COMAPLEX
MINERALS CORP

FUEL MANAGEMENT AND SPILL CONTINGENCY PLAN

Comaplex Minerals Corp.

MELIADINE WEST PROJECT

January 2007

SUITE 901, 1015 4TH STREET SW, CALGARY, CANADA T2R 1J4 © TEL [403] 265-2846 © FAX [403] 232-1421

CONTENTS

A - INTRODUCTION

1. PURPOSE

This Fuel Management and Spill Contingency Plan is designed to promote environmental awareness and safety, as well as facilitate the efficient cleanup of spills as the result of:

1. transportation incidents while in transit between Rankin Inlet and the Comaplex Minerals Corp. (CMF) exploration site at Meliadine Lake, and
2. spills during the course of camp and exploration operations involving the following substances:
    - P-50 Diesel
    - Jet A 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, Meliadine project personnel, KIA, and government agencies in the event of a spill.
2. To comply with federal and territorial regulations pertaining to the preparation of contingency plans and notification requirements.
3. To promote the safe and effective recovery of spilled materials.
4. To minimize the environmental impacts of spills to water and/or land.
5. To facilitate the management of wastes according to environmental legislation.

2. SCOPE

This Plan addresses the organization of the Meliadine West 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 CMF, CMF contractors, local government agencies, and the Nunavut Power Corporation in Rankin Inlet. Emergency response equipment is listed that is available immediately (should a spill occur) from local freighting contractors, such as M & T Enterprises and the Nunavut Power Corporation in Rankin Inlet.

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

- Appendix A contains summaries of physical / chemical properties and emergency response measures for hydrocarbon substances to be transported to the Meliadine exploration camp.
- Appendix B contains an up-to-date inventory of spill response equipment and kits available at various locations.
- Appendix C contains NWT Spill Report Forms that are to be used to report spills.
- Appendix D contains a fuel storage monitoring plan.
- Appendix E contains a list of basic components of a Fuel Spill Response Kit

CMF will be contracting out the delivery of fuel and lubricants to the exploration site. The contractors will be trained for spill response and have spill kits that complement this Transportation Spill Contingency Plan. In the event of a spill the contractor is expected to implement a spill response immediately with CMF's plan serving as a back-up.

3. SITE DESCRIPTION

The Meliadine West Gold Project camp is located approximately 25 km north of Rankin Inlet (63° 01' 30" N latitude, 92° 10' 20" West longitude). The area is low arctic tundra with a summer active layer up to 1 m on dry exposed ridges and less than .5 m in the high organic humic soils under meadows. The camp with a capacity for up to 75 persons is located approximately 5 m above lake level on a peninsula surrounded on three sides by Meliadine Lake. Bulk fuel storage is provided by double walled fuel vaults in three locations – 3 X 50,000 L of P50 at camp, 3 X 50,000 L Aviation fuel approximately 200 m south of camp, and 9 X 50,000 L P-50 for exploration needs about 500 m west of camp (please see Figures 1 and 2). No other hazardous substances in significant quantities (>10 L) are used by the Project.

No fuel storage vessels are within 30 m of any water body. All tankage with >1000 L capacity has inherent secondary containment.

Bulk supplies including fuel for the camp and exploration program generally are re-supplied in winter by overland surface transport from Rankin Inlet. The principal route services the main camp site (Figure 3) and includes a short distance of municipal road, sea ice on Hudson Bay, tundra and freshwater ice belonging to the Kivalliq Inuit Association (KIA) and the lake ice of Meliadine Lake under federal jurisdiction. The haul route distance from Rankin Inlet to the Meliadine Project exploration camp is approximately 28 km. Another route proceeds north east from the north shore of Rankin Inlet to a cache on federal claims held in the Parallel Lake area (Figure 3) and similarly crosses lands administered by both the KIA and Indian and Northern Affairs. This haul route distance is approximately 46 km.

Day to day supplies for camp and exploration operations as well as the transfers of personnel are overland by contracted local Bombardier in winter and by chartered helicopter in summer.

3.1 Spill Kits

Spill kits in bright yellow 200 L containers include:
- basic personal protective equipment including goggles and latex gloves,
- sorbent materials including socks, pillows, pads and granular substances
- large plastic bags for containing and transferring contaminated sorbent materials.

Spill kits are located at:
- Camp fuel cache
- Aviation fuel cache
- Drilling fuel cache
- Generator shack

- Core shack generator
- Reconnaissance caches and drill sites

Additional sorbent materials for use at refueling sites for stoves and furnaces throughout camp are stored in the **Emergency Response** shelter, and at the drillers' storage and repair yard (see Figure 2 for these locations and locations of spill kits).

3.2 Spill Response Capacity

All bulk fuel on site is stored in double walled fuel vaults.

The largest active use vessels are the P50 tanks (1000 L) connected to stoves and furnaces for heating worker accommodations.

Minor spills (<200 L) will be cleaned up by the deployment of sorbent materials which will be disposed of by incineration.

Larger spills will be cleaned up by a combination of sorbent materials, and containment and collection in empty 205 L drums on site. Recovered fuels will be disposed of by incineration.

Containment of larger spills will be achieved by snow berms/trenches in winter and trenches/sorbent socks (in spill kits) in summer.

3.3 Contaminated Soils

Spill sites will be identified, monitored and treated with peat and fertilizer to enhance plant recovery where growth retardation is evident. Sites that do not respond and show sign of plant growth at the time of site abandonment will become subject to the **Abandonment and Restoration Plan**.

3.4 Closure and Abandonment

The lands that are subject to this Spill Contingency Plan are Inuit Owned Lands belonging to the Kivalliq Inuit Association and are leased to CMF for the purposes of mineral exploration and development. The Preliminary Closure and Abandonment Plan that follows is the undertaking by CMF filed with KIA.

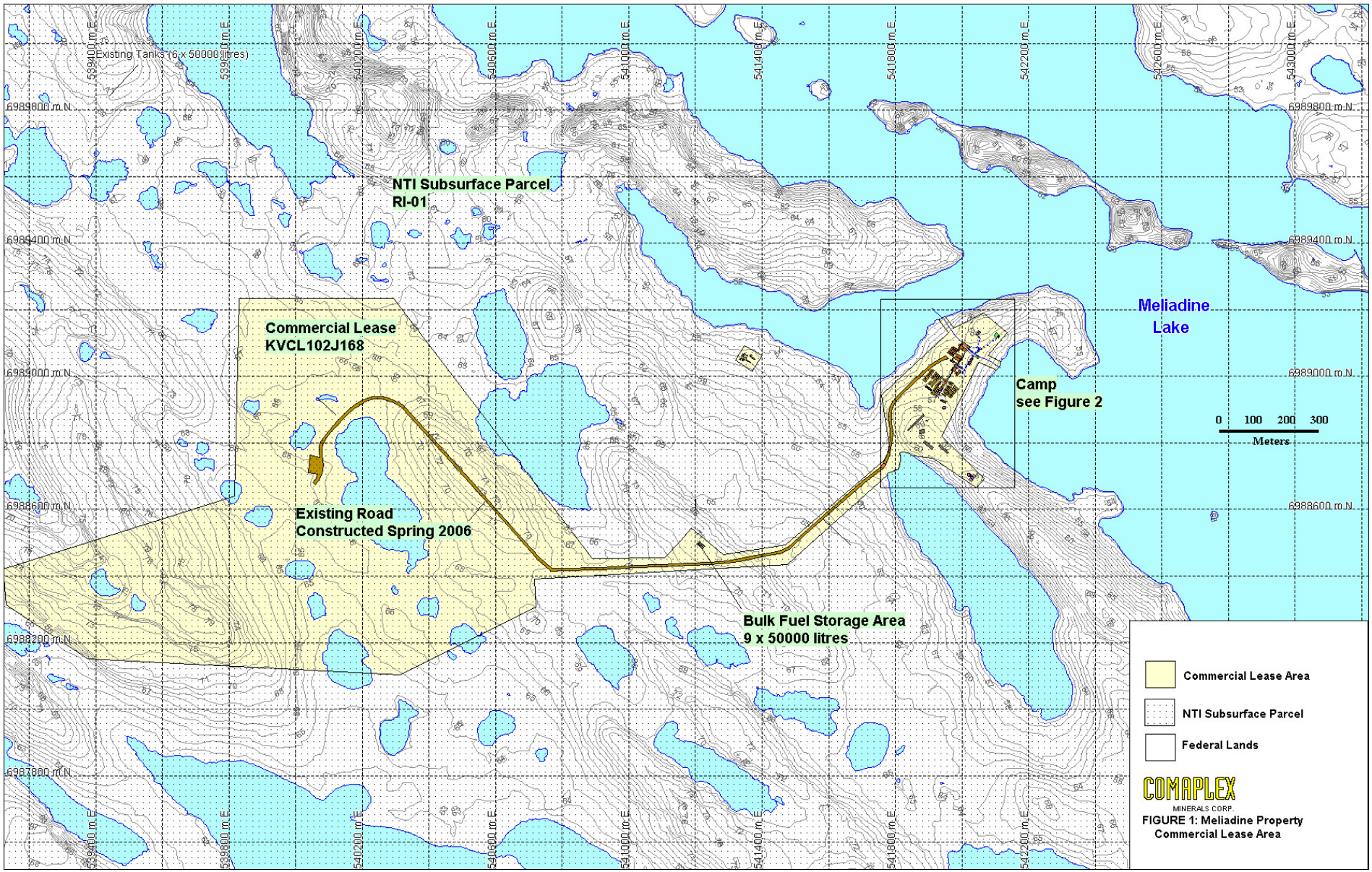
Existing Tanks (6 x 50000 litres)
NTI Subsurface Parcel
RI-01
Commercial Lease
KVCL102J168
Existing Road
Constructed Spring 2006
Bulk Fuel Storage Area
9 x 50000 litres
Meliadine
Lake
Camp
see Figure 2
0 100 200 300
Meters
Commercial Lease Area
NTI Subsurface Parcel
Federal Lands
COMAPLEX
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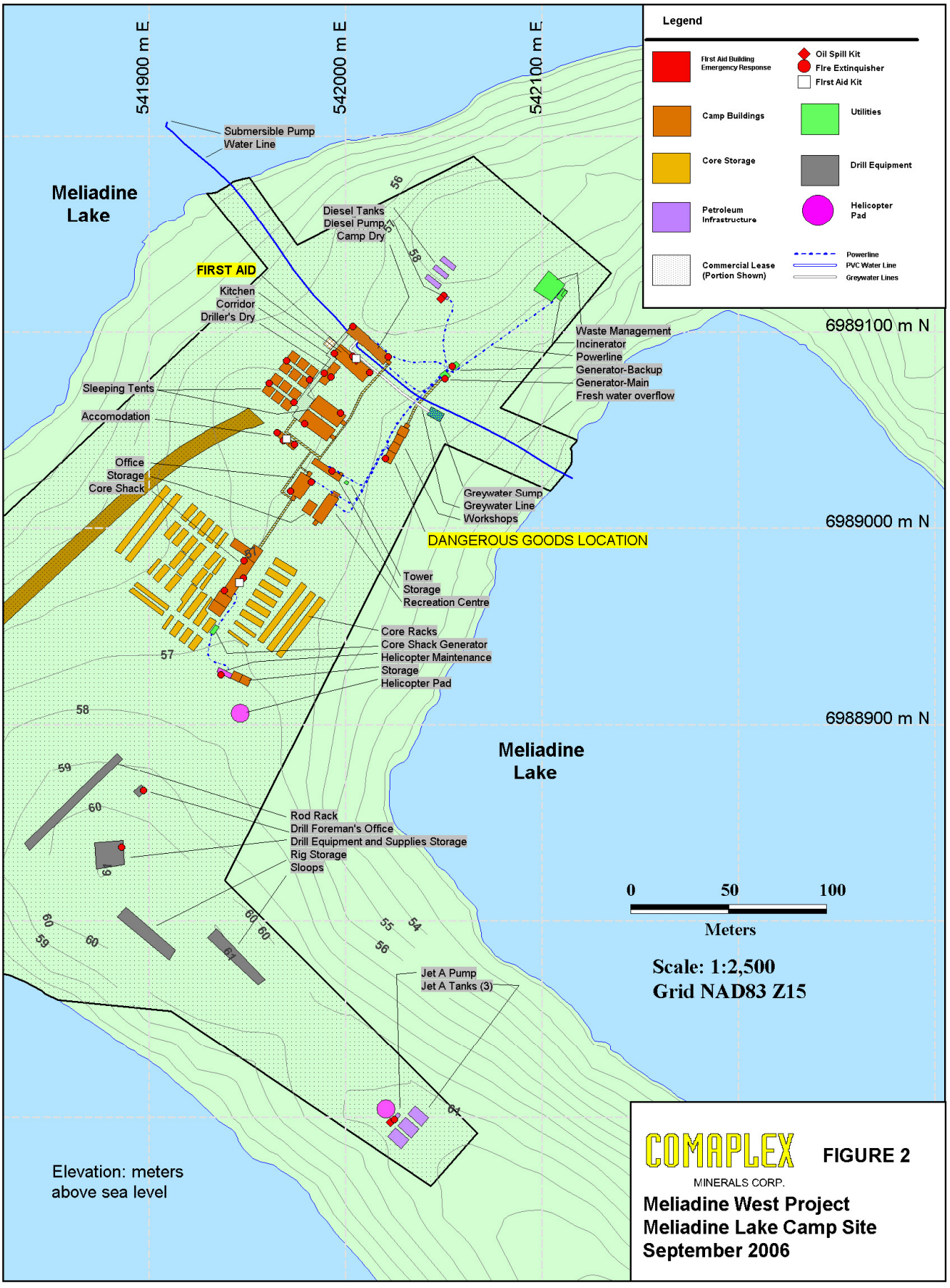
FIGURE 1: Meliadine Property
Commercial Lease Area


