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Defence Construction Canada

Operation & Maintenance Plan
FOX-3, Dewar Lakes Dew Line Site
1BR-FOD0813

Prepared by:

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Revision Log

Revision #	Revised By	Date	Issue / Revision Description
1	EMS	Dec. 30, 2008	Draft
2	EMS	Feb. 16, 2009	Final Draft
3	EMS	March 19, 2009	Final

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1. Introduction

1.1 Purpose

The purpose of the proposed project is to provide remedy for previous activities that occurred as a result of the operation of the former DEW Line site. Specifically, the clean up is to prevent the release of physical debris and/or contaminants into the environment. During the construction phase of the clean up, existing facilities no longer required for the operation of the NWS will be demolished. The demolition wastes will be segregated into hazardous and non-hazardous materials and disposed of appropriately. Contaminated soils identified during the field investigations will be excavated and properly disposed of in on-site engineered landfills or at off-site facilities if characterized as hazardous. Scattered surface debris and partially buried debris will also be collected and disposed. New landfills will be constructed to contain the non-hazardous contaminated soil and demolition waste generated during the clean up. Existing landfills within the site will be remediated, as required. Disturbed areas will be physically restored to a stable condition shaped to match the existing terrain. The detailed clean up program is provided in Section 5.

1.2 Location

The FOX-3, Dewar Lakes DEW Line site is located in the central area of Baffin Island in the Nunavut Territory. The station area is approximately 6 km northwest of Dewar Lakes, near which the airstrip was built. There is no direct sea access from this site. The nearest community is Hall Beach, approximately 400 km west of the site.

1.3 Biophysical Information

1.3.1 Flora

Dewar Lakes is located on a dry, bedrock-controlled hill with intermittent vegetation and coarse textured soil. Vegetation cover on the hill is sparse (up to 10%), dominated by purple saxifrage (*Saxifraga spp.),* and mountain avens (*Dryas spp.)* associated with kobredia (*Kobresia spp.),* sedges (*Carex spp*.) and Arctic poppy (*Papaver radicatum*). Valley bottoms and ponds or small lakes generally contain more soil of finer texture. Margins of these water bodies and adjacent meadows usually support a near complete cover of sedges, grasses, cotton grass (*Eriophorum spp.),* rush (*Luzula sp.)* and saxifrage.

1.3.2 Avifauna

Snowy owls (*Nyctea scandiaca*), Peregrine falcon (*Falco peregrinus*), Gyrfalcon (*Falco rusticolus*), and Rough-legged hawk (*Buteo lagopus*) are known to occur in this region, although none were noted during the 2006 site investigation. Red-throated loon (*Gavia stellata*) is the most common loon in this region of Baffin Island and was likely the species observed near the facilities during the site visits. The small shallow ponds in the area are the preferred nesting habitat for this species. Other waterfowl species which may be nesting in the area include: Tundra swan (*Cygnus columbianus*), Greater snow goose (*Anser caerulescens*), Brant

(*Branta bernicla*), King eider (*Somateria spectabilis*), and Oldsquaw (*Clangula hyemalis*). Both Glaucous gull (*Larus hyperboreus*) and Thayer's Gull (*Larus thayeri*) are known to occur in this region.

1.3.3 Terrestrial Fauna

Barren-ground caribou (*Rangifer tarandus groenlandicus*) in this region of Baffin Island belong to the South-Baffin population. The calving grounds for this herd occur within the general area of Dewar Lakes. Calving usually occurs during late June and the cows and calves disperse from the area towards the coastal lowlands.

While Dewar Lakes is somewhat inland from the coast, Polar bears (*Ursus maritimus*) in this region travel extensively on land during late winter and early spring to avoid hazardous crossings of open water. Important summer denning areas occur to the east of Dewar Lakes, along the east coast of Baffin Island and bears have been known to occur at the station.

Other animals noted at the site are Arctic fox (*Alopex lagopus*), grey wolf (*Canis lupus*), short-tailed weasel (*Mustela erminea*), Arctic hares (*Lepus arcticus andersoni*), collared lemming (*Dicrostonyx torquatus kilangmiutak*) and brown lemming (*Lemmus sibiricus*).

1.4 Contact List

Table 1 provides the contact names and numbers for personnel associated with the work at the FOX-3 site.

Table 1: Contact List

Company	Name & Position	Phone No.
Biogenie (Contractor)	Project Manager – Sylvain Laberge	514-895-4517
Defence Construction Canada (representatives for the Department of National Defence)	Environmental Officer – Douglas Craig	613-998-7288
	Associate Project Manager – Steve Poaps	613-998-9529

2. Background

2.1 Location of Drinking Water Supply

Please see attached site plan for the location of the drinking water supply at FOX-3.

2.2 Sewage Treatment and Disposal

As a minimum, the camp sewage will be directed to a two-cell lagoon situated a minimum of 100 metres from the camp, any natural drainage course and water bodies that support aquatic life. The sewage lagoons will be sized to provide an individual capacity for 50 days of wastewater storage or one half of the duration of the construction season, whichever is less. The maximum fluid depth shall not exceed one metre. The sewage effluent will be tested prior to discharge for the following parameters: Biological Oxygen Demand, Total Suspended Solids, Oil & Grease; Faecal Coliforms and pH. Greywater from camp operations will also be discharged into the sewage lagoon.

2.3 Solid Waste Management and Disposal

Domestic garbage will be incinerated in an enclosed container (typically a forced-air incinerator) and the residual waste buried in the Non-Hazardous Waste Landfill. Scrap metal will be crushed and buried in the Non-Hazardous Waste Landfill. All excess fuels, camp equipment and facilities will be removed from the site after completion of the clean up activities. Any hazardous wastes encountered during the clean up operations will be packaged and stored according to TDG Regulations prior to shipment to a southern disposal facility. Waste oil is included as hazardous waste.

