COMMENT FORM FOR NIRB SCREENINGS

The Nunavut Impact Review Board (NIRB) has a mandate to protect the integrity of the ecosystem for the existing and future residents of Nunavut. To assess the environmental and socio-economic impacts of the project proposal, NIRB would like to hear your concerns, comments and suggestions about the following project proposal application:

Project Proposal Title: Muskox Project Baseline Aquatic Studies, 2006 West Kitikmeot
Proponent: Tahera Diamond Corporation
Location: West Kitikmeot
Comments Due By: July 28, 2006 **NIRB #:** 06YN067

Indicate your concerns about the project proposal below:

- ☐ no concerns
- ☐ water quality
- ☐ terrain
- ☐ air quality
- ☐ wildlife and their habitat
- ☐ marine mammals and their habitat
- ☐ birds and their habitat
- ☐ fish and their habitat
- ☐ heritage resources in area
- ☐ traditional uses of land
- ☐ Inuit harvesting activities
- ☐ community involvement and consultation
- ☐ local development in the area
- ☐ tourism in the area
- ☐ human health issues
- ☐ other: _____

Please describe the concerns indicated above:

Do you have any suggestions or recommendations for this application?

Do you support the project proposal? Yes ☐ No ☐ Any additional comments?

Name of person commenting: _____ **of** _____
Position: _____ **Organization:** _____
Signature: _____ **Date:** _____

Nunavut Research Institute
Nunavummi Qaujisaqtulirijikkut

Box 1720, Iqaluit, NT X0A 0H0
phone: (867) 979-7279 fax: (867) 979-7109
email: jcockwell@.nac.nu.ca
Web Site www.nri.nu.ca

SCIENTIFIC RESEARCH LICENCE APPLICATION

(Land, Freshwater & Marine Based Research)

This application fulfills the requirements for NIRB environmental screening

SECTION 1: APPLICANT INFORMATION

1. Applicant's full name and mailing address:
Tahera Diamond Corporation
130 Adelaide Street West,
Suite 1900,
Toronto, ON
M5H 3P5

Phone: 416-777-1998

Fax: 416-777-1898

E-mail:
missal@tahera.com

2. Field Supervisor (address, if different from above):

Ms. Cheryl Wray, Tahera Diamond Corporation, Jericho Project
P.O. Box 2341
Yellowknife, NT
X1A 2P4

Phone: 780-644-9129
Fax: 780-644-9181

Sat. phone: n/a

3. Other Personnel list (name and position):
Fisheries biologist: to be contracted (fisheries crews will also collect water quality)
Hydrologist: to be contracted

Total # of personnel: 6 (including field assistants)

Total # of person days: 200

SECTION 2: AUTHORIZATION NEEDED

4. List the organisations you will contact for necessary authorizations associated with the project.

Department of Fisheries and Oceans (by the contract fisheries biologist for a fisheries licence)

5. List the active permits, licences, or rights related to the project and their expiry date:

- Land Use Permit KTL304C057 Expires 31 October 2006
- Water Licence NWBJER9801 Expires 31 December 2006

SECTION 3: PROJECT PROPOSAL DESCRIPTION

6. Proposed project title: *Muskox Project Baseline Aquatic Studies - 2006*

7. Project duration:
Period of operation: 1July 2006 to 31 December 2009 (3 year, multi-year licence with annual renewal)

8. Location(s) of data collection:
- Land Status Types: Crown, Commissioners', Inuit Owned Surface Lands, Inuit Owned Sub-Surface Lands, & Other
- Please ensure that maps of the project area are attached (1:50 000, 1:250 000)

Location Name	Region	Latitude (north)	Longitude (west)	NTS Map sheet #	Land Status
Muskox Project	West Kitikmeot	65°58'38" N	111°45'00" W	76E/13	IOL
For additional sites, attach a separate page					

NON-TECHNICAL PROJECT PROPOSAL SUMMARY

9. On a separate page, please include a non-technical description of the project proposal, no more than 300 words, in English & Inuktituk (Inuinaktun, if in the Kitikmeot). The project description should outline the project activities (research methods, camps, etc.) and their necessity, method of transportation, any structures that will be erected, expected duration of activity and alternatives considered. If the proposed activity fits into any long-term developments, please describe the projected outcome of the development for the area and its timeline. (see environmental summary, attached)