541900 m E
542000 m E
542100 m E
6989100 m N
6989000 m N
6988900 m N
Meliadine Lake
Meliadine Lake
Submersible Pump
Water Line
Diesel Tanks
Diesel Pump
Camp Dry
FIRST AID
Kitchen
Corridor
Driller's Dry
Waste Management
Incinerator
Powerline
Generator-Backup
Generator-Main
Fresh water overflow
Sleeping Tents
Accomodation
Office
Storage
Core Shack
Greywater Sump
Greywater Line
Workshops
DANGEROUS GOODS LOCATION
Tower
Storage
Recreation Centre
Core Racks
Core Shack Generator
Helicopter Maintenance
Storage
Helicopter Pad
Rod Rack
Drill Foreman's Office
Drill Equipment and Supplies Storage
Rig Storage
Sloops
Jet A Pump
Jet A Tanks (3)
Legend
First Aid Building
Emergency Response
Oil Spill Kit
Fire Extinquisher
First Aid Kit
Camp Buildings
Utilities
Core Storage
Drill Equipment
Petroleum Infrastructure
Helicopter Pad
Commercial Lease
(Portion Shown)
Powerline
PVC Water Line
Greywater Lines
0
50
100
Meters
Scale: 1:2,500
Grid NAD83 Z15
Elevation: meters
above sea level
COMAPLEX
MINERALS CORP.
FIGURE 2
Meliadine West Project
Meliadine Lake Camp Site
September 2006

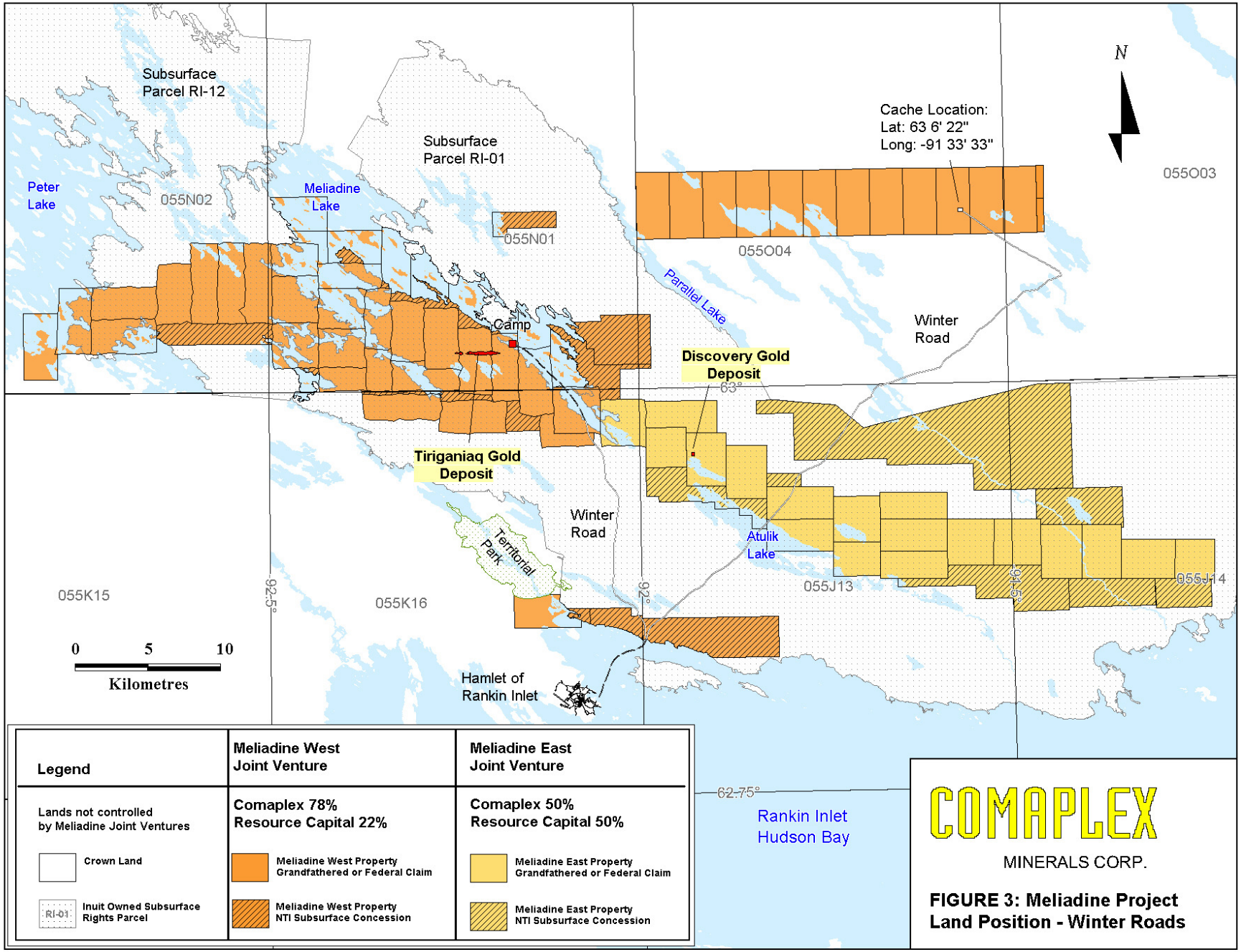

Subsurface
Parcel RI-12
Subsurface
Parcel RI-01
Cache Location:
Lat: 63 6' 22"
Long: -91 33' 33"
N
055O03
Peter
Lake
055N02
Meliadine
Lake
055N01
055O04
Parallel Lake
Camp
Winter
Road
Discovery Gold
Deposit
63°
Tiriganiaq Gold
Deposit
Winter
Road
Territorial
Park
Atulik
Lake
055K15
055K16
055J13
055J14
62.5°
62°
61.5°
0 5 10
Kilometres
Hamlet of
Rankin Inlet
62.75°
Rankin Inlet
Hudson Bay
Legend
Meliadine West
Joint Venture
Meliadine East
Joint Venture
Lands not controlled
by Meliadine Joint Ventures
Comaplex 78%
Resource Capital 22%
Comaplex 50%
Resource Capital 50%
Crown Land
Meliadine West Property
Grandfathered or Federal Claim
Meliadine East Property
Grandfathered or Federal Claim
RI-01
Inuit Owned Subsurface
Rights Parcel
Meliadine West Property
NTI Subsurface Concession
Meliadine East Property
NTI Subsurface Concession
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FIGURE 3: Meliadine Project
Land Position - Winter Roads

B: SPILL ACTION PLAN RESPONSE SEQUENCE

1. REPORT ALL SPILLS TO:

Exploration camp manager or Senior Project geologist on site

Site: **Ph./Fax 867 645 3308 (local); 403-451-3236 (3237)**

Office: **Ph. 403 265 2846; 403-750-2560; Fax 403-232-1421**

The reporting requirement applies to all spills: on land, on water and on ice.

The reporting requirement applies equally to all substances covered by this contingency plan; fuels, hydraulic oil, lubricants, and waste oil.

All reports by telephone must be followed with a fax of the completed report form (see Appendix C) to the number indicated on the reporting form.

Reporting and notification described below must be made by the first observer of the spill or the observer's superior immediately upon the spill being under control, or on failure to gain control of the situation.