2.4 History of Site

The FOX-3 site was constructed in the 1950's as part of the Distant Early Warning (DEW) Line, which provided radar surveillance of the northern approaches to North America. In March 1985, Canada and the United States agreed to modernize the North American Air Defence System by closing the remaining 21 DND DEW Line sites by the early 1990's, and build the North Warning System (NWS).

In 1992, the DEW Line Clean Up Protocol was developed by the Environmental Sciences Group (ESG) of the Royal Military College of Canada and was reviewed and approved by federal and territorial environmental officials. The protocol includes procedures for dealing with contaminated soil, waste oil, landfills, wastewater, debris and hazardous materials. In 1998, the Environmental Provisions of the Cooperation Agreement between DND and the NTI were implemented to provide the approach necessary to restore the sites to an environmentally safe condition and prevent the migration of contaminants into the Arctic food chain.

3. Sewage Lagoon

The lagoon is a constructed facility that is to provide an individual capacity for 50 days of wastewater storage or one half of the duration of the construction season, whichever is greater. Perimeter berms are to be constructed so that a minimum of 1 metre of freeboard is maintained. The berms shall be placed and compacted fill material in horizontal lifts not exceeding 300 mm in thickness to 95 percent Maximum Dry Density. Depth indicators are to be installed and maintained within each lagoon to enable visual monitoring of the fluid depths. At the completion of construction activities at the site, the temporary lagoon will be backfilled to provide a minimum of 500 mm granular fill over settled solids.

The location of the sewage lagoon at FOX-3 must be: a minimum of 100 m from the construction camp, Engineer's Office, and/or other temporary facilities; a minimum of 100 m from drainage paths; a minimum of 450 metres from water bodies supporting aquatic life; downwind of the construction camp based on the prevailing wind direction; and within the DND reserve.

Volumes of sewage are calculated based on the number of people in the camp. The current estimate is 60 people.

All sampling procedures for the sewage effluent are provided in the QA/QC Plan dated September 2008 and submitted to the Nunavut Water Board on November 21, 2008.

4. Non-Hazardous Waste Landfill

A Non-Hazardous Waste (NHW) Landfill will be constructed at FOX-3 for the disposal of non-hazardous debris resulting from clean up operations. It will be located approximately 340 m southeast of the module train, adjacent to the access road, and has an available surface area of 12,200 m2. The area has a relatively steep grade, and bouldery rugged ground with pockets of open boulders.

A NHW Landfill is designed on the premise that it will contain non-hazardous materials only and will not generate leachate. Therefore, it is not necessary to eliminate all moisture migration into and out of the landfill. The NHW Landfill is also not designed to maintain the contents in a perennially frozen state.
The following materials may be disposed of in an NHW Landfill:

- Tier I and Type A hydrocarbon contaminated soil;
- Non-hazardous demolition debris;
- Non-hazardous site debris;
- Non-hazardous debris and Tier I soils excavated from landfills;
- Creosote treated timbers wrapped in polyethylene sheeting; and
- Double-bagged asbestos.

The NHW Landfill will consist of a perimeter containment berm and granular cover to minimize erosion and infiltration in order to provide long-term stability. The NHW Landfill will be established on native ground, stripped of any organic matter which will be stockpiled and used in the closure of the landfill. No base cover or liner is required for this landfill. Development and closure of an NHW Landfills includes the following work:

- Construction of exterior berms;
- Placement of Tier I contaminated soil and non-hazardous demolition waste and site debris in the landfill;
- Placement of Tier I contaminated soil and non-hazardous demolition waste and site debris in the landfill;
- Compaction of landfill debris;
- Placement and compaction of intermediate granular cover in the landfill;
- Placement and compaction of final granular cover over the landfill;
- Grading to promote drainage away from the landfill;
- Supply and installation of groundwater monitoring wells in and around the landfill as indicated on the drawings; and
- Survey of the location of asbestos and creosote-treated timbers.

5. Tier II Soil Disposal Facility

A Tier II Soil Disposal Facility will be located directly south of the station, approximately 1.3 km west of the access road, and covers an estimated area of 12,000 m2. The area is generally level with a bedrock ridge at the south end, several metres above grade. A Tier II Soil Disposal Facility is designed to contain contaminated soil exceeding Tier II Criteria only. The design of this facility is based on the characteristics of the contaminants in the soils, the geothermal properties of the area, and the local permafrost regime. The design utilizes permafrost as the primary containment barrier. Both the Tier II contaminated soil and the wet, silty gravel perimeter berms are designed to be continuously frozen. A geothermal analysis was conducted to determine the time required for freezeback of the facility and the long-term geothermal regime of the facility. The thickness of the cover material was calculated to prevent thaw of the contaminated soil, even after 10 consecutive 1 in 100 warm years.

A high-density polyethylene (HDPE) liner is placed at the base and side slopes of the facility to provide secondary containment. The liner is chemically compatible with the contaminated soils and will prevent the potential movement of contaminants during the period required for permafrost aggradation. A second HDPE liner is to be placed over the contaminated soils and seamed to the base liner to prevent precipitation from percolating down through the cover fill and into the Tier II contaminated soils. The development and closure of the Tier II facility at FOX-2 will include the following work:

- Construction of exterior berms with saturated silty gravel;
- Supply and installation of HDPE liners;
- Placement of Tier II contaminated soils in the landfill;
- Placement and compaction of intermediate granular cover over the soil.
- Installation of the top HDPE liner;
- Placement and compaction of final granular cover on the landfill;
- Grading to promote drainage away from the landfill; and
- Supply and installation of thermistor strings and groundwater monitoring wells in and around the landfill.