SECTION 4: MATERIAL USE

10. List equipment (including drills, pumps, aircrafts, etc.):

Equipment type and number	Size-dimensions	Proposed use
Helicopter	Bell 206, equivalent	field crew transport

11. Detail fuel and hazardous materials use (*at the camp*):

Fuels	Number of Containers	Capacity of Containers (gal & litres)
• **Diesel**	1 bladder 60 drums	6000L 205L
• **Gasoline**	5 drums	205L
• **Aviation fuel**	100 drums Jet B	205 L
• **Propane**	80	100 lb

• Other		
Hazardous Materials	**Number of Containers/Concentration**	**Capacity of Containers (gal & litres)**
• none		
•		
•		

12. Describe method of fuel transfer:

Hand pump for diesel; fuel farm is bermed; bladder has internal secondary containment.
Electric pump to helicopter operated by the pilot

13. Describe any procedures and materials in place to handle accidental spills. Please attach the spill contingency plan and other appropriate information about the hazardous materials associated with the proposed project.

(see spill plan, attached)

SECTION 5: WASTE DISPOSAL AND TREATMENT FACILITIES

14. Describe amount and methods of disposal:

Type of Waste	Projected Amount Generated	Method of Disposal	Additional Treatment Procedures
Sewage	350 L/day	Biolet toilets	Incineration
Grey water	250 L/day	Pond; exfiltration	Exfiltration
Garbage	10 kg/day	Incineration	Ash is landfilled
Overburden (organic soil, waste material,tailings)	Not applicable		
Hazardous waste:	Not applicable		
Other:			

SECTION 6: RESTORATION AND ABANDONMENT PLANS

15. Describe or attach the proposed procedure for site restoration upon abandonment of any area associated with the project:

(see exploration reclamation plan, attached)

SECTION 7: ENVIRONMENTAL IMPACT

16. Indicate and describe the components of the environment that are near the project area, as applicable. Attach any relevant maps or information:

Type of species (common name, associated herd, etc.)	**Important Habitat Area** (calving, staging, denning, migratory pathways, spawning, nesting, etc.)	**Critical time periods** (calving, post-calving, spawning, nesting, breeding, etc.)
Fish:	To be investigated	spring, summer and fall
Caribou:	Bathurst Herd, migratory	April to August
Muskox:	Feeding	June to August
Raptor:	None in the immediate area	
Migratory Birds:	Nesting, foraging	June, July, August
Waterfowl:	Nesting	June
Seals:	None in the area	
Whales:	None in the area	
Narwhals:	None in the area	
Canid family (wolves, wolverines, foxes, etc.)	Project site part of the home territory; no nearby dens	April—June
Bears (grizzly, polar, black):	Project site is part of home territory of grizzly	April – emergence from dens
Other:		
Eskers:	Not surveyed	
Communities:	None in the immediate area; Kugluktuk is closest at 360 km	
Historical/Archaeological sites:	Not surveyed	

17. Indicate and describe other known uses of the area such as local development, traditional use (hunting/fishing/spiritual), outfitting, tourism, mineral development, research, etc.:

No known traditional or non-traditional use other than mineral exploration

18. Describe the impacts of the proposed project activity on the environmental components and uses, in the area listed above:

No impacts anticipated other than very minor disturbances from field crews over short (typically less than 2 week) periods. Helicopter support will be used, combined with boats and walking.

19. What are some suggested mitigation measures for these impacts?

Avoid wildlife harassment
Non-destructive sampling
Incinerate food waste
No feeding of wildlife policy
No hunting by employees or contractors

SECTION 7: COMMUNITY INVOLVEMENT & REGIONAL BENEFITS

20. List the community representatives that you have contacted about this proposed project:

Community	Name	Organisation	Date Contacted	Means	Telephone #	Fax #
Kugluktuk		HTA	to contact	Phone		
Cambridge Bay		HTA	to contact	Phone		
Bathurst Inlet		HTA	to contact	Phone		
Umingmaktok		HTA	to contact	Phone		
Cambridge Bay	Donald Havoyiak	KIA	to contact	Phone		

21. Describe the level of involvement that the residents of Nunavut have had with respect to the proposed project. Elaborate on local employment opportunity, training programs, contracts, Inuit Impact Benefit Agreements (if applicable):

One or two field assistants may be required for this small project and will be sought from West Kitikmeot communities listed above. Depending on timing, exploration field assistants may be employed in environmental sampling if available and interested in the work.