2. ALERT CMF Personnel:

SPILL OBSERVER

- IMMEDIATE SUPERVISOR or Meliadine Camp manager
  - Meliadine Project Manager - Mark Balog 1 403 750 2560
  - Contractors (clean up) - M & T Enterprises Ltd. Rankin Inlet 1 867 645 2778

3. NOTIFY AGENCIES:

24 HOUR NWT SPILL REPORT LINE PHONE	1 867 920 8130
FAX	1 867 873 6924
KIVALLIQ INUIT ASSOCIATION	1 867 645 2810
DIAND - Rankin Inlet	1 867 645 2831
- Iqaluit	1 867 979 4405
- Water Resources	1 867 975 4298
Environment Canada – Iqaluit	1 867 975 4644
Yellowknife	1 867 920 6060
-24 hr. Emergency pager	1 867 920 5131
Fisheries and Oceans Rankin Inlet	1 867 645 2871

Emergency Contacts

EMO - Rankin Inlet	1 867 645 5042
	after hours 1 867 645 3789
Rankin Municipality (Senior Administrator)	1 867 645 2895
RCMP - Rankin Inlet	1 867 645 1111
Rankin Inlet Health Center	1 867 645 2816
Rankin Inlet Fire Department	1 867 645 2525

KIA David Ningeongan 1 867 645 2800
after hours 1 867 645 3196

4. RECORD THE FACTS

Use Spill Report Form from Appendix C

NOTE: **If the On-Scene Coordinator is not available when a spill is detected then the spill must be reported directly to NWT 24-hour spill report line without delay.**

C: INITIAL SPILL RESPONSE PRIORITIES

SAFETY FIRST

1. RESPOND QUICKLY

1. Identify the spilled material.
2. Ensure safety of yourself and others.
3. Shut off ignition sources - NO SMOKING.
4. Attend to Injured.
5. Assess the severity of the spill.
6. Call for assistance.
7. Project Manager mobilizes Emergency Response Team.
8. Keep unnecessary people out of the area.
9. Wear impervious clothing, goggles, gloves.
10. Approach spill from upwind **IF SAFE TO DO SO**.
11. Stop product flow if possible.
12. Contain and recover spill as soon as possible.

2. RESPOND SAFELY

1 Do not contain gasoline or av gas if vapors might ignite.
2 Allow gasoline or av gas spills to evaporate.
3 See Appendix A - Product Guides for further information.

3. OBTAIN AND REPORT SPILL DETAILS

NWT Spill Report Forms are in Appendix C of this spill contingency and response plan.

DIESEL - P 50 - SPILL RESPONSE ACTIONS

CONSIDER ACTION ONLY IF SAFETY PERMITS!

• ELIMINATE IGNITION SOURCES

• STOP SOURCE OF DIESEL IF SAFE TO DO SO

ON LAND

• Do not flush into ditches or drainage systems.
• Block entry into waterways and contain with earth, snow or other barrier.
• Remove small spills with sorbent pads.
• On tundra use peat moss and leave in place to degrade, if practical.

ON SNOW & ICE

• Block entry into waterways and contain with snow or other barrier.
• Remove minor spills with sorbent pads and/or snow.
• Use ice augers and pump to recover diesel under ice.
• Slots in ice can be cut over slow moving water to contain oil.
• Burn accumulated diesel from the surface using Tiger Torches if feasible and safe to do so.

ON MUSKEG

• Do not deploy personnel and equipment on marsh or vegetation.
• Remove pooled diesel with pumps and skimmers.
• Flush with low pressure water to herd diesel to collection point.
• Burn only in localized areas, e.g., trenches, piles or windrows.
• Do not burn if root systems can be damaged (low water table).
• Minimize damage caused by equipment and excavation.

ON WATER

• Contain spill as close to release point as possible.
• Use spill containment boom to concentrate slicks for recovery.
• On small spills, use sorbent pads to pick up contained oil.
• On larger spills, use skimmer on contained slicks.
• Do not deploy personnel and equipment onto mudflats or into wetlands

RIVERS & STREAMS

• Prevent entry into water, if possible, by building berm or trench.
• Intercept moving slicks in quiet areas using (sorbent) booms.
• Do not use sorbent booms/pads in fast currents and turbulent water.

STORAGE / TRANSFER

• Store closed, labelled containers outside away from flammable items.
• Electrically ground containers and vehicles during transfer.

DISPOSAL

• Segregate waste types.
• Place contaminated materials into marked containers.
• Consult camp manager on disposal procedures.

HYDRAULIC OIL SPILL RESPONSE ACTIONS
CONSIDER ACTION ONLY IF SAFETY PERMITS
• ELIMINATE IGNITION SOURCES
• STOP SOURCE OF HYDRAULIC OIL IF SAFE TO DO SO

ON LAND
• Do not flush into ditches or drainage systems.
• Block entry into waterways and contain with earth, snow or other barrier.
• Remove small spills with sorbent pads.
• On tundra use peat moss and leave to degrade if feasible to do so.

ON SNOW & ICE
• Block entry into waterways and contain with snow or other barrier.
• Remove minor spills with sorbent pads and/or snow.
• Use ice augers and pump when feasible to recover oil under ice.
• Burning hydraulic oil will not likely be feasible.
• Mechanical removal (scraping) can be tried.

ON MUSKEG
• Do not deploy personnel and equipment on marsh or vegetation.
• Remove pooled oil with pumps and skimmers.
• Flush with low pressure water to herd oil to collection point.
• Minimize damage caused by equipment and excavation.
• Burning is not likely possible.

ON WATER
• Contain spill as close to release point as possible.
• Use spill containment boom to concentrate slicks for recovery.
• On small spills, use sorbent pads to pick up contained oil.
• On larger spills, obtain and use skimmer on contained slicks.
• Do not deploy personnel and equipment on mudflats or wetlands.
• Remove contained oil with sorbent pads and/or skimmer.

RIVERS & STREAMS
• Prevent entry into water, if possible, by building berm or trench.
• Intercept moving slicks in quiet areas using (sorbent) booms.
• Do not use sorbent booms/pads in fast currents and turbulent water.

STORAGE / TRANSFER
• Store closed, labeled containers outside away from flammable items.
• Drums are likely to be used for containing collected hydraulic oil.

DISPOSAL
• Segregate waste types.
• Place contaminated materials into marked containers.
• Consult on camp manager on disposal procedures..

LUBE OIL SPILL RESPONSE ACTIONS

CONSIDER ACTION ONLY IF SAFETY PERMITS

• ELIMINATE IGNITION SOURCES

• STOP SOURCE OF LUBE OIL IF SAFE TO DO SO

ON LAND

• Do not flush into ditches or drainage systems.
• Block entry into waterways and contain with earth, snow or other barrier.
• Remove small spills with sorbent pads.
• On tundra use peat moss and leave to degrade if feasible to do so.

ON SNOW & ICE

• Block entry into waterways and contain with snow or other barrier.
• Remove minor spills with sorbent pads and/or snow.
• Burning is unlikely to be possible.
• Use ice augers and pump when feasible to recover oil under ice.

ON MUSKEG

• Do not deploy personnel and equipment on marsh or vegetation.
• Remove pooled oil with pumps and skimmers.
• Flush with low pressure water to herd oil to collection point.
• Burning is not likely to be possible.
• Minimize damage caused by equipment and excavation.

ON WATER

• Contain spill as close to release point as possible.
• Use spill containment boom to concentrate slicks for recovery.
• On small spills, use sorbent pads to pick up contained oil.
• On larger spills, obtain and use skimmer on contained slicks.
• Do not deploy personnel and equipment on mudflats or wetlands.
• Remove contained oil with sorbent pads and/or skimmer.

RIVERS & STREAMS

• Prevent entry into water, if possible, by building berm or trench.
• Intercept moving slicks in quiet areas using (sorbent) booms.
• Do not use sorbent booms/pads in fast currents and turbulent water.

STORAGE / TRANSFER

• Store closed, labeled containers outside away from flammable items.
• Electrically ground containers and vehicles during transfer.

DISPOSAL

• Segregate waste types.
• Place contaminated materials into marked containers.
• Consult camp manager on disposal procedures.

WASTE OIL SPILL RESPONSE ACTIONS

CONSIDER ACTION ONLY IF SAFETY PERMITS

• ELIMINATE IGNITION SOURCES

• STOP SOURCE OF WASTE OIL IF SAFE TO DO SO

ON LAND

• Do not flush into ditches or drainage systems.
• Block entry into waterways and contain with earth, snow or other barrier.
• Remove small spills with sorbent pads.
• On tundra use peat moss and leave to degrade if feasible to do so.

ON SNOW & ICE

• Block entry into waterways and contain with snow or other barrier.
• Remove minor spills with sorbent pads and/or snow.
• Burning is unlikely to be possible.
• Use ice augers and pump when feasible to recover oil under ice.

ON MUSKEG

• Do not deploy personnel and equipment on marsh or vegetation.
• Remove pooled oil with pumps and skimmers.
• Flush with low pressure water to herd oil to collection point.
• Burning is not likely to be possible.
• Minimize damage caused by equipment and excavation.

ON WATER

• Contain spill as close to release point as possible.
• Use spill containment boom to concentrate slicks for recovery.
• On small spills, use sorbent pads to pick up contained oil.
• On larger spills, obtain and use skimmer on contained slicks.
• Do not deploy personnel and equipment on mudflats or wetlands.
• Remove contained oil with sorbent pads and/or skimmer.

RIVERS & STREAMS

• Prevent entry into water, if possible, by building berm or trench. & Streams
• Intercept moving slicks in quiet areas using (sorbent) booms.
• Do not use sorbent booms/pads in fast currents and turbulent water.

STORAGE / TRANSFER

• Store closed, labeled containers outside away from flammable items.
• Electrically ground containers and vehicles during transfer.

DISPOSAL

• Segregate waste types
• Place contaminated materials into marked containers.
• Whenever possible suitable waste oils collected at the site will be disposed of by incineration.
• Consult camp manager on disposal procedures.

GASOLINE SPILL RESPONSE ACTIONS
CONSIDER ACTION ONLY IF SAFETY PERMITS

GASOLINE FORMS VAPOURS THAT CAN IGNITE AND EXPLODE NO SMOKING

• ELIMINATE IGNITION SOURCES
• STOP SOURCE OF GASOLINE IF SAFE TO DO SO

ON LAND
• Block entry into waterways by diking with earth, snow or other barrier(s).
• Do not contain spill if there is any chance of igniting vapors.
• On shop floors and in work/depot yards, apply particulate sorbents.
• On tundra use peat moss and leave to degrade if feasible to do so.

ON SNOW & ICE
• Block entry into waterways by diking with snow or other barrier.
• Do not contain spill if there is any chance of igniting vapors.
• In work/depot yards, apply particulate sorbents.

ON MUSKEG
• Remove pooled gasoline with pumps, if safe to do so.
• Do not deploy personnel and equipment on marsh or vegetation.
• Low pressure flushing can be tried to disperse small spills.
• Burn CAREFULLY only in localized areas, e.g., trenches, piles or windrows.
• Do not burn if root systems can be damaged (low water table).
• Minimize damage caused by equipment and digging.

ON WATER
• Contain or remove spills ONLY AFTER VAPOURS DISSIPATE.
• Use booms to protect water intakes.
• Skimming can be tried once light ends evaporate.

STORAGE / TRANSFER
• Store closed, labeled containers in cool, ventilated areas away from incompatible materials.
• Electrically ground containers and vehicles during transfer.

DISPOSAL
• Segregate waste types, if necessary.
• Place contaminated materials into marked containers.
• Consult camp manager on transportation and disposal requirements.