During construction of this facility, the gradation, moisture content and compaction are monitored to ensure compliance with the design. It should be noted that water management during key trench construction will not be a concern as the facility is located in an area that is free of debris and soil contamination. Any water encountered will be pumped away from the area, without the requirement for testing.

6. Hazardous Waste Management

Hazardous" waste materials are defined as waste materials that are designated as 'hazardous' under Nunavut or Federal legislation; or as 'dangerous goods' under the Transportation of Dangerous Goods Act (TDGA). The Canadian Environmental Protection Act (CEPA) regulates material containing PCBs at concentrations greater than 50 ppm. Specific hazardous materials may include: batteries, asbestos, fuel tank bottom sludges, solvents, PCB-containing fluids, fuels and lubricating oils, alcohols and glycols, and heavy metal contaminated liquids. Disposal requirements of these hazardous waste materials are presented in Table 2.

Table 2: Hazardous Waste Material Disposal Requirements

Hazardous Waste Material	Disposal Requirement
Batteries Heavy metal contaminated organic liquids Liquids containing organic compounds with chlorine concentrations >1000 ppm Liquids containing organic compounds with PCB concentrations >2 ppm and <50 ppm	Off-site licensed treatment/disposal facility (by separate contract)
Fuel tank bottom sludges Fuels, lubricating oils, alcohols and glycols	Off-site licensed treatment/disposal facility (by separate contract) **OR** On-site incineration in accordance with the contract specifications
Liquids and solids containing organic compounds with PCB concentration >50 ppm	Off-site licensed treatment and disposal facility

Hazardous materials are placed in environmentally suitable containers (typically lined and braced sea-cans) at an approved containment facility on-site. A storage area is established and registered with Environment Canada. The hazardous materials are removed by sea-lift in accordance with the TDGA Regulations.

7. Emergency Response

The Emergency Response Plan from the contractor is to be submitted prior to the start of work in late May or early June, and comments on it are presented in Appendix B.

8. References

Northwest Territories, Municipal and Community Affairs Community Development. *Guidelines for the Preparation of an Operation and Maintenance Manual for Sewage and Solid Waste Disposal facilities in the Northwest Territories*. October 1996.

UMA Engineering Ltd., *Environmental Clean Up Study of 21 DEW Line Sites in Canada. Volume 20 FOX-3, Dewar Lakes, NWT*. UMA Engineering Ltd., in association with Hardy BBT Limited and Jacques Whitford Group, 1991.

UMA Engineering Ltd., *Specifications for the Clean Up of the FOX-3, Dewar Lakes DEW Line Site*. UMA Engineering Ltd., in association with Hatch, 2007.

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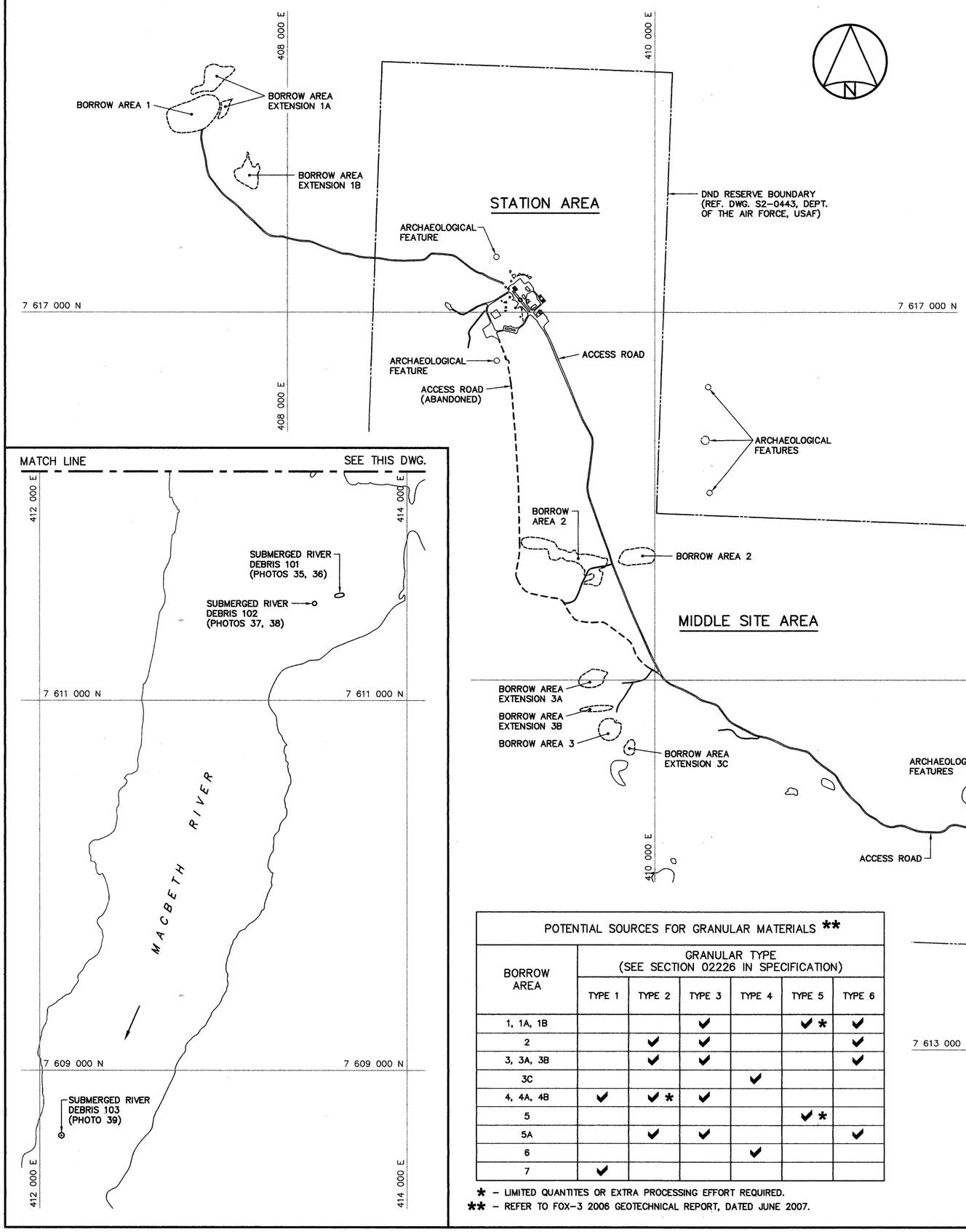
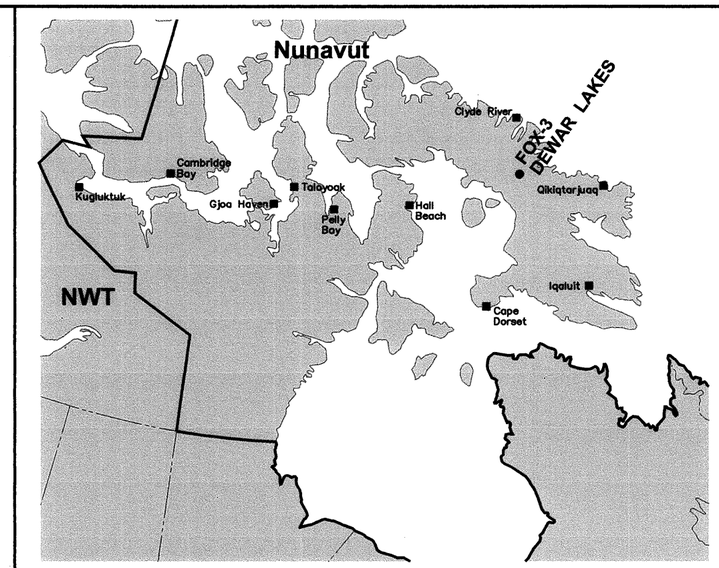
Appendix A