22. Describe and attach documentation regarding community concerns or support for the proposed project:

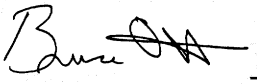
Project support will be solicited through contacts.

23. Is there a Traditional Knowledge (TK) component to this research project?

No

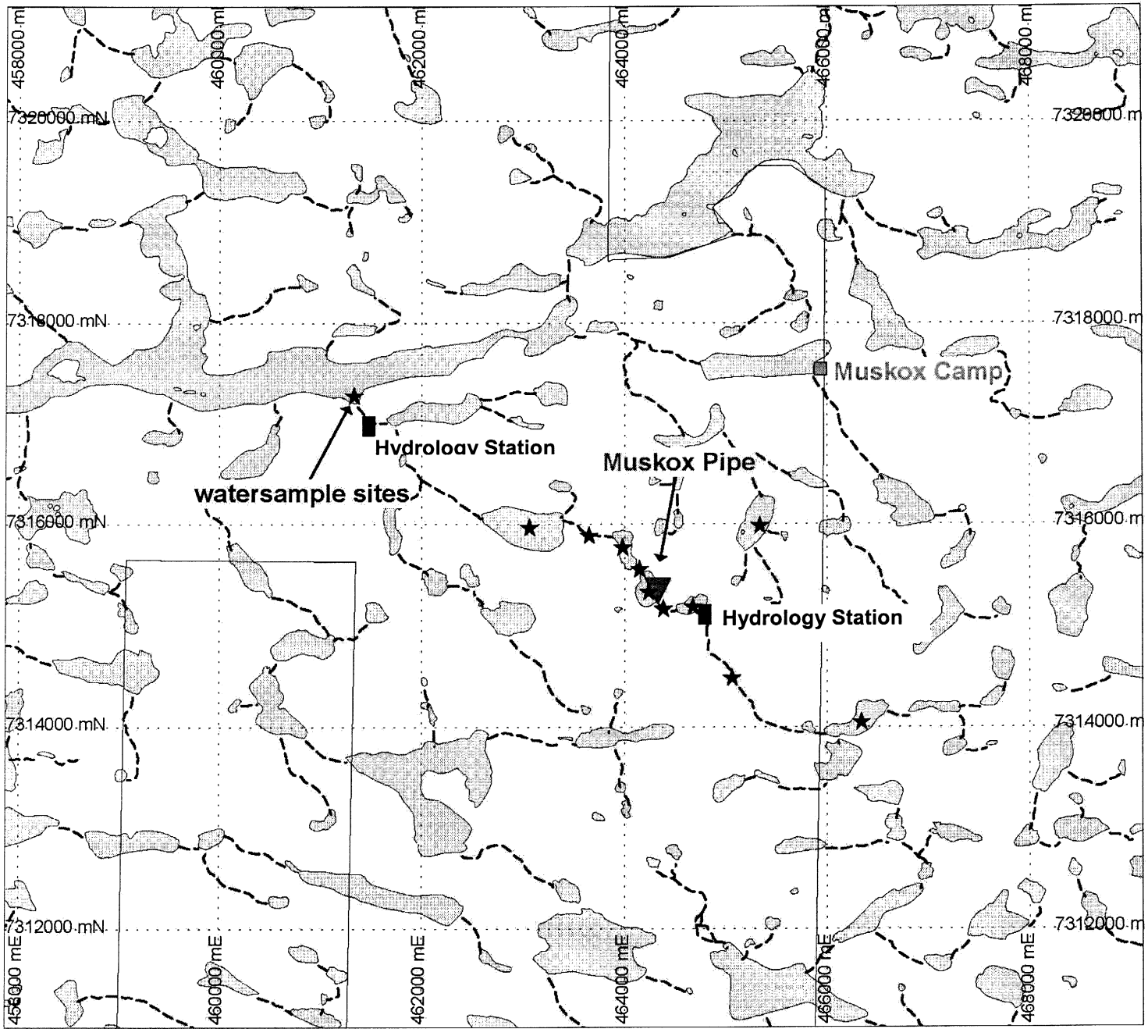
24. Check YES X or NO☐ if you give NRI permission to release the applicants contact information in the Annual Compendium of Research Undertaken in Nunavut, published by the Nunavut Research Institute.