JET A (AVIATION FUEL) SPILL RESPONSE ACTIONS
CONSIDER ACTION ONLY IF SAFETY PERMITS
AV GAS FORMS VAPOURS THAT CAN IGNITE AND EXPLODE
NO SMOKING

• ELIMINATE IGNITION SOURCES
• STOP SOURCE OF JET A IF SAFE TO DO SO

ON LAND
• Block entry into waterways by diking with earth, snow or other barrier(s).
• Do not contain spill if there is any chance of igniting vapors.
• On shop floors and in work/depot yards, apply particulate sorbents.
• On tundra use peat moss and leave to degrade if feasible to do so.

ON SNOW & ICE
• Block entry into waterways by diking with snow or other barrier.
• Do not contain spill if there is any chance of igniting vapors.
• In work/depot yards, apply particulate sorbents.

ON MUSKEG
• Remove pooled av gas with pumps, if safe to do so.
• Do not deploy personnel and equipment on marsh or vegetation.
• Low pressure flushing can be tried to disperse small spills.
• Burn CAREFULLY only in localized areas, e.g., trenches, piles or windrows .
• Do not burn if root systems can be damaged (low water table).
• Minimize damage caused by equipment and digging.

ON WATER
• Contain or remove spills ONLY AFTER VAPOURS DISSIPATE.
• Use booms to protect water intakes.
• Skimming can be tried once light ends evaporate.

STORAGE / TRANSFER
• Store closed, labeled containers in cool, ventilated areas away from incompatible materials.
• Electrically ground containers and vehicles during transfer.

DISPOSAL
• Segregate waste types, if necessary.
• Place contaminated materials into marked containers.
• Consult camp manager on transportation and disposal procedures.

PROPANE RESPONSE ACTIONS
GAS STORED IN CYLINDERS THAT EXPLODE WHEN IGNITED!
CONSIDER ACTION ONLY IF SAFETY PERMITS

KEEP ALL VEHICLES INCLUDING SNOWMOBILES AWAY FROM ACCIDENT AREA

Refer to Product Guide in Appendix A for:
- Physical/Chemical Properties
- Response to Fires
- First Aid

• Vapors cannot be contained when released.

• Water spray can be used to knock down vapors if there is NO chance of ignition.

• Small fires can be extinguished with dry chemical or CO.

• Personnel should withdraw immediately from area unless a small leak is stopped immediately after it has been detected.

• If tanks are damaged, gas should be allowed to disperse and no attempt at recovery should be made.

• Personnel should avoid touching release point on containers since frost quickly forms.

• Stay clear of tank ends.

ACETYLENE RESPONSE ACTIONS

GAS STORED IN CYLINDERS THAT EXPLODE WHEN IGNITED!
CONSIDER ACTION ONLY Y IF SAFETY PERMITS
KEEP ALL VEHICLES INCLUDING SNOWMOBILES AWAY FROM ACCIDENT AREA

Refer to Product Guide in Appendix A for:
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• If tanks are damaged, gas should be allowed to disperse and no attempt at recovery should be made.

• Personnel should avoid touching release point on containers since frost quickly forms.

• Stay clear of tank ends.

D: SPILL RESPONSE CONTACTS

Comaplex Minerals Corp. - Meliadine West Project

TITLE	NAME	OFFICE	FAX
On-Scene Coordinators			
Camp Manager	Doug Dumka	1403 750 2559	1 403 232 1421
Spill Cleanup Supervisors Meliadine Camp			
	Doug Dumka	1 867 645 3308; 403-451-3236	
	Sandy Barham	1 867 645 3308; 403-451-3236	
Comaplex Office	Mark Balog	1 403 750 2560	1 403 232 1421
		1 403 288 9355(H)	
		1 403 620 1432 (24hr cell)	
Environmental Coordinator	Ben Hubert	1 403 256 0017	1 403 256 1228
		1 403 256 7114 (H)	
CONTRACTORS			
M & T Enterprises Ltd. Rankin Inlet		1 867 645 2778	1 867 645 2590
OTHERS			
Nunavut Power Corp. Rankin Inlet		1 867 645 5300	1 867 645 2487.
Rankin Municipality (Senior Administrator)		1 867 645 2895	1 867 645 2146

EXTERNAL CONTACTS
CONTACT THE FOLLOWING NUMBER IMMEDIATELY:

1. GOVERNMENT 24-HOUR SPILL REPORT LINE	PH. (867) 920-8130 FAX (867) 873-6924

OTHER CONTACTS: PHONE

KIVALLIQ INUIT ASSOCIATION - LAND MANAGEMENT

Tongola Sandy – president	1 867 645 2810
Luis Manzo - land use manager	1 867 645 2810

EMO 1 867 645 5042 (1 867 645 3789 after working hours)

GOVERNMENT OF CANADA

RCMP - Rankin Inlet	1 867 645 2822
DIAND - Rankin Inlet - Henry Kablalik	1 867 645 2831
Environmental Protection, Environment Canada	1 867 920 6060
Magnus Bourque, Hazardous Materials Officer	1 867 669 4729

Dave Tilden, Hazardous Materials Specialist		1 867 669 4728
Fisheries & Oceans:	Rankin Inlet	1 867 645 2871
	Iqaluit	1 867 979 6274

LOCAL TRANSPORTATION

Helicopters		
CUSTOM HELICOPTERS	Staff House	1 867 645 3885
	Hanger	1 867 645 3939
Air Lines - Scheduled		
	First Air - Dispatch	1 867 873 8021
	Calm Air	1 867 645 2900
	Kivalliq Air	1 877 855 1500
Bombardier	Kowmuk's Taxi	1 867 645 3034
Neighbouring Sites	Nunavut Power Corp.- Rankin Inlet	1 867 645 5300

EQUIPMENT SUPPLIERS

Frontier Mining, Yellowknife (spill kits etc)	1 867 920 7617
Acklands – Yellowknife (spill kits etc)	1 867 873 4100

E: DUTIES AND RESPONSIBILITIES

The roles and responsibilities of CMF personnel, contractors, and Government are described on the following pages.

CMF and CONTRACTOR PERSONNEL

Spill Observer - anyone on haul route, at fuel cache, camp, or drill site at any time
- Assess the initial severity of the spill and safety concerns.
- Report all spills to Meliadine Camp manager immediately.
- Determine the source of the spill and stop or contain it, if possible.
- Participate in spill response as member of cleanup crew.

On-Scene Coordinator (OSC) - CMF Meliadine Camp Manager
- Immediately reports the spill to NWT 24-Hour Spill Report Line at (403) 920-8130.
- Records the time of the report, source of information and details on location, size, type of spill as well as any other information available on the spill report form.
- Oversees the cleanup operation until it is satisfactorily completed.
- Together with the Spill Cleanup Supervisor, decides if additional equipment is required to contain and clean up spills.
- Notifies government agencies, CMF Site Manager, CMF Project Manager and Environmental Coordinator on spill details.
- Oversees completion and distribution of Spill Report. Ensures investigation identifies measures to prevent similar spills in future.
- Ensures Response Team is adequately trained in spill response.
- Organizes training courses for spill response teams.

Spill Clean Up Supervisors
- Supervise spill cleanup crew.
- Assist in initial and ongoing response efforts.
- With work crew, take initial action to seal off the source and contain spill.
- Continue actions until relieved or supplemented by other Supervisor.
- Decide with On-Scene Coordinator if mobilization of additional equipment from Spill Response Organization or Contractor is warranted.
- Assess whether burning is a viable clean up measure; consult with regulatory authorities at spill site.

Spill Cleanup Crew (Emergency Response Team)
- conduct cleanup of spills under direction of Spill Cleanup Supervisor(s).
- Deploy booms, sorbents and other equipment and materials as required.
- Take appropriate response measures.
- Continue cleanup as directed by Spill Cleanup Supervisor until relieved.

Project Manager, Meliadine West Gold Project

- Responsible for all communication with the media.
- Ensures that all press releases are accurate and in accordance with company policy.
- Makes financial decisions on major expenses during large spill response.
- Initiates Mutual Aid Agreements if proper response requires outside assistance.

Environmental Coordinator

- Provides cleanup advice to the On-Scene Coordinator and Spill Cleanup Supervisor.
- Assists the Project Manager in the preparation of press releases.
- Develops safe and effective spill management and prevention practices.
- Provides advice to the Spill Cleanup Supervisor of storage and disposal options.
- Updates and distributes Contingency Plan.
- Ensures that there is follow up reports prepared on the spill event, clean up and environmental impacts.

F: EXTERNAL RESOURCES - contractors and consultants

CMF Fuel Haul Contractors

- Ensure that their best effort is made to maintain spill equipment which shall be available and be applied to a spill incident on site when required.
- Initiates cleanup in the absence of CMF personnel, however caused.
- Reports all spills immediately to the CMF On-Scene Coordinator (OSC) or Camp Manager
- Responsible for the training of their personnel on spill response.
- Develops and maintains company specific contingency plans for the CMF Meliadine West Gold Project which conforms to this CMF Spill Contingency Plan and related policies.

Environmental Consultants

- Provide advice to CMF on spill response strategies, counter measure technologies, impact assessments and post spill monitoring and site rehabilitation.

Neighbouring Operations

- Supply spill response equipment, materials and manpower, as required, when requested to do so.

EXTERNAL RESOURCES - Kivalliq Inuit Association and Nunavut Water Board

KIA

The Meliadine West Gold exploration program is carried out on Inuit Owned Land administered and managed by the KIA who has issued land use permits to CMF for the exploration activities. Inspectors from KIA routinely inspect land use sites for compliance to terms and conditions of permits. While KIA receives data from spills reported to the NWT Spill Line, it is expected that all spills on Inuit Owned Land be reported directly to KIA. The same form as used for the Spill Line may be used for reporting to KIA.

Nunavut Water Board

The Nunavut Water Board issues water licenses under the Nunavut Land Claims Agreement and the Nunavut Waters and Nunavut Surface Rights Tribunal Act. Conditions of the water license usually include the authorized limits of water use, sources of water use, effluent discharge limits, monitoring and reporting requirements. As well, licenses require that Spill Contingency Plans be submitted for approval. Enforcement of the provisions of the water license is carried out by Inspectors from the Water Resources Division (Department of Indian and Northern Affairs). Periodic inspections are conducted by water license inspectors.

EXTERNAL RESOURCES - GOVERNMENT

Department of Indian and Northern Affairs (DIAND)

The Northern Affairs program of DIAND administers the Territorial Lands Act and Regulations. Through this legislation land use permits are issued. One of the conditions of land use permits is the requirement to report all spills to a 24 hour government run report line (403-920-8130). Land Use

Permits may also address matters of environmental conservation and protection including waste disposal, sources of borrow materials, open pit mining, road alignments, land reclamation and closure requirements. Enforcement of the provisions of the land use permits is carried out by the Operations Division of DIAND through Resource Management Officers located at the District Offices.