Overall Site Plan





LOCATION OF DEWAR LAKES WITHIN NUNAVUT TERRITORY

N.T.S.

POTENTIAL SOURCES FOR GRANULAR MATERIALS **						
BORROW AREA	GRANULAR TYPE (SEE SECTION 02226 IN SPECIFICATION)					
	TYPE 1	TYPE 2	TYPE 3	TYPE 4	TYPE 5	TYPE 6
1, 1A, 1B			✔		✔ *	✔
2		✔	✔			✔
3, 3A, 3B		✔	✔			✔
3C				✔		
4, 4A, 4B	✔	✔ *	✔			
5					✔ *	
5A		✔	✔			✔
6				✔		
7	✔					

* – LIMITED QUANTITES OR EXTRA PROCESSING EFFORT REQUIRED.
** – REFER TO FOX-3 2006 GEOTECHNICAL REPORT, DATED JUNE 2007.

National Defence / Défense nationale

Headquarters
Quartier général

General Notes:

1. ALL COORDINATES ARE REFERENCED TO NAD83 (CSRS), UTM ZONE 19N. ELEVATIONS ARE REFERENCED TO MEAN SEA LEVEL, RELATIVE TO GEOID MODEL CANADIAN HT2_0.
2. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
3. ARCHAEOLOGICAL FEATURES LOCATED AS PER ARCHAEOLOGICAL STUDY AT FOX-3, DEWAR LAKES, BY THOMSON HERITAGE CONSULTANTS.
4. ALL NON-HAZARDOUS DEBRIS TO BE PLACED IN NON-HAZARDOUS WASTE LANDFILL.
5. REFER TO TABLE 02219-1 IN SPECIFICATIONS FOR DESCRIPTION OF DEBRIS AREAS.

Legend:

- BODY OF WATER
- APPROXIMATE EXTENT OF DEBRIS AREAS
- APPROXIMATE EXTENT OF BORROW AREAS
- APPROXIMATE LOCATION OF PROPERTY BOUNDARIES

No.	DATE	REVISION	REVISION	APPR.

K.R. MERKOSKY LICENSEE NWT/NU 2007-08-27

THE ASSOCIATION OF PROFESSIONAL ENGINEERS, GEOLOGISTS and GEOPHYSICISTS OF THE NORTHWEST TERRITORIES
PERMIT NUMBER P 007
UMA ENGINEERING LTD.

UMA | AECOM HATCH

SCALE – ECHELLE 200 100 0 200 400 600m

PROJECT – PROJET
FOX-3 DEWAR LAKES

DEW LINE CLEAN UP

TRADE – METIER	DATE
SITING	2007-08-24

SUBJECT – SUJET

OVERALL SITE PLAN

PRODUCTION	CONCURRENCE – ASSENTIMENT	
DESIGNED – ETUDIE TME/DTM		DES OFF – AGENT CONCEPT
DRAWN – DESSINE CAE		SECT HD – CHEF SECT
CHECKED – VERIFIE RRM		DES MGR – GEST CONCEPT
COORDINATION SMS	REVIEWED – REVU	

DWG. NO. – DESSIN NO.
H-D67/1-9101-101

Canada

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Appendix B

Contractor Emergency Response Plan

CLEAN UP AND RESTORATION OF THE DEW LINE SITE AT FOX-3
Dewar Lakes, Nunavut

EMERGENCY RESPONSE PLAN

(O/Ref.: CD8178) (Y/Ref.: DLCFOX3)

DEFENCE CONSTRUCTION CANADA

February 2009

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CLEANUP AND RESTORATION OF THE DEW LINE SITE AT FOX-3

EMERGENCY RESPONSE PLAN

Dewar Lakes, Nunavut

(O/Ref.: CD8178) (Y/Ref.: DLCFOX3)