Applicant: Cheryl Wray



_for Cheryl Wray, ____Environmental Coordinator,_____19 June 2006_____

Signature **Title** **Date**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Muskox Camp
Hydrology Station
watersample sites
Muskox Pipe
Hydrology Station

ENVIRONMENTAL PROGRAM SUMMARY

Initial environmental studies are being considered for the subject claim area. Studies envisaged will include collection of water quality samples up to three times during the summer period (June through September), establishment of stream gauging stations and measurement of stream flows, spot vegetation surveys of the claim area to verify aerial vegetation mapping, and fisheries surveys in local lakes. Fisheries surveys would be by non-destructive methods (catch and release).

Wildlife studies at Muskox are being conducted as part of the wildlife monitoring requirements for the Jericho Diamond Mine under separate permit.

Tahera
Diamond Corporation

Vancouver Exploration Office
340 – 17 Fawcett Road
Coquitlam, BC
V3K 6V2

Abandonment and Restoration Plan Muskox Camp and the Polar Property

Submitted with
Water License Application - Nunavut Water Board

November 2005

Table of Contents

Preamble

This Abandonment and Restoration (A&R) Plan is effective as of January 1, 2006, and until replaced or revised. This Plan applies to Muskox camp and the Polar property on which the camp is located. The camp supports exploration activities including prospecting, geological mapping, geophysical surveying, diamond drilling, reverse circulation drilling and evaluation/bulk sample drilling. The camp is located at N 65° 58', W 111° 45'.

Copies and revisions of the A&R Plan can be obtained from Tahera Diamond Corporations Coquitlam Exploration Office by contacting Mike Johnson at (604) 519-1977. The head office for Tahera Diamond Corporation is located at Suite 803 – 121 Richmond Street West, Toronto, Ontario, M5H 2K1.

Introduction

This A&R Plan has been prepared for Muskox camp, located on the Polar property. Muskox camp is a temporary camp located 245 km southeast of Kugluktuk and 410 km north-northwest of Yellowknife. The camp is capable of housing up to a maximum of 40 occupants, with the average number in camp at approximately 20 persons. The camp is occupied seasonally, usually in the spring and summer months.

Muskox camp was built by De Beers Canada Exploration Inc. in 1996. Tahera Diamond Corporation purchased the camp from De Beers in the summer of 2005 and at that time commenced upgrading the camp to increase its capacity. Further camp maintenance and upgrades are anticipated for the life of the camp.

Tahera became the operator of the Polar property in the summer of 2004 following the signing of a joint venture agreement with De Beers. Ongoing exploration activities include prospecting, till sampling, mobile metal ion (MMI) sampling, geological mapping, ground geophysical surveying (magnetic, gravity and electromagnetic) and drilling. The drilling on the property involves exploration, delineation and evaluation drilling using both diamond and reverse circulation (RC) drills. Any and all of these exploration activities could be undertaken on the property in future years. A RC bulk sample drill program is in the planning phase for the winter of 2006.

Access to the property and camp is by fixed-wing, float or ski-equipped aircraft. Helicopters and snow-mobiles (seasonally dependant) are used for movement throughout the property. The construction of an ice road between Muskox and Jericho has been planned for the winter of 2006 for the mobilization, support and demobilization of the RC bulk sample drill program.

Muskox Camp Site Information

The following lists all the current structures and equipment at Muskox camp. More structures and equipment may be constructed, erected or situated in the camp as it is upgraded and maintained in the future, but any upgrades will have minimal impact. They would most likely include additional tents and an incinerator.