Inspection of CMF project activities located on Crown Land by Resource Management Officers is conducted periodically.

Environment Canada (EC)
The Environmental Protection and Conservation Service of Environment Canada administers the Canadian Environmental Protection Act (CEPA) and Section 36 of the Fisheries Act. For the latter this specifies that unless authorized by regulation, any effluents discharged into fish bearing water must be non-toxic. EC is responsible for providing environmental advice to federal and territorial government agencies and for the preservation and enhancement of environmental quality.

Department of Fisheries and Oceans (DFO)
The Department of Fisheries and Oceans (DFO) administers the habitat protection provisions of the Fisheries Act. This includes provisions for prohibiting the blocking of fish passageways and the destruction of fish habitat. DFO applies a Habitat Management Policy whereby the objective is to achieve a no net loss of fish habitat On occasion, DFO Inspectors visit spill sites to investigate possible impacts to fish habitat.

G: REFERENCES

BHP Diamonds Inc. Transportation Spill Contingency Plan. January 1997.

Department of Transportation. Environmental Guidelines for the Construction, Maintenance and Closure of Winter Roads in the Northwest Territories. Prepared by Stanley Associates Engineering Ltd. 1993.

Northwest Territories Water Board. Guidelines for Contingency Planning. 1987.

WMC International Ltd., Emergency Management System Plan, August 2001.

ACKNOWLEDGMENTS

CMF gratefully acknowledges the use of the WMC International Ltd's Emergency Management System Plan that was based fundamentally on BHP Diamonds Inc. Transportation Spill Contingency Plan.

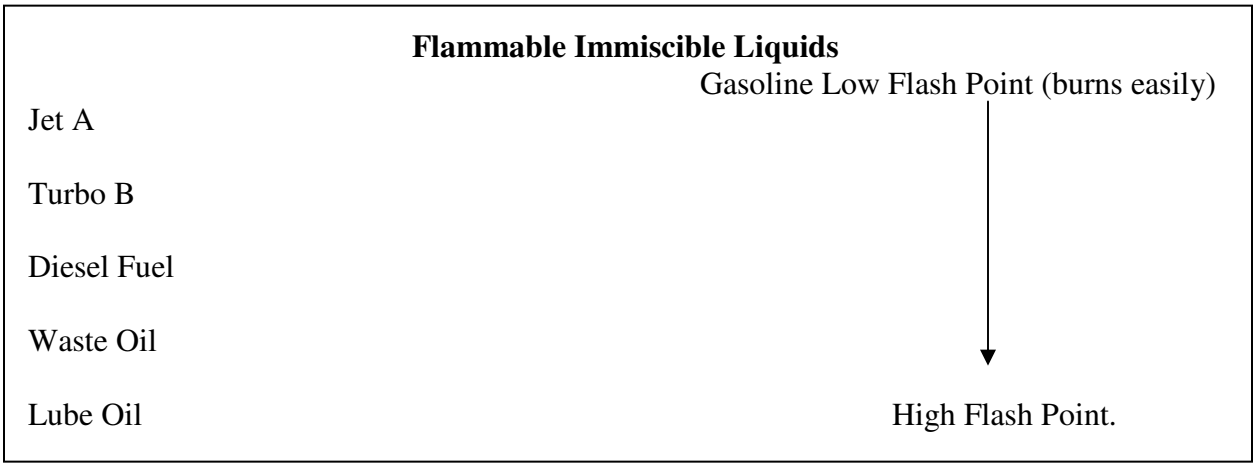
APPENDIX A
PRODUCT GUIDES

The materials included in this Plan can generally be divided into two categories:

- flammable immiscible liquids
- flammable compressed gases

1 Flammable Immiscible Liquids

These substances are all hydrocarbon-based and will ignite under certain conditions. Gasoline and aviation fuel pose the greatest fire (and safety) hazard and usually cannot be recovered when spilled on water. The remaining materials generally do not pose a hazard at ambient temperatures. They are all insoluble, float unless mixed into the water column and can be recovered when safety allows.



DIESEL

TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear, yellow or red
ODOUR: Petroleum
SOLUBILITY: Insoluble
VAPOUR
DENSITY: Will sink to ground levels

FLASH POINT: 40EC (minimum)
POUR POINT: -50 to -6EC
VISCOSITY: Not viscous
SPECIFIC
GRAVITY: Floats on water (0.8 - 0.9)

SAFETY MEASURES

WARNINGS

- Vapors are heavier than air and form easily at high temperatures.
- Empty containers can contain explosive vapors.
- Toxic gases form upon combustion.
- Eye contact causes irritation.
- Material can accumulate static charges.
- Inhalation of vapors can cause irritation of the respiratory tract, headache, vomiting, and unconsciousness.

PERSONAL PROTECTION

- Always wear impervious, chemical-resistant clothing, gloves, footwear, and goggles; nitrile, Viton and PVC are suitable materials **(DO NOT USE NATURAL RUBBER or NEOPREN**E.)
- Wear full-face organic vapor cartridge respirator where oxygen is adequate, otherwise wear positive pressure SCBA.

PRECAUTIONS

- Monitor for explosive atmosphere.
- Avoid contact with strong oxidizers, such as nitric acid, sulphuric acid, chlorine, ozones, peroxides.
- Eliminate ignition sources.
- Restrict access and work upwind of spill.

RESPONSE TO FIRES
CONSIDER ACTION ONLY IF SAFETY PERMITS!

- Wear SCBA in confined areas.
- Shut off fuel supply.
- Extinguish fire with Co_2 , dry chemical, alcohol foam or water fog.
- Use water to cool containers exposed to fire.

RESPONSE TO SPILLS
CONSIDER ACTION ONLY IF SAFETY PERMITS!

ON LAND

- **ELIMINATE IGNITION SOURCES.**
- Do not flush into ditch/drainage systems.

• Block entry into waterways.
• Contain spill by diking with earth, snow or other barrier.
• Remove minor spills with peat moss and/or sorbent pads.
• Remove large spills with pumps or vacuum equipment.

ON WATER
• Use booms to contain and concentrate spill.
• Remove spill using sorbent, skimmer or vacuum truck.
• Protection booming can be considered for water intakes.

STORAGE & TRANSFER
• Store closed, labelled containers in cool, ventilated areas away from incompatible materials.
• Electrically ground containers and vehicles during transfer.

DISPOSAL
• Segregate waste types.
• Place contaminated materials into marked containers.
• Consult with environmental authorities during final disposal.

FIRST AID
EYES
• Flush eyes immediately with fresh, warm water (NOT HOT WATER) for 20 minutes while holding the eyelids open.
• Remove contact lenses, if exposed to vapors or liquid.
• Get prompt medical attention.

SKIN
• Remove and launder contaminated clothing.
• Wash skin thoroughly with soap and water.
• Get medical attention.
• Discard saturated leather articles.

INHALATION
• Move victim to fresh air.
• Perform artificial respiration if victim not breathing.
• Provide oxygen if victim is having difficulty breathing.
• Get prompt medical attention.

INGESTION
• DO NOT INDUCE VOMITING; if victim is conscious; give milk or water to drink. If vomiting begins, keep victim's head below hips to prevent aspiration.
• **Get prompt medical attention.**

HYDRAULIC OIL

TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Straw-yellow liquid
ODOUR: Petroleum
SOLUBILITY: Generally insoluble
VAPOUR DENSITY: Few vapors emitted
FLASHPOINT: 215EC
POUR POINT -25EC
VISCOSITY: Medium (265cSt @ 15EC)
SPECIFIC GRAVITY: Floats on water (0.9)

SAFETY MEASURES

WARNINGS

- Vapors are heavier than air but are unlikely to form.
- Toxic gas can form in fire and at high temperatures.
- CO, Co_2 , and dense smoke are produced upon combustion.
- Oil mist or vapor from hot oil can cause irritation of the eyes, nose, throat and lungs.

PERSONAL PROTECTION

- Always wear impervious, chemical-resistant clothing, gloves, footwear, and goggles; PVC, Nitrile, and Viton are suitable materials (**DO NOT USE NATURAL RUBBE**R).
- Use of organic vapor cartridge respirator is highly unlikely.

PRECAUTIONS

- Avoid excessive heat, which can cause formation of vapors.
- Avoid contact with strong oxidizers, such as nitric acid, sulphuric acid, chlorine, ozones, peroxides.
- Eliminate ignition sources.
- Restrict access and work upwind of spill.

RESPONSE TO FIRES
CONSIDER ACTION ONLY IF SAFETY PERMITS!

- Wear SCBA and eye protection when responding to fires.
- Shut off fuel supply.
- Extinguish fire with Co_2 , dry chemical, alcohol foam or water fog.
  NOTE: Water or foam may cause frothing.
- Use water to cool containers exposed to fire.

RESPONSE TO SPILLS
CONSIDER ACTION ONLY IF SAFETY PERMITS!

ON LAND

- Prevent additional discharge of oil.
- Do not flush into ditch/drainage systems.
- Block entry into waterways.
- Contain spill by diking with earth, snow or other barrier.
- Remove minor spills with peat moss and/or sorbent pads.

• Remove large spills with pumps or vacuum equipment. Spill can also be mechanically removed if oil is too viscous to be pumped.

ON WATER
• Use booms to contain and concentrate spill.
• Remove spill using sorbent, skimmer or vacuum truck.
• Protection booming can be considered for water intakes/marinas.

STORAGE & TRANSFER
• Store closed, labelled containers in cool, ventilated areas away from incompatible materials.

DISPOSAL
• Segregate waste types.
• Place contaminated materials into marked containers.
• Consult with environmental authorities during final disposal.

FIRST AID

EYES
• Flush eyes immediately with fresh, warm water (NOT HOT WATER) for 20 minutes while holding the eyelids open.
• Remove contact lenses, if exposed to vapors or liquid.
• Get prompt medical attention.

SKIN
• Remove and launder contaminated clothing.
• Wash skin thoroughly with soap and water.
• Get medical attention.
• Discard saturated leather articles.

INHALATION
• Move victim to fresh air.
• Perform artificial respiration if victim not breathing.
• Provide oxygen if victim is having difficulty breathing.
• Get prompt medical attention.

INGESTION
• DO NOT INDUCE VOMITING; if victim is conscious; give milk or water to drink. If vomiting begins, keep victim's head below hips to prevent aspiration.
• Get prompt medical attention.

LUBE OIL

TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Amber liquid
ODOUR: Petroleum
SOLUBILITY: Generally insoluble
VAPOUR DENSITY: Few vapors emitted
FLASHPOINT: 190 to 220EC
POUR POINT: -35 to -400EC
VISCOSITY: Medium (255cSt @15EC)
SPECIFIC GRAVITY: Floats on water (0.9)

SAFETY MEASURES

WARNINGS

- Vapors are heavier than air but are unlikely to form.
- Toxic gas can form in fire and at high temperatures.
- CO, Co_2 , and dense smoke are produced upon combustion.
- Oil mist or vapor from hot oil can cause irritation of the eyes, nose, throat and lungs.