DEFENCE CONSTRUCTION CANADA

February 2009

Written by: Nancy Davis
Project Coordinator

Verified and approved by: Sylvain Laberge
Project Director

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1 INTRODUCTION

1.1 CONTENT

In April 2008, Biogenie S.R.D.C. Inc. (Biogenie) was awarded the contract to clean-up the FOX-3 DEW Line site by Defence Construction Canada on behalf of the Department of National Defence. Since Dewar Lakes is in a remote northern location, response time from emergency response authorities is expected to be lengthy. This Emergency Response Plan was prepared in order to minimize or eliminate any effects to human health and/or damage to the environment should any foreseeable emergency situation arise. It was developed in accordance with CSA Z731 *Emergency Planning for Industry, A National Standard of Canada* and the *Guidelines for Emergency Response Planning, Northwest Territories Water Board, January 1987.*

As required this document presents:

- A description of the materials that will be transported to site or handled on site as part of the cleanup activities.
- A list of possible on or off-site emergency situations associated with the project.
- The roles and responsibilities of the Project Team.
- The reporting and communication procedures.
- Action procedures in case of emergency.
- Available resources and training.

It is important to note that this plan is an integral part of the Health and Safety Plan. References are made to this document.

1.2 SITE DESCRIPTION

Dewar Lakes (FOX-3) is located on Central Baffin Island at 68º 38' 99" N 71º 13' 76" W, approximately 230 km west of Clyde River. The site is located in Nunavut, Qikiqtaaluk District, under the jurisdiction of the Qikiqtani Regional Council. The main site is at 550 m above sea level and the airstrip is located at about 4 km away. The total area encompassed by the DND reserve is approximately 1,600 hectares. The site was an auxiliary DEW Line station which was decommissioned in 1989 after construction of the new FOX North Warning System (NWS) radar site.

As at most auxiliary sites of the DEW Line, this station is composed of the following buildings and structures:

- Module Train
- Warehouse
- Garage
- Vehicle Storage Shed
- POL Pumphouse
- Radar Tower, Radome, Communication equipment, etc.
- Fuel tanks
- Airstrip equipment

In addition, debris including barrels and old equipment are scattered around the site and in former landfills. These debris and buildings must be collected and managed as part of the site cleanup.

To access the site, material and equipment will have to be transported by CAT-Train from Longstaff Bluff (FOX-2) on an overland route of approximately 185 km.

2 MATERIALS DESCRIPTION

This section details the materials that will be handled during the course of the project. All Material Safety Data Sheets (MSDS) for these products are available in the Health and Safety Plan. A summary of the MSDS including the chemical name, hazard classification, WHMIS label, etc. are presented in Appendix A.

Under the *Safety Act*, Workplace Hazardous Material Information System (WHMIS) regulations will apply to the handling and storage of hazardous material. Relevant MSDS will be kept current and available on-site. Containers and pipelines will be properly labeled following the WHMIS guidelines.

2.1 MATERIALS IMPORTED TO THE SITE

In order to perform the clean-up activities, different chemicals will be brought to the site. These products are associated with camp operation and cleaning, water treatment, drum and debris cleaning, operation and maintenance of vehicles and heavy machinery and with blowtorching and welding. The imported hazardous materials are:

- Gases (acetylene, argoshield, oxygen)
- Flammable liquids (acetone, diesel fuel, fuel oil, gasoline, hexane, kerosene)
- Oxidizer (ammonium nitrate)
- Miscellaneous dangerous goods (aluminum sulphate)

In addition, non-hazardous products such as activated carbon, lubricant, oil and grease will also be brought to the site. Appendix B presents the non-hazardous and hazardous materials inventory including a description of how and where it is contained during transport and in storage at FOX-3. In summary, diesel fuel and gasoline will be stored in the lined and bermed fuel storage area, compressed gases will be stored in cylinder cages, oil, grease and other lubricants will be stored in an ISO barge container equipped with a catch basin containing absorbent material.

Ammonium nitrate and aluminum sulphate will also be stored in an ISO barge container to protect these products against weather.

2.2 MATERIALS PRESENT IN FOX-3

The hazardous materials to be removed, containerized and transported from FOX-3 to FOX-2 as part of the cleanup are mainly materials regulated under the Canadian Environmental Protection Act. Concentrations of certain parameters in mainly soil and paint make these products hazardous and require special handling. The inventory of hazardous substances includes the following products:

- Lead batteries
- Solvents
- PCB containing oil
- Petroleum distillates, including free products that may be recovered during excavation and from demolition of former fuel tanks
- PCB contaminated materials (soil, paint and any material containing PCBs in concentrations greater than 50 ppm)
- Electrical equipment including, capacitors, transformers and regulators which contain PCBs at concentrations in excess of 50 ppm

Other materials such as asbestos containing insulation will have to be handled as part of the work. Prior to the removal of asbestos-containing insulation material, an Asbestos Abatement Plan (AAP) and an official notification will be presented to the Engineer and to the Prevention Services of the Workers Compensation Board of the Government of Nunavut (WCB). No work will commence prior to having received the approval from WCB. Asbestos recovered on site will be double bagged and placed in the non-hazardous waste landfill constructed in FOX-3.

Dismantled amended painted material with concentrations exceeding lead or PCB criteria will be sized to fit within the appropriate containers. Material will be securely placed to prevent movement during normal transport conditions. ISO Barge containers equipped with drip trays and additional bracing will be filled with larger contaminated demolition material. Weight will

be distributed evenly over the floor of the container so that the centre of gravity is close to the mid-length and below the half-height of the container. Container openings will be sealed.