Wooden Structures

1 kitchen building

1 dry building

1 office building

1 generator shack

1 storage shack

1 toilet shack

8 sleeping buildings (1 doubles as first aid)

Fabric Tents

1 eating/recreation tent

1 core logging tent

1 large storage tent

2 sleeping tents

Miscellaneous

1 burn barrel for incinerating

1 wooden dock for float planes

Materials Storage

MSDS sheets for all substances used in camp and on drill rigs are included in the Appendix. Please refer to the **Spill Contingency Plan – Muskox Camp and Polar Property** for details on spill prevention, containment and remediation.

Muskox Camp

Fuel - The types of fuels used and stored at Muskox camp include: diesel, Jet-B, unleaded gasoline and propane. Diesel is used for running the electrical generator, the heating of structures and for the incineration of waste. Jet-B is used to power helicopters and fixed-wing aircraft. Gasoline is used to power snow-mobiles and small equipment (ice-augers, etc). Diesel, Jet-B and gasoline are stored in 45 gallon drums in impervious fuel berms outside of the camp at a safe distance. Diesel is also stored in camp adjacent to structures for supplying ongoing fuel for heating purposes. Propane fuel is used for cooking and heating in camp and is stored in 100 pound cylinders at a safe distance from camp.

Fuel Type	Maximum quantity of fuel on site
Diesel	100 drums / 20,500 litres
Jet-B	20 drums / 4,100 litres

Gasoline	5 drums / 1,025 litres
Propane	75 cylinders / 75,000 pounds

Oil - Oil stored on site includes 2-cycle and 4-cycle engine oil used for lubrication in the diesel generators, snow-mobiles and other equipment. The oil is only stored in either the generator shack or storage shack and only in small quantities.

Other Substances - The only other substances stored and used in camp would include non-toxic and biodegradable household cleaning products. These products are stored in very small quantities.

Exploration/Delineation Diamond Drill Sites

Fuel - The types of fuels used and stored at diamond drill sites may include: diesel, Jet-B, and propane. Diesel is used for running the drill rig and heating. If on site, Jet-B is used to power helicopters and fixed-wing aircraft. Diesel and Jet-B are stored in 45 gallon drums in small, impervious fuel berms. Propane fuel is used for heating and is stored in 100 pound cylinders.

Fuel Type	Maximum quantity of fuel on site
Diesel	2 drums / 410 litres
Jet-B	2 drums / 410 litres
Propane	4 cylinders / 400 pounds

Oil - Oil stored on site includes 2-cycle and 4-cycle engine oil and hydraulic oil. Engine oil is used for lubrication in the drill rig, snow-mobiles and other equipment. Hydraulic oil is used in the drill and related equipment. The oils would be stored in the drill shack, storage shack or equivalent.

Other substances – Ethylene glycol (antifreeze) may be stored with the drill rig as coolant for the engine. If present, it will be stored in small quantities.

Drill Additives - Quik-Gel, Quik-Trol, Poly Drill OBX and 133, Linseed Soap, Special "E" Thread Dope, Big Bear Diamond Drill Rod Grease and 550 X polymer. All these products are non-hazardous.

Muskox RC Bulk Sample Drill Site

Fuel - The types of fuels used and stored at RC drill sites will include diesel and propane. Jet-B may be stored on site. Diesel is used for running the drill rig and support equipment. If on site, Jet-B is used to power helicopters and fixed-wing aircraft.

Fuel Type	Maximum quantity of fuel on site
Diesel	1 fuel bladder / 95,000 litres
Jet-B	2 drums / 410 litres
Propane	5 cylinders / 500 pounds

Oil - Oil stored on site includes 2-cycle and 4-cycle engine oil and hydraulic oil. Engine oil is used for lubrication in the drill rig, snow-mobiles and other equipment. Hydraulic oil is used in the drill and related equipment. The oils would be stored in the drill shack, storage shack or equivalent.

Other substances – Ethylene glycol (antifreeze) may be stored with the drill rig as coolant for all engine-driven equipment employed on site. If present, it will be stored in small quantities.