PERSONAL PROTECTION

- Always wear impervious, chemical-resistant clothing, gloves, footwear, and goggles; nitrile, PVC and Viton are suitable materials. **(DO NOT USE NATURAL RUBBE**R.)
- Use of organic vapor cartridge respirator is highly unlikely.

PRECAUTIONS

- Avoid excessive heat, which can cause formation of vapors.
- Avoid contact with strong oxidizers, such as nitric acid, sulphuric acid, chlorine, ozones, peroxides.
- Eliminate ignition sources.
- Restrict access and work upwind of spill.

RESPONSE TO FIRES
CONSIDER ACTION ONLY IF SAFETY PERMITS!

- Wear SCBA and eye protection when responding to lube oil fires.
- Shut off fuel supply.
- Extinguish fire with Co_2 , dry chemical, alcohol foam or water fog.
  NOTE: Water or foam may cause frothing.
- Use water to cool containers exposed to fire.

RESPONSE TO SPILLS
CONSIDER ACTION ONLY IF SAFETY PERMITS!

ON LAND

- Prevent additional discharge of oil.
- Do not flush into ditch/drainage systems.
- Block entry into waterways.
- Contain spill by diking with earth, snow or other barrier.
- Remove minor spills with sorbent and/or peat moss.

• Remove large spills with pumps or vacuum equipment. Spill can also be mechanically removed if oil is too viscous to be pumped.

ON WATER
• Use booms to contain and concentrate spill.
• Remove spill using sorbent, skimmer or vacuum truck.
• Protection booming can be considered for water intakes.

STORAGE & TRANSFER
• Store closed, labelled containers in cool, ventilated areas away from incompatible materials.

DISPOSAL
• Segregate waste types.
• Place contaminated materials into marked containers.
• Consult with environmental authorities during final disposal.

FIRST AID

EYES
• Flush eyes immediately with fresh, warm water (NOT HOT WATER) for 20 minutes while holding the eyelids open.
• Remove contact lenses, if exposed to vapors or liquid.
• Get prompt medical attention.

SKIN
• Remove and launder contaminated clothing.
• Wash skin thoroughly with soap and water.
• Get medical attention.
• Discard saturated leather articles.

INHALATION
• Move victim to fresh air.
• Perform artificial respiration if victim not breathing.
• Provide oxygen if victim is having difficulty breathing.
• Get prompt medical attention.

INGESTION
• DO NOT INDUCE VOMITING; if victim is conscious; give milk or water to drink. If vomiting begins, keep victim's head below hips to prevent aspiration.
• Get prompt medical attention.

WASTE OIL

TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Black to brown liquid
ODOUR: Petroleum
SOLUBILITY: Generally insoluble
VAPOUR
DENSITY: Few vapors emitted

FLASHPOINT: 100 to 200EC
POUR POINT: -30 to -400EC
VISCOSITY: Medium (200 - 300 cSt)
SPECIFIC
GRAVITY: Floats on water (0.9)

SAFETY MEASURES

WARNINGS

- Vapors are heavier than air but are unlikely to form.
- Toxic gas can form in fire and at high temperatures.
- CO, Co_2, and dense smoke are produced upon combustion.

PERSONAL PROTECTION

- Always wear impervious, chemical-resistant clothing, gloves, footwear, and goggles; nitrile, PVC and Viton are suitable materials (**DO NOT USE NATURAL RUBBER**.)
- Use of organic vapor cartridge respirator is highly unlikely.

PRECAUTIONS

- Avoid excessive heat, which can cause formation of vapors.
- Avoid contact with strong oxidizers, such as nitric acid, sulphuric acid, chlorine, ozones, peroxides.
- Eliminate ignition sources.
- Restrict access and work upwind of spill.

RESPONSE TO FIRES
CONSIDER ACTION ONLY IF SAFETY PERMITS!

- Wear SCBA and eye protection when responding to lube oil fires.
- Shut off fuel supply.
- Extinguish fire with Co_2, dry chemical, alcohol foam or water fog.
  NOTE: Water or foam may cause frothing.
- Use water to cool containers exposed to fire.

RESPONSE TO SPILLS
CONSIDER ACTION ONLY IF SAFETY PERMITS!

ON LAND

- Prevent additional discharge of oil.
- Do not flush into ditch/drainage systems.
- Block entry into waterways.
- Contain spill by diking with earth, snow or other barrier.
- Remove minor spills with peat moss and/or sorbent pads.
- Remove large spills with pumps or vacuum equipment. Spill can also be mechanically removed if oil is too viscous to be pumped.

ON WATER
• Use booms to contain and concentrate spill.
• Remove spill using sorbent, skimmer or vacuum truck.
• Protection booming can be considered for water intakes.

STORAGE & TRANSFER
• Store closed, labelled containers in cool, ventilated areas away from incompatible materials.

DISPOSAL
• Segregate waste types.
• Place contaminated materials into marked containers.
• Consult with environmental authorities during final disposal.

FIRST AID

EYES
• Flush eyes immediately with fresh, warm water (NOT HOT WATER) for 20 minutes while holding the eyelids open.
• Remove contact lenses, if exposed to vapors or liquid.
• Get prompt medical attention.

SKIN
• Remove and launder contaminated clothing.
• Wash skin thoroughly with soap and water.
• Get medical attention.
• Discard saturated leather articles.

INHALATION
• Move victim to fresh air.
• Perform artificial respiration if victim not breathing.
• Provide oxygen if victim is having difficulty breathing.
• Get prompt medical attention.

INGESTION
• DO NOT INDUCE VOMITING; if victim is conscious; give milk or water to drink. If vomiting begins, keep victim's head below hips to prevent aspiration.
• Get prompt medical attention.

GASOLINE

TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Colorless liquid (can be dyed)
ODOUR: Gasoline/Petroleum
SOLUBILITY: Insoluble
VAPOUR
DENSITY: Will sink to ground levels

FLASH POINT: -50EC
FREEZING PT: -60EC
VISCOSITY: Not viscous (< 1 cSt)
SPECIFIC
GRAVITY: Floats on water (0.7 - 0.8)

SAFETY MEASURES

WARNINGS

- **Vapors form instantaneously, and are heavier than air.**
- Empty containers can contain explosive vapors.
- Vapors can travel to distant sources of ignition and flash back.
- Eye contact causes irritation.
- Material can accumulate static charges.
- Inhalation of vapors can cause irritation of the respiratory tract, headache, vomiting, and unconsciousness.

PERSONAL PROTECTION

- Always wear impervious, chemical-resistant clothing, gloves, footwear, and goggles; nitrile, Viton and PVC are suitable materials **(DO NOT USE NATURAL RUBBER or NEOPRENE**.)
- Wear full-face organic vapor cartridge respirator where oxygen is adequate; otherwise wear positive pressure SCBA, if circumstances warrant.

PRECAUTIONS

- Monitor for explosive atmosphere.
- Avoid contact with strong oxidizers, such as nitric acid, sulphuric acid, chlorine, ozones, peroxides.
- Eliminate ignition sources.
- Restrict access and work upwind of spill.

RESPONSE TO FIRES

CONSIDER ACTION ONLY IF SAFETY PERMITS!

- Wear SCBA in confined areas.
- Shut off fuel supply.
- Extinguish fire with Co_2 , dry chemical, alcohol foam or water fog.
- Use water to cool containers exposed to fire.

RESPONSE TO SPILLS

CONSIDER ACTION ONLY IF SAFETY PERMITS!
ON LAND

- **ELIMINATE IGNITION SOURCES.**
- Do not flush into ditch/drainage systems.
- Block entry into waterways.

• Contain spill by diking with earth, snow or other barrier.
• Remove minor spills with peat moss and/or sorbent pads.
• Cover pools with foam to prevent vapor evolution if gasoline presents a fire hazard; otherwise allow vapors to dissipate.

ON WATER
• ELIMINATE IGNITION SOURCES.
• DO NOT ATTEMPT TO CONTAIN OR REMOVE SPILLS.
• Protection booming can be considered for water intakes.

STORAGE & TRANSFER
• Store closed, labelled containers in cool, ventilated areas away from incompatible materials.
• Electrically ground containers & vehicles during transfer.

DISPOSAL
• Place contaminated materials into segregated marked containers.
• Consult with environmental authorities during final disposal.

FIRST AID

EYES
• Flush eyes immediately with fresh, warm water (NOT HOT WATER) for 20 minutes while holding the eyelids open.
• Remove contact lenses, if exposed to vapors or liquid.
• Get prompt medical attention.

SKIN
• Remove and launder contaminated clothing.
• Wash skin thoroughly with soap and water.
• Get medical attention.
• Discard saturated leather articles.

INHALATION
• Move victim to fresh air.
• Perform artificial respiration if victim not breathing.
• Provide oxygen if victim is having difficulty breathing.
• Get prompt medical attention.

INGESTION
• DO NOT INDUCE VOMITING; if victim is conscious; give milk or water to drink. If vomiting begins, keep victim's head below hips to prevent aspiration.
• Get prompt medical attention.

JET A

TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: White or pale yellow liquid
ODOUR: Gasoline/Petroleum
SOLUBILITY: Negligible
VAPOUR
DENSITY: Will sink to ground levels

FLASH POINT: -20 to - 250EC
FREEZING PT: -50EC
VISCOSITY: Not viscous (<7 cSt)
SPECIFIC
GRAVITY: Floats on water (0.75 0.8)

SAFETY MEASURES

WARNINGS
- Vapors instantaneously form, and are heavier than air.
- Low-lying areas can trap explosive vapors.
- Vapors can travel to distant sources of ignition and flash back.
- Eye contact causes irritation.
- Material can accumulate static charges.
- Inhalation of vapors can cause irritation of the respiratory tract, headache, vomiting, and unconsciousness.

PERSONAL PROTECTION
- Always wear impervious, chemical-resistant clothing, gloves, footwear, and goggles; nitrile and Viton are suitable protective materials (**DO NOT USE NATURAL RUBBER, NEOPRENE, OR PVC**).
- Wear full-face organic vapor cartridge respirator where oxygen is adequate; otherwise wear SCBA, if circumstances warrant.

PRECAUTIONS
- Monitor for explosive atmosphere.
- Avoid contact with strong oxidizers, such as nitric acid, sulphuric acid, chlorine, ozone, peroxides.
- Eliminate ignition sources.
- Restrict access and work upwind of spill.

RESPONSE TO FIRES
CONSIDER ACTION ONLY IF SAFETY PERMITS!
- Wear SCBA in confined areas.
- Shut off fuel supply.
- Extinguish fire with Co_2, dry chemical, AFFF foam or water fog.
- Use water to cool containers exposed to fire.

RESPONSE TO SPILLS
CONSIDER ACTION ONLY IF SAFETY PERMITS!
ON LAND
- **ELIMINATE IGNITION SOURCES**.