Other types of hazardous waste will be packaged and containerized according to the *TDG Act and Regulations*, depending on the type of material to be transported. Batteries will be packaged in sealed leak-proof containers with suitable absorbent material. Hazardous liquids, including solvents, sludge, and petroleum distillates not meeting the discharge criteria will be containerized in drums according to the *TDG Act and Regulations*.

2.3 FUEL MANAGEMENT

Arctic diesel fuel will be transported in CSC-approved ISO tanks. The volume of each tank varies from 19,900 to 21,290 L. Gasoline will be transported to the site in 205-litre sealed barrels.

2.3.1 Monitoring

Fossil fuel burning equipment will be visually inspected weekly and during refueling operations. Keys from any equipment requiring maintenance or repairs will be removed and placed in a locked compartment accessible only by the mechanic to avoid it from being used until necessary repairs are completed.

2.3.2 Environmental Protection and Fuel Management

Fuel and gasoline will be stored in accordance to the proposed methodology detailed in the Work Methodology Plan, presented to DCC. Refueling and fuel transfer, if necessary, will be done only by qualified personnel. A 950-L capacity ULC-approved mobile fuel tank will be used for refueling heavy machinery.

For the refueling of heavy equipment, generators, pumps, ATVs and tools, drip pans will be used to prevent spills, when required. In addition, an automatic stop-fill valve will be used.

3 IDENTIFIED SCENARIOS

The potential emergency situations identified for the project include chemical spills, fires, vehicle accidents, medical emergencies, and the presence of aggressive wildlife within the camp or working area.

Table II provides details of the potential emergency situations identified for the project.

Table I: Possible Emergency Situations Identified for the Project

Emergency Event	Description
Gases release	Uncontrolled release of gases (acetylene, oxygen, propane, Argoshield)
Liquid or solid spill	Spill during fuel or gasoline transfer
	Breakdown of pipeline or storage tank
	Spill of oxidizer (ammonium nitrate)
	Spill of corrosive material (aluminum sulphate)
	Spill of flammable liquids (acetone, hexane, gasoline, diesel fuel, fuel oil, kerosene)
	Spill of other petroleum products (hydraulic oil, motor oil, grease, etc.)
	Spill of polychlorinated biphenyls (PCB)
Fire	Fuel or equipment fire in vicinity of PCB contamination
	Fuel or equipment fire in areas not associated with PCB contamination
Vehicle accident	Accident involving pick-up truck, heavy equipment, ATVs, etc.
Medical emergency	Injury, aggravated medical condition, death during Site Cleanup
	Injury, aggravated medical condition, death during CAT-Train
Presence of aggressive wildlife	Polar bears

4 ROLES AND RESPONSABILITIES

Appendix C provides an organizational chart of the key personnel involved in the project. This section describes the roles and responsibilities of the personnel and subcontractors involved in the site remediation of the FOX-3 DEW Line Site in Dewar Lakes, Nunavut.

4.1 DCC REPRESENTATIVES

The site Engineer, who represents Defence Construction Canada, is responsible to ensure that the clean-up activities are performed according to the contract and the applicable legislations. If the emergency situation should necessitate the involvement of the North Warning Office for a specific requirement (e.g., site evacuation of personnel), the communication line to NWO will be maintained by the DND/DCC Project Manager or DCC Site Engineer. The DCC Project Manager, Site Engineer, and Engineer's representatives will be informed of any emergency situation that may arise during the course of the project.

4.2 INCIDENT COMMANDER

All emergency situations will be reported to Biogenie's Site Superintendent who will, in turn, report them to the Engineer as well as the relevant government agency. Response procedures will be immediately implemented to limit environmental and health and safety impacts.

In the case of a medical emergency, the medic will report to the Site Superintendent, the Project Manager and the Engineer. The medic will also coordinate off-site evacuation of the injured employee. When the medic and the work crew are not on site, off-site evacuation will be coordinated by the Site Superintendent.

The Site Superintendent will act as Fire Captain in the case of an emergency fire situation. He will designate a gathering area upwind of the fire, appoint personnel to extinguish the fire and/or

remove a source tank, collect runoff water, and contact the Nunavut Fire Department as described in the Emergency Contact List (see Appendix D of this document).

In addition his role includes:

- Communicating (lead role) and promoting information regarding the Biogenie Emergency Response Plan.
- Possessing thorough knowledge of the procedures for the Biogenie Emergency Response Plan.
- Possessing thorough knowledge of the evacuation areas, means of exit, fire extinguisher locations, and fire pull stations.
- Communicating and promoting awareness of the Biogenie Emergency Response Plan.
- Coordinating scheduling with the Site Safety Officer to cover absences.
- Planning and executing emergency response drills in accordance with regulations.
- If required, making sure that a staff list and visitor sign-in sheet is maintained.
- Attending regular scheduled meetings and training sessions relating to the Biogenie Emergency Response Plan.
- Assisting in implementing changes and revisions to the Biogenie Emergency Response Plan.

4.3 HEALTH AND SAFETY OFFICER

In the event that the Site Superintendent cannot act as the incident commander as per 4.1, the Health and Safety Officer will take over this role. During any emergency situation, the Health and Safety Officer will assist the Site Superintendent. His role also includes:

- Assisting in communicating and promoting information regarding the Biogenie Emergency Response Plan.
- Reporting directly to the Site Superintendent.
- Possessing thorough knowledge of the procedures for the Biogenie Emergency Response Plan.
- Possessing thorough knowledge of their specific evacuation area, means of exit, fire extinguisher locations, and fire pull stations.
- Ensuring that a staff list and visitor sign-in sheet is maintained for their specific area.
- Assisting in the planning and execution of emergency response drills.