Drill Additives – Max Gel (bentonite mud) and Drispac. Max Gel is a naturally occurring, non-hazardous and biodegradable bentonite mud used as a viscosifier in drilling. Drispac is a non-hazardous and biodegradable viscosifier and water loss agent.

Seasonal Camp Shutdown

Exploration activities on the Polar Property are generally run in two yearly time periods. The winter/spring exploration season is usually run between January and May. The summer exploration season is usually run between July and September. Following the completion of any field program, the camp will be shutdown.

Structures – All wooden buildings and tents will be thoroughly cleaned of all garbage and waste. All the oil stoves and propane systems will be shut off and the supply drums/cylinders will be sealed to prevent leakage and condensation build-up. All doors and windows will be thoroughly secured shut to prevent animals and snow from entering the structures.

Water system – All components of the water system will be thoroughly drained and "winterized" to prevent freezing and damage. The intake pipes will be removed from the lake and stored on site.

Fuel, oil, chemicals and other substances – Any non-empty fuel drums and cylinders will be moved to the fuel storage berm. The drums/cylinders will be thoroughly checked for leaks and will be securely sealed. New fuel bungs are available on site to replace leaking bungs. The fuel from any leaking drums will be pumped into new drums and sealed. The fuel berm will be sealed with tarps to prevent snow from building up inside the berm. Empty fuel drums and cylinders will be returned to Yellowknife for refund/recycling.

The quantity of oil in camp is very small. Any left over oils will be stored in one of the wood framed storage structures.

No hazardous and non-biodegradable chemicals will be stored on the property during shutdown. All such substances, if present, will be removed to Yellowknife.

Generators – Any diesel generators in camp will be shut down according to the manufacturers recommended "winterization" procedures. All fuel hoses and storage tanks will be sealed and inspected for leaks, and any necessary repairs will be made.

Waste – All combustible wastes (including human wastes) will be incinerated. Any non-combustible residue from the incinerator and other bulky waste materials will be shipped to Jericho or Yellowknife for proper disposal.

The greywater sump is equipped with a wooden lid that will be securely sealed during shutdown.

Drill Site Shutdown

It is Tahera policy to restore all drill sites immediately following the completion of drill activities whether or not the drill rig will be left on site.

Drill Equipment – All drill equipment will be broken down and prepared for removal or storage as per the drill contractor's procedures and under the supervision of Tahera personnel.

Fuel, oil and other substances - Any non-empty fuel drums and cylinders will be moved to the fuel storage berm. The drums/cylinders/bladders will be thoroughly checked for leaks and will be securely sealed. New fuel bungs are available on site to replace leaking bungs. The fuel from any leaking drums will be pumped into new drums or bladders and sealed. The fuel berm will be sealed with tarps to prevent snow from building up inside the berm. Empty fuel drums and cylinders will be returned to Yellowknife for refund/recycling.

All oil and other substances will be removed from the drill site and either stored in camp or shipped to Jericho or Yellowknife.

Drill Sites - All drill sites will be inspected by the drill contractor and by Tahera for contamination and waste. Any contamination will be cleaned up as outlined in the Spill Contingency Plan. Any remaining waste will either be incinerated in camp or shipped to Jericho or Yellowknife for proper disposal.

Final Abandonment and Restoration

This section applies to any camps, fuels caches, drill sites or other applicable locations.

- All structures, equipment and facilities on the property will be dismantled and removed from the site.
- Recycling and re-use of camp material is encouraged.

- Wooden structures will dismantled and burnt in a suitable location. The remaining wood coals and ash will be raked to remove any non-combustible materials (i.e. nails, screws, etc) which will be shipped to Yellowknife for disposal. The remaining coals and ash will be buried.
- All sumps and pits will be back-filled after removing and burning any wooden retaining structures.
- All garbage and waste will be incinerated and the remaining non-combustible material will be shipped out for proper disposal.
- All fuel and empty fuel drums/cylinders will be removed from the site and all fuel caches and storage areas will be inspected for contamination. Any soil contamination encountered will handled as outlined in Spill Contingency Plan.
- Drill sites will be shutdown and restored as outlined in the previous section. All drill materials, equipment and supplies will be removed from the site.

