

FUEL SPILL CONTINGENCY PLAN

TerraX Minerals Inc.
Needle Lake Property

INTRODUCTION

PURPOSE

This Spill Contingency Plan is designed to promote environmental awareness and safety, as well as facilitate the efficient cleanup of spills as the result of incidents on the TerraX Minerals Inc. Needle Property involving the following substances:

- P-50 Diesel
- 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, TerraX 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.

SCOPE

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 TerraX Minerals Inc., its contractors, and local government agencies. Emergency response equipment is listed that is available immediately (should a spill occur).

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 (MSDS Sheets).

- Appendix B contains an up-to-date inventory of spill response equipment and kits that will be available on site.
- Appendix C contains NWT Spill Report Forms that are to be used to report spills.

TerraX personnel, and its contractors will be trained for spill response and have spill kits that complement this Spill Contingency Plan. In the event of a spill the contractor is expected to implement a spill response immediately with this plan serving as guidance.

SPILL RESPONSE ACTION PLAN

1. **REPORT ALL SPILLS TO:**
Exploration camp manager or Senior project geologist on site

TerraX Minerals Inc. office (613) 843-8109
10 Green Street, Suite 312
Ottawa, ON, K2J 3Z6
Attn: Joe Campbell

2. **REPORT ALL SPILLS TO EXTERNAL STAKEHOLDERS/REGULATORS**

24 Hour NWT Spill Report Line
PH: (867) 920-8130
FAX (867) 873-6924

KITIKMEOT INUIT ASSOCIATION
PH: (867) 983-2458 or (867) 982-3310

ENVIRONMENT CANADA – Prairies , Northwest Territories and Nunavut
PH: (780)-951-8600
FAX: (780)-495-2615

NUNAVUT WATER INSPECTOR
PH: (867) 975-4298

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 for copies) 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.

3. **RECORD THE FACTS (Use Spill Report Form from Appendix C)**
NOTE: when a spill is detected then the spill must be reported directly to NWT 24-hour spill report line without delay.

INITIAL SPILL RESPONSE PRIORITIES

A. SAFETY FIRST

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

B. RESPOND SAFELY

1. Do not contain if vapours might ignite.
2. Allow potentially explosive spills to evaporate.
3. See Appendix A - Product Guides for further information.

C. 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 absorbent 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 absorbent 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 absorbent 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 absorbent booms/pads in fast currents and turbulent water.

STORAGE/TRANSFER/DISPOSAL

- Store closed, labeled containers outside away from flammable items.
- Electrically ground containers and vehicles during transfer.
- 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 absorbent 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 absorbent 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 absorbent 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 absorbent pads and/or skimmer.

RIVERS & STREAMS

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

STORAGE/TRANSFER/DISPOSAL

- Store closed, labeled containers outside away from flammable items.
- Drums are likely to be used for containing collected hydraulic oil.
- 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 absorbent 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 absorbent 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 absorbent 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 absorbent pads and/or skimmer.

RIVERS & STREAMS

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

STORAGE/TRANSFER/DISPOSAL

- Store closed, labeled containers outside away from flammable items.
- Electrically ground containers and vehicles during transfer.
- Segregate waste types.
- Place contaminated materials into marked containers.
- Consult camp manager on disposal procedures.

JET B SPILL RESPONSE ACTIONS

CONSIDER ACTION ONLY IF SAFETY PERMITS

JET B FORMS VAPOURS THAT CAN IGNITE AND EXPLODE

NO SMOKING

- Eliminate ignition sources
- Stop source of Jet B 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 vapours.
- 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 vapours.
- In work/depot yards, apply particulate absorbents.

ON MUSKEG

- Remove pooled Jet B 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/DISPOSAL

- Store closed, labeled containers in cool, ventilated areas away from incompatible materials.
- Electrically ground containers and vehicles during transfer.
- 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 AWAY FROM ACCIDENT AREA

Refer to Product Guide in Appendix A for:

Physical/Chemical Properties

Response to Fires

First Aid

- Vapours cannot be contained when released.
- Water spray can be used to knock down vapours 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.

DUTIES AND RESPONSIBILITIES

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

TerraX and CONTRACTOR PERSONNEL

Spill Observer

- Assess the initial severity of the spill and safety concerns.
- Report all spills to 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) (Senior Site 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.
- Decides if additional equipment is required to contain and clean up spills
- Notifies government agencies and TerraX Head Office
- 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.