- Attending regular scheduled meetings and training sessions relating to the Biogenie Emergency Response Plan.
- Acting as the primary contact for the Site Superintendent.
- Completing and reporting a head count for the Site Superintendent. Include information about any people who may still be inside the building and the location or nature of the hazard or fire.

4.3.1 Employees

All emergency situations will have to be identified and reported by site workers to the Biogenie team representatives. Communications with all team members will be maintained during the response procedure. Through training, Biogenie will make sure that each employee:

- Be familiar with the procedures of the Biogenie Emergency Response Plan and where the muster area(s) are located.
- Become familiar with the work area, the nearest means to exit, and the locations of fire alarm pull stations.
- If he/she has been assigned a specific duty to perform during an emergency situation, remain familiar with the procedures and responsibilities involved.
- Establish a "buddy" system with a fellow employee so someone knows where he/she is in the event of an emergency.
- Immediately report any observed potential dangerous situations to the Site Safety Officer and their immediate supervisor.
- Identify themselves (and any visitors/clients they may have) to the Site Superintendent or the Health and Safety Officer in charge of the head count at the appointed muster area.
- Identify any missing co-workers, visitors, clients, or occupants.
- Do not leave the muster area(s) until the Site Superintendent has given authorization.

4.4 EMERGENCY CONTACT LIST

The Emergency Response Plan also includes an Emergency Contact List with names of equipment suppliers, emergency carriers, hospitals, health care and environmental agencies as well as project personnel. This list will be posted in front of each telephone on-site along with specific emergency procedures to be followed in specific situations such as aggressive wildlife encounters, medical emergency or fire. The Emergency Contact List is presented in Appendix D.

5 EMERGENCY RESPONSE PROCEDURES

Emergency response procedures have been elaborated for each identified scenario. Appendix E presents the location of protective gear and emergency response equipment in the construction camp area. It is important to note that the emergency response procedures for chemical spills was elaborated based on the 2008 Emergency Response Guidebook produced by the U.S. Department of Transportation, Transport Canada and the Secretariat of Transportation and Communications.

5.1 GASES RELEASE, SOLID OR LIQUID SPILL

Accidental spills may take the form of solid, liquid or gaseous releases into the environment. Because of the presence of different substances on site, an inventory has been taken of all substances that may have adverse effects on the environment. This inventory is available in Appendix B and will be updated monthly.

To help respond to a chemical spill of the substances present on site, a list of adequate protective gear and basic emergency response measures have been prepared in Appendix A. The Health and Safety Plan provides MSDS sheets of every substance on site.

5.1.1 Prevention

Various chemical products will be used during the FOX-3 site remediation project. Biogenie will take every possible precaution to minimize the likelihood and limit the potential impact of hazardous material spills. With the exception of the large volume of diesel and gasoline, which is protected by lined containment, most hazardous products will be stored and used in small quantities. It should be noted that hazardous material will be transported in compliance with the *TDG Act and Regulations*.

Every precaution will also be taken to prevent and minimize the likelihood of a spill. During winter fuel transportation, spill kits, pumps and a spare tank will be available to transfer products

in the event of a spill or leak. Visual inspection will be performed periodically. However, should a spill occur, emphasis will first be placed on human health. Any person detecting a spill will take every safety precaution and wear adapted protective gear prior to approaching the spill area.

Biogenie intends to use twelve (12) ISO tanks of approx. 21,000 litres capacity each for the transportation of fuel in FOX-3. These tanks are insulated and designed for transportation purposes. They have successfully been used for the CAM-F and CAM-5 cleanup projects. It is expected that 250,000 litres of fuel will be necessary to complete the CAT-Train.

5.1.2 Response Procedure

In the event of a spill, the first person noticing the incident shall:

- Isolate or eliminate all sources of ignition and identify the spilled material, if possible.
- If possible stop the source of the spill.
- Warn people, isolate and/or evacuate the area, as necessary.
- Report the following to the Site Superintendent:
    - the location of the spill;
    - the known or suspected time of the spill;
    - the substance spilled;
    - the estimated volume spilled;
    - the cause of the spill;
    - the flow direction of the spill.
- Ensure adequate use of spill response equipment.
- Apply emergency response procedures as specified in Appendix G.
- Document all events and measures taken.

Depending on the physical location of the spill, specific supplemental precautions will be taken with regards to the spill response procedures.

- ***On Land***
    - Prevent dispersion in drainage system and ditch.
    - Contain material with sorbent booms, dyke of snow or earth.
    - Remove small spills with sorbent pads and dig by hand the impacted soil.

- ***Muskeg***
    - Ensure integrity of marsh or vegetation.

- Remove free-phase product with pumps and skimmer and low pressure point equipment.
- Minimize damage caused by equipment.

➢ ***Snow and Ice***

- Prevent dispersion into waterways by containment with snow or other material.
- If necessary, pump water surface to recover diesel under ice.
- Remove minor spills with sorbent pads.

➢ ***On Water***

- Contain spill as close to release point as possible.
- Use sorbent booms to contain free-phase product.
- Use skimmer or sorbent pads to recover free-phase product.
- Do not deploy personnel or equipment on wetlands.

The Site Superintendent will immediately notify the Engineer of the occurrence of a spill. A spill report will be produced as per section 5.1.4.

5.1.3 Equipment

A spill kit will be present at each activity area where there is a chance of a liquid or solid spill. In addition, absorbent materials and pads will always be available in pick-up trucks and in the mechanic truck. These spill kits are described in Table II hereafter.