Appendix

MSDS

FUEL SPILL CONTINGENCY PLAN

Fuel Storage

The four main types of fuel used in exploration are: Diesel, gasoline, Jet-B and propane. Diesel is used for machinery and vehicles in camp and the drill site. Gasoline is for vehicles, small machinery and equipment. Jet-B fuel is used by helicopters or turbine powered aircraft. Propane is used in appliances in camp and heating at the drill site.

Diesel, gasoline and Jet-B are stored in sealed 45 gallon drums. Propane is stored in 100 pound cylinders. The total number of barrels or cylinders kept on site will vary depending on requirements and will comply with the limit set by the appropriate governing body.

Fuel spill kits are located at each fuel cache, and contain absorbent materials and other safety equipment that may be needed to contain a spill.

This Contingency Plan will be posted on-site for easy reference in the event of an unplanned discharge of fuels.

Sources of Potential Fuel Spills:

Potential fuel spills could be a result of the following:

- Accidental damage to barrels or cylinders;
- Vehicles involved in accidents;
- Damaged pumping system.

These scenarios will be minimized by regular visual inspection, proper training for fuel handling and spill response training for all personnel associated with fuel handling.

If a Fuel Spill Occurs:

The following steps are to be taken in the event of a fuel spill, a leak at a storage facility, or a vehicle accident.

1) Identify the source of the leak or spill.
2) Contain the spill and the source if possible.
3) Leaks from a tank or barrel can be stopped by:

- turning off valves;
- utilizing patching kits to seal leaks; and
- Place plastic sheeting at the foot of the tank or barrel to prevent seepage into the ground.
- In the worst case, the contents of the leaking barrel can be pumped to an empty barrel.

4) Contact the Spill Response Coordinator or supervisor.

Fuel Spills on Land

- Contact the Spill Response Coordinator.
- Hydrocarbon on rock will be soaked up with absorbent sheeting. The hydrocarbon-saturated sheeting will be placed in empty drums for disposal.
- Contaminated soil and vegetation may have to be removed and disposed of. The Spill Response Coordinator or supervisor will contact the government authority identified by the 24-Hour Spill Reporting Line for approval before undertaking this.

Fuel Spills on Snow

- Snow works well as a natural absorbent and collects spilled fuel.

- Berms can be made from snow by compacting and lining the snow-berm with plastic.
- The snow-fuel mixture will be scraped up and stored in a lined area or in drums for future disposal, or burned with approval (contact the NWT 24-Hour Spill Line). Remaining contaminated snow will be placed in drums or on a lined berm (on land).

Fuel Spills on Water

It is important to immediately limit the area of the spill on water. The following steps should be followed.

- Booms will be deployed to contain the spill area. Winds, waves, and other factors will limit the effectiveness of this action.
- Absorbent pads and similar materials will be used to capture small spills on water. The absorbent pads are hydrophobic (absorb hydrocarbons and repel water).

Fuel Spills on Ice

- Where a spill occurs on ice, snow will be compacted around the edge of the spill to serve as a berm. The ice will prevent (or reduce the rate of) seepage of fuel into the water, but the contaminated snow/ice must be immediately scraped up. Permission may be given from the government to burn off fuel, as with fuel spills on snow (contact the NWT 24-Hour Spill Line).
- Fuel that escapes under the ice through breaks or cracks is extremely difficult to collect. Expertise should be sought immediately. A Mobile Environmental Response Unit can be made available in a matter of hours if spills are extreme.

RESPONSE TO SYSTEM FAILURES AND SPILLS

Initial Actions

In the event of a spill or system failure, personnel at the spill site will follow the following procedures:

1) Ensure safety of yourself and others.
2) Assess any hazards to persons in the vicinity of the spill.
3) Control danger to human life.
4) Assess if spill can be readily stopped or brought under control.
5) If safe to do so, contain and stop flow of spilled material.
6) Gather information on the status of the situation.
7) Report spill or system failure to the On-Scene Coordinator immediately so they can ensure the responsible regulator is notified by contacting the NWT 24 hour Spill Line.
8) If safe, resume action for cleanup and containment.