• Block entry into waterways; do not flush into ditch/drain systems.
• Contain spill by diking with earth, snow or other barrier.
• Remove minor spills with sorbent or explosion-proof pump.
• Cover pools with foam to prevent vapor evolution if avgas presents a fire hazard; otherwise allow vapors to dissipate.

ON WATER
• **ELIMINATE IGNITION SOURCES.**
• **Contain or remove spills ONLY AFTER VAPOURS DISSIPATE.**
• Protection booming can be considered for water intakes.
• Recover slicks using skimmer and sorbent, if volumes warrant.

STORAGE & TRANSFER
• Store closed, labelled containers in cool, ventilated areas away from incompatible materials.
• Electrically ground containers & vehicles during transfer.

DISPOSAL
• Place contaminated materials in segregated, marked containers.
• Consult with environmental authorities during final disposal.

FIRST AID
EYES
• Flush eyes immediately with fresh, warm water (NOT HOT WATER) for 20 minutes while holding the eyelids open.
• Remove contact lenses, if exposed to vapors or liquid.
• Get prompt medical attention.

SKIN
• Remove and launder contaminated clothing.
• Wash skin thoroughly with soap and water.
• Get medical attention.
• Discard saturated leather articles.

INHALATION
• Move victim to fresh air.
• Perform artificial respiration if victim not breathing.
• Provide oxygen if victim is having difficulty breathing.
• Get prompt medical attention.

INGESTION
• DO NOT INDUCE VOMITING; if victim is conscious; give milk or water to drink. If vomiting begins, keep victim's head below hips to prevent aspiration.
• Get prompt medical attention.

PROPANE

TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Colorless gas	FLASH POINT: -104EC
ODOUR: Natural gas odor	FREEZING PT: -190 EC
SOLUBILITY: Insoluble	VISCOSITY: n/a
VAPOUR	SPECIFIC
DENSITY: Will sink to ground levels	GRAVITY: Liquid floats on water

SAFETY MEASURES

WARNINGS

- Vapors form instantaneously, and are heavier than air.
- Vapors can travel to distant sources of ignition and flash back.
- Eye contact causes irritation.
- Material can accumulate static charges.
- Inhalation of vapors can cause irritation of the respiratory tract, headache, vomiting, and unconsciousness.

PERSONAL PROTECTION

- Always wear impervious, chemical-resistant clothing, gloves, footwear, and goggles; nitrile and Viton are suitable protective materials (**DO NOT USE NATURAL RUBBER, NEOPRENE, OR PV**C).
- Avoid frostbite burn to skin and eyes from contact with propane.
- Wear full-face organic vapor cartridge respirator where oxygen is adequate, otherwise wear positive pressure SCBA.

PRECAUTIONS

- Monitor for explosive atmosphere.
- Avoid contact with strong oxidizers, such as nitric acid, sulphuric acid, chlorine, ozones, peroxides.
- Eliminate ignition sources.
- Restrict access and work upwind of spill.

RESPONSE TO FIRES

CONSIDER ACTION ONLY IF SAFETY PERMITS!

- Wear SCBA in confined areas.
- Shut off fuel supply.
- Extinguish fire with Co_2 , dry chemical, alcohol foam or water fog.
- Use water to cool containers exposed to fire.

RESPONSE TO GAS RELEASES
CONSIDER ACTION ONLY IF SAFETY PERMITS!
ON LAND
• ELIMINATE IGNITION SOURCES.
• DO NOT ATTEMPT TO CONTAIN OR REMOVE SPILLS

ON WATER
• ELIMINATE IGNITION SOURCES.
• DO NOT ATTEMPT TO CONTAIN OR REMOVE SPILLS.

STORAGE & TRANSFER
• It is not possible to collect released material.

DISPOSAL
• Consult with environmental authorities if the disposal of any contaminated materials is required.

FIRST AID

EYES
• Flush eyes immediately with fresh, warm water (NOT HOT WATER) for 20 minutes while holding the eyelids open.
• Remove contact lenses, if exposed to vapors or liquid.
• Get prompt medical attention.

SKIN
• Remove and launder contaminated clothing.
• Wash skin thoroughly with soap and water.
• Get medical attention.
• Discard saturated leather articles.

INHALATION
• Move victim to fresh air.
• Perform artificial respiration if victim not breathing.
• Provide oxygen if victim is having difficulty breathing.
• Get prompt medical attention.

INGESTION
• DO NOT INDUCE VOMITING; if victim is conscious; give milk or water to drink. If vomiting begins, keep victim's head below hips to prevent aspiration.
• Get prompt medical attention

ACETYLENE

TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Colorless gas
ODOUR: Garlic - like
SOLUBILITY: Slightly soluble
VAPOUR
DENSITY: Will sink to ground levels

FLASH POINT: -18EC
FREEZING PT: -82EC
VISCOSITY n/a
SPECIFIC
GRAVITY: (0.6) Liquid floats on water

SAFETY MEASURES
WARNINGS

- Vapors form instantaneously, and are heavier than air.
- Empty containers can contain explosive vapors.
- Vapors can travel to distant sources of ignition and flash back.
- Eye contact causes irritation.
- Material can accumulate static charges.
- inhalation of vapors can cause irritation of the respiratory tract, headache, vomiting, and unconsciousness.

PERSONAL PROTECTION

- Always wear impervious, chemical-resistant clothing, gloves, footwear, and goggles; nitrile and Viton are suitable protective materials (**DO NOT USE NATURAL RUBBER, NEOPRENE, OR PVC**).
- Wear full-face organic vapor cartridge respirator where oxygen is adequate, otherwise wear positive pressure SCBA.

PRECAUTIONS

- Monitor for explosive atmosphere.
- Avoid contact with strong oxidizers, such as nitric acid, sulphuric acid, chlorine, ozones, peroxides.
- Eliminate ignition sources.
- Restrict access and work upwind of spill.

RESPONSE TO FIRES
CONSIDER ACTION ONLY IF SAFETY PERMITS!

- Wear SCBA in confined areas.
- Shut off fuel supply.
- Extinguish fire with Co_2, dry chemical, alcohol foam or water fog.
- Use water to cool containers exposed to fire.

RESPONSE TO GAS RELEASES
CONSIDER ACTION ONLY IF SAFETY PERMITS!
ON LAND
• ELIMINATE IGNITION SOURCES.
• DO NOT ATTEMPT TO CONTAIN OR REMOVE RELEASES

ON WATER
• ELIMINATE IGNITION SOURCES.
• DO NOT ATTEMPT TO CONTAIN OR REMOVE RELEASES

STORAGE & TRANSFER
• Store closed, labelled containers in cool, ventilated areas away from incompatible materials
• Electrically ground containers & vehicles during transfer.

DISPOSAL
• Consult with environmental authorities if the disposal of any contaminated materials is required.

FIRST AID

EYES
• Flush eyes immediately with fresh, warm water (NOT HOT WATER) for 20 minutes while holding the eyelids open.
• Remove contact lenses, if exposed to vapors or liquid.
• Get prompt medical attention.

SKIN
• Remove and launder contaminated clothing.
• Wash skin thoroughly with soap and water.
• Get medical attention.
• Discard saturated leather articles.

INHALATION
• Move victim to fresh air.
• Perform artificial respiration if victim not breathing.
• Provide oxygen if victim is having difficulty breathing.
• Get prompt medical attention.

INGESTION
• DO NOT INDUCE VOMITING; if victim is conscious; give milk or water to drink. If vomiting begins, keep victim's head below hips to prevent aspiration.
• Get prompt medical attention.

APPENDIX B
RESPONSE EQUIPMENT INVENTORY

During the exploration phase of the project, spills occurring along the transportation route will be remedied by the appropriate personnel depending on the party responsible for the spill, the location of the spill, and the extend of the environmental threat. Larger spills will involve the coordination of CMF personnel (including the Emergency Response Team), contractors, and CMF Mutual Aid Partners. For the purposes of listing response equipment, the equipment will be listed by contractor and site.

Mobile Equipment

From **M and T Enterprises (867 645 2778)**

Equipment *located in Rankin Inlet that can be used for spill countermeasures includes:*

- 1 740 Champion grader
- 1 BW 75 compactor
- 1 Cat 950 loader
- 1 Cat 966 loader
- 1 Cat D5 dozer
- 1 Cat D6D dozer
- 9 tandem dump trucks
- 1 trash pump
- 1 backhoe
- 1 tractor and end dump
- 1 Cat 966 loader
- 1 Cat D3 dozer
- 1 Cat D6E dozer
- 1 Cat D8K dozer
- 1 5000 gal. skid mounted storage tank

From **Nunavut Power Corporation** (645 5300)

Spill equipment available:

- fuel sorbent material
- pumps and hoses
- night operating equipment (portable generator light stand and cords)
- winter clean up equipment (chain saw)
- hand tools (shovels, rakes, wrenches)
- safety equipment

From **Municipality of Rankin Inlet** (645 2525) contact **Fire Department** (645 2895)

Heavy Equipment available:

- portable lighting
- dump truck
- bull dozer
- snow plow
- fire truck.
- front end loader
- backhoe
- grader
- vacuum truck

Mutual Aid Partners

In the event of a major spill requiring additional resources, equipment and manpower will be made available through mutual aid agreements with the Canadian Coast Guard Emergency Response Officer (1 867 874 5559), the Hamlet of Rankin Inlet (1 867 645 2525) and the Nunavut Power Corporation (1 867 645 5300).

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Canadian Coast Guard (CCG) - Rankin Inlet Inventory

Material from the CCG inventory at Rankin INLET is available on a cost recovery basis and will be made available on request to the Nunavut EMO representative who will be billed by CCG for material consumed and who will then recover costs from CMF accordingly.