Table II: Spill Kit Description and Locations

Spill Kit	Location of spill kit	Contents
Liquid spill (petroleum products, sludge, contaminated water)	Fuel storage area Camp area (generators) POL storage container Refueling equipment CAT-Train fuel hauling equipment Vehicle Maintenance Area	• Four bags (10 kg each) of loose absorbent material (3M PowersorbTM, vermiculite, or equivalent) • Four booms containing absorbent material (3M Powersorb™ or equivalent) • Twelve pads of absorbent material (3M Powersorb™ or equivalent) • Five heavy-duty disposable bags • Two sets of protective clothing and equipment including chemical resistant gloves, a half-face respirator and cartridges, goggles, disposable coveralls (Tyvek™ or equivalent) • A container for storing the above

5.1.4 Reporting

Spills or accidents will immediately be reported to Biogenie's Site Superintendent. A written spill report will be submitted to the Engineer within 24 hours of the incident. The spill report form is included in Appendix F. If more than 70 L of liquids or solids are spilled into the environment, the Water Resources Officer, Nunavut District, Nunavut Region, will immediately be notified by Biogenie's Site Superintendent. The spill will also be reported to the NWT/NU 24-hour spill reporting line.

5.2 FIRE

This section describes Biogenie's fire plan and includes a list of firefighting equipment, identifies the gathering area, sets smoking and fire rules and details record keeping procedures.

5.2.1 Notification

In the event of a fire, the DCC Site Engineer will be notified immediately via the two way radios.

5.2.2 Firefighting Equipment

Numerous portable extinguishers are available on site to handle small accidental fires resulting from activities such as power tool use, welding, etc. Biogenie also has a water truck and fire pump on hand to handle larger fires. A water reserve of approximately 20,000 liters will be installed near the Construction Camp during the Cleanup Activities. Two (2) fire fighting suits with self contained breathing apparatus (SCBA) will be available on site. Appendix E shows the location of the equipment in the Construction Camp. The firefighting tools and their locations for the entire site are listed in Table III.

Table III: Location of Extinguishers On Site

Location	Required Tool(s)
Dozer, Challenger, motor vehicle, trucks, AWD tractor, loader, excavator	5 lbs ABC fire extinguisher
Mechanic truck	10 lbs ABC fire extinguisher or larger
During interior demolition of buildings	2 x 10 lbs ABC fire extinguisher
Refueling area and refueling truck	2 x 10 lbs ABC fire extinguisher
Vehicle maintenance area	10 lbs ABC fire extinguisher or larger
Storage ISO containers (haz and non-haz materials	10 lbs ABC fire extinguisher
Camp, Laboratories and Office buildings,	5 lbs ABC fire extinguishers, smoke detectors and two (2) fire fighting suits

5.2.3 Smoking and Fire Rules

As detailed in the Camp Rules smoking will only be allowed in designated areas outside.

5.2.4 Muster Area

The muster area is shown on the Emergency Evacuation Plan in Appendix E. This will be posted inside the camp.

5.2.5 Record Keeping

In the event of a fire, the incident will be recorded on Biogenie's Industrial Accident or Potential Risk Report Form 1450-FO17. This form will be submitted to the DCC Site Engineer within 24 hours of the incident and can be found in the Health and Safety Plan.

5.3 VEHICLE ACCIDENT

Operators will be qualified to use machinery. In the event of an accident, it will be recorded on Biogenie's Industrial Accident or Potential Risk Report Form 1450-FO17 available in the Health and Safety Plan. This form will be submitted to the DCC Site Engineer within 24 hours of the incident. The training records and qualifications of field personnel will be kept in the Health and Safety Plan.

5.4 MEDICAL EMERGENCY

Medical emergencies may take the form of a work-related injury or an aggravated medical condition. In the event of such an emergency, the work in the affected area will stop. The emergency response/treatment personnel and the nearest supervisor will converge to the area and employees not involved in the response will move to a safe location. The incident will be evaluated by the emergency personnel, which will implement the necessary measures to be taken.

In case of a serious accident, the Site Superintendent and medic will immediately be contacted through the mobile radio unit. The medic will administer first-aid if necessary. Transportation to the nearest hospital will be arranged if necessary.

5.4.1 Response Procedures and Reporting

The Worker Injury Emergency Response Procedures are presented in schematic form in Appendix G.

In the event of an accident, it will be recorded on Biogenie's Industrial Accident or Potential Risk Report Form 1450-FO17 available in the Health and Safety Plan. This form will be submitted to the DCC Site Engineer within 24 hours of the incident.

5.4.2 On-Site Medical Services

An adequate number of staff and local employees will hold valid first-aid certification to comply with the *Nunavut Safety Act Regulations*. Also, an on-site medic will be present throughout the project to direct emergency medical services. Several first-aid kits as well as sick quarters will be on-site and their locations will be posted inside the Camp.

It is important to note that Biogenie's supervisory staff as well as most of its operators have completed their first responder certification in case of a medical emergency.

5.4.3 Early Defibrillation Program

A letter from the medical director of the subcontractor retained to provide medical services for the FOX-3 project, Frontier Medical Services, is included in Appendix H as well as a guideline for of AED training for the operation, maintenance and reporting procedures in the use of AED.

5.4.4 Off-Site Medical Services

For the entire duration of the project, the appointed medic will maintain communication with the medical services located in Hall Beach should an emergency situation rise. In addition, air ambulances can be contacted at all times if necessary.

5.4.5 Prevention

Applicable prevention instructions for high-risk work have been elaborated and will be followed by employees. These procedures are part of the Health and Safety Plan. The WOS will ensure that employees understand the importance that Biogenie accords to working in a safe and healthy environment including the proper use of provided PPE.

5.4.6 First Aid Equipment

During the CAT-train, heavy machinery used for hauling will be equipped with a standard first aid kit. On-site, heavy machinery (excavators, loaders, dump truck, challengers, mechanic truck, farm tractor) and pick-ups will be equipped with a standard first aid kit. Another fist aid kit will also be installed in the Kitchen Area of the Construction Camp. During the site cleanup operations in FