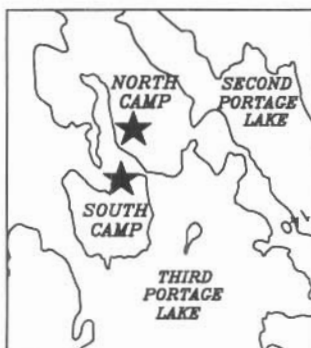




0 25 50 100  
metres

**SOUTH CAMP**

water in water out  
boat launch  
area of disturbance  
Helicopter Pad  
full Jet B  
Salt & Cement  
bulk fuel tanks



## LEGEND

LAKESHORE

BUILDING

CONTOUR



**CUMBERLAND**  
RESOURCES LTD

**MEADOWBANK PROJECT**  
Nunavut

**PRESENT  
SOUTH CAMP  
LOCATION**

Scale: as shown

N.T.S. 66A,H

Date:

Dec30 2002

Revised by: JT Kellner

I.O.L. BL-14

Map No.

Filename: Feb 2003

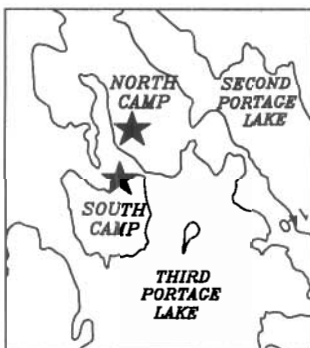
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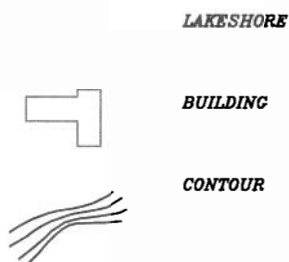
0 25 50 100  
metres

NORTH  
CAMP

bulk fuel tanks  
COVER-ALL  
water out  
area of disturbance  
water in  
boat launch



## LEGEND



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Nunavut

PRESENT  
NORTH CAMP  
LOCATION

Scale: as shown	N.T.S. 66A.H	Date: Feb 2003
Revised by: JT Kellner	I.O.L. BL-14	Map No.
Filename: north_camp	Datum: NAD83Z14	

## **RESPONSIBILITIES**

### **SHIPPER:**

- Ensures proper loading and containment and documentation which complies with TDG guidelines.
- Ensures goods are classified and labeled appropriately. Provide placards if required.
- Ensures safety at all times.
- Ensures proper communication with carrier.

### **CARRIER:**

- Supervises and ensures proper loading and containment and documentation which complies with all TDG guidelines.
- Ensures correct volumes for transport, attach placards if necessary, maintains or replaces safety marks.
- Checks and delivers TDG manifest to receiver.
- Ensures safety of all personnel and equipment.

### **RECEIVER:**

- Supervises unloading procedures.
- Complies with TDG guidelines.
- Ensures safety of containment facilities.
- Ensures maintenance of all pumps and loading / unloading equipment on site.
- Provides on-site emergency communications (telephone, radio).
- Completes regular site inspections of storage facilities.
- Records all shipment manifests.
- Keeps on-site inventory of all dangerous goods.
- Maintains safety procedures at all times.

### **SPILL SITE COORDINATOR:**

- Supervises and organizes spill containment equipment and personnel.
- Reports to internal and external resources.
- Ensures proper safety equipment is available.
- Notifies all personnel of current hazards.
- Maintains proper safety procedures at all times.
- Must be compliant with all TDG guidelines.



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MEADOWBANK PROJECT  
WINTER HAUL ROAD