1500' X 24" oil containment boom
6 boom towing devices
6 5/8" tow lines X 100' c/w snap hooks
6 anchoring devices
6 Danforth anchors (22 lbs)
6 3/8" X 75' trip lines
6 trip line marker buoys type mb40
8 bales disposable boom (8" X 10' X 4 lengths per bale)
9 bales sorbent pads (18" X 18" X 3/8" X 100 pads)
10 sorbent rolls (36" X 150' X 3/8")
5 boxes of oil snare
2 1000 gal. portatanks
1 Spate pump
2 lengths 3" oil resistant suction hose - 50' each.
2 lengths oil resistant discharge hose - 50" each.
1 TDS-118 light medium oil skimmer c/w diesel power pack
1 spare parts kit for TDS-118 skimmer
1 4Kva diesel generator
1 16' aluminum boat
1 25 hp outboard motor
2 3000 psi portable high pressure washer
2 sets portable lights (each set has 3 X 500 watt halogen lamps, spare bulbs, 100" ext. cord and carrying case)
2 coils 1/4" polypropylene rope (1200')
2 coils ½" polypropylene rope (600')
2 coils 5/8" polypropylene rope (600')
72 pair disposable coveralls
120 pair work gloves
12 hard hat liners
40 dust / mist disposable masks
40 pairs assorted rain gear
20 pair safety glasses
20 safety vests
20 pair sunglasses
2 20' steel ISO containers
1 tool box

APPENDIX C

NUNAVUT SPILL REPORT FORMS
(next page)

1 867 920 8130 24 Hr Report Line

Northwest Territories

N.W.T. SPILL REPORT (Oil, Gas, Hazardous Chemicals or other Materials)

ᓄᓇᕗᑎᐊᒥ ᐃᓚᓲᓄᑦ ᐅᓂᒃᑲᖅ (ᐅᖃᓗᐊᓂᐃᑦ, ᓯᓚᑦ, ᐊᑦᑕᓇᖅᑐᑦ ᐃᓕᓴᕐᓂᐃᑦ ᐅᕙᓪᓕᐊᑦ ᐊᓯᖏᓪᓕᑦ)

24-Hour Report Line
24-ᓄᑦ ᐃᒃᖃᓗᓄᑦ ᐅᓂᒃᑲᖅᓯᐅᔪᓇᖅᑐᖅ ᐅᖃᓕᓂᐅᑦ
Phone/ᐅᖃᓕᓂᐅᑦ (403) 920-8130
Fax/ᓱᒃᑐᒃᓄᑦ (403) 873-6924

A Report date and time
ᐅᑦᓗᖅ ᓱᖏᐟᓴᒍᖅ ᖃᓴᓯᒪᔪᖅᑎᑦᓗᒍ ᐅᓂᒃᑲᐅᑎᒋᔭᐅᑦ

B Date and time of spill (if known)
ᐅᑦᓗᖓ ᐃᓚᑎᑦᓗᒍ ᖃᓴᓯᒪᔪᖅᑎᑦᓗᒍᓗ (ᖃᒃᑲᕐᓚᕐᑐᒃᓴᑦ)

C ☐ Original report ᓱᑐᑦᓯᖅᓴᒥ ᐅᓂᒃᑲᐅᓱᐅᔪᖅ
☐ Update no. _____ ᐅᓂᒃᑲᐅᓱᐅᒃᓂᓐᖅ ᓇᓴᐅᑦ __
Spill number ᐃᓚᓲᑦ ᓇᓴᐅᑦ

D Location and map coordinates (if known) and direction (if moving)
ᓇᓂ ᐃᓚᒃ ᐊᓯᒪᓗ ᓄᓇᐟᓐᔪᐊᑦ ᓇᓴᐅᑎᖓᑦ (ᖃᒃᑲᕐᓚᕐᑐᒃᓴᑦ) ᐊᓯᒪᓗ ᓇᒧᐟᓐᔪᑑᓯᓕᐟᓐᓚᓯᑦ (ᐃᖏᑦᖁᓕᓴᑦ)

E Party responsible for spill
ᑭᒃᑯᑦ ᐃᓚᑎᑦᑎᓯᒃᑦ

F Product(s) spilled and estimated quantities (provide metric volumes/weights if possible)
ᑭᓱᑦ ᑭᓱᓪᓗᓂᑦ ᐃᓚᓲᒃᑦ ᖃᓄᐅᑎᒃ ᐊᖏᓂᖅᖃᓕᑦ (ᐊᖏᓂᖅᓖᓐ ᐅᑭᖏᑎᓂᖅᓱᓪᓗᓂᑦ ᐊᓱᓴᓐᖏᑦᑕᑦ)

G Cause of spill
ᑭᓱ ᐃᓚᐟᔪᑕᐅᒃ

H Is spill terminated?
ᐃᓚᓱᒃ ᓄᒃᖃᖅᑎᑕᐅᒃᑰᑦ?
☐ yes/ Δ ☐ no/ ᐊᒃᖃ

I If spill is continuing, give estimated rate
ᓱᓕ ᐃᓚᐟᑦ ᖃᓄᐅᑎ ᓱᒃᑲᑎᑎᕐᒃᓴᑦ

J Is further spillage possible?
ᐃᓚᖃᓄᓂᐃᓪᓕᐊᖏᖅᑕᑦ?
☐ yes/ Δ ☐ no/ ᔪᒃᖃ

K Extent of contaminated area (in square metres if possible)
ᖃᓄᖅ ᐊᖏᑎᑎᒃᑯ ᐃᓚᓯᐃᐅᔪᖅ (ᐅᒃᑐᑦᓱᒪᓗᒍ ᐊᔪᖏᓇᖏᑦᑐᑦ)

L Factors affecting spill or recovery (weather conditions, terrain, snow cover, etc.)
ᑭᓱᑦ ᐱᐟᔪᑕᐅᑯᑦ ᐃᓚᔪᒧᒍ ᐅᑭᓄᑦ ᐊᖏᑭᐅᑕᐅᓇᓱᑎᑦᓗᒍ (ᓱᓕ ᖃᓄᐃᓕᓴᒃᓴᖓᓂᑦ, ᓄᓇ ᖃᓄᐃᓕᓴᒃᓴᖓᓂᑦ ᐊᐅᓪᓴᐅᑕᐅᓴᒃᓄᓂ, ᐊᓱᑭᓄᔪᖅᑎᑦᓗᒍ)

M Containment (natural depression, dykes, etc.)
ᐅᖏᓱᐊᓗᖏᓄᐃᓕᐅᑦ ᑭᒃᓕᐊᒍᑦ ᐃᓱᖏᓴᓕᖏᓱᒪᔪᖅ (ᓄᓇᒥ ᐃᓱᖏᓴᐃᑦ, ᐊᓱᑭᓄᔪᑦᑎᓕᓐᓂᓗ)

N Action, if any, taken or proposed to contain, recover, clean up or dispose of product(s) and contaminated materials
ᖃᓄᐃᓕᓴᐅᓂ, ᖃᓄᐃᓕᓴᐅᑎᖏᓪᓕᐊᑦᑕᑦ ᑭᑭᓂ ᖃᓄᐃᓕᓴᐅᑭᐅᔪᖅᑕᑦ ᐊᑕᐅᓱᒋᑎᑕᐅᓇᓱᒃᑲᑦ, ᓄᖏᓐᖏᑕᐅᓇᓱᒃᑲᑦ ᑭᑭᓂ ᐃᑎᑕᐅᓂᐊᖏᖅᑕᑦ ᐃᓚᓲᖅ (ᐃᓚᓲᑦᓄᓂᑦ) ᐊᓯᒪᓗ ᐃᓚᓯᐃᐅᔪᑦ.

O Do you require assistance?
ᐃᒃᓱᖏᑕᐅᔭᓇᐊᖏᓐᓄᑦ?
☐ no ᐊᒃᖃ ☐ yes, describe: Δ - ᓇᓗᓇᐃᔭᒋᓗᒍ

P Possible hazards to persons, property, or environment; eg: fire, drinking water, fish or wildlife
ᐊᑦᑕᒋᓇᐃᓪᓕᐊᖏᖅᑕᑦ ᐃᓇᓐᓄᑦ, ᐱᒋᐅᑎᔭᐅᓄᑦ ᑭᑭᓄᑦ ᐊᐅᑎᒧᑦ ᓄᑦᓗ - ᐃᑭᑦᓗᓂ, ᐃᒥᒋᒧᑦ ᓂᐅᑭᖏᖅᑕᐅᓄᒋᒋᔭᓗᓂ, ᐃᖏᓕᓴᓄᓄᑦ ᑭᑭᓂ ᓂᒋᐊᑎᓄᑦ

Q Comments and/or recommendations ᐅᖏᐅᓱᒃᓴᐃᑦ ᐊᓚᓲᓗ ᐅᑭᓄᔪᓂᑦ ᖃᓄᐃᓕᓴᐅᑎᖏᔭᐅᔪᑦ

FOR SPILL LINE USE ONLY
ᐊᑐᖏᑕᐅᔪᓱᖏᖅ ᐃᓚᓲᓄᑦ ᐅᖏᓕᑭᐃᐅᑭᑐᑐᓄᑐᖏᖅ

Lead Agency
ᐃᖏᖃᓄᐃᔾᔨᓕᓐᓄᑭᐃᑦ ᐃᓚᓲᒥᐳ ᑲᒪᒋᔾᖏᖅᑐᑦ-

Spill significance
ᐃᓚᔪᑦ ᖃᓄᐃᓕᓴᓄᓴᖓ-

Lead Agency contact and time
ᐃᖏᖃᓄᐃᔾᔨᓕᓐᓄᑭᐃᑦ ᐃᓚᓲᒥᐳ ᑲᒪᒋᔾᖏᖅᑐᑦ
ᖃᐅᔨᓴᖃᑕᐅᓂᖓ ᐊᓚᓗᒍ ᖃᓴᓯᒪᔪᖅᑎᑦᓗᒍ

Is this file now closed?
ᑕᕐᓇ ᐅᓂᒃᓇᔾᔨᐅᓱᖏᖅ ᒪᑐᐅᑦ?

Reported by ᐅᓂᒃᖃᖅᑐᖏᖅ	Position, Employer, Location ᖃᓄᐃᑦᑐᒃ ᐃᖏᖃᓄᐃᔾᔨᓕᓐᓄᒃ, ᐃᖏᖃᓄᐃᔾᔨᓕᖏᑎᖓ, ᓇᒥ	Telephone ᐅᖏᓕᑭᐃᑦ
Reported to ᑭᒃᑯᓱᓄᑦ ᐅᓂᒃᑲᐅᑕᐅᔪᖅ	Position, Employer, Location ᖃᓄᐃᑦᑐᒥᒃ ᐃᖏᖃᓄᐃᔾᔨᓕᓐᓄᒃ, ᐃᖏᖃᓄᐃᔾᔨᓕᖏᑎᖓ, ᓇᒥ	Telephone ᐅᖏᓕᑭᐃᑦ

NWT 1752/0593

FUEL STORAGE MONITORING PLAN

The fuel storage monitoring plan will consist of the following daily and weekly inspections conducted by CMF personnel that have been trained in the use of fuel pumping equipment and fuel spill response.

The following inspections will be conducted and recorded on a daily basis:

1. All tanks, lines, pumps, hoses, valves and fittings will be inspected for leaks or damage.
2. Ensure proper fuel only is dispensed into the correct tanks and barrels for use in the camp and associated exploration work.
3. Ensure that the "No Smoking" signs posted in the area of the fuel tanks are always clearly visible.
4. Ensure that all personnel on site abide by the "No Smoking" rule within the distances outlined in the regulations for fuel tanks.
5. Ensure all spill response equipment and PPE (Personal Protection Equipment) is clearly visible and easily accessed.
6. Fuel levels in all primary tanks checked and compared against the fuel dispensed from each primary tank for each week.
7. Outer tanks checked for fuel leakage from the primary tank.
8. Spill response equipment checked.
9. PPE checked.

Appendix E

Basic Contents of Fuel Spill Response Kit

1. Absorbent pads or sheets, socks, and granular material

2. Disposable protective gloves

3. Disposable protective coveralls.

4. Sorbent containment and disposal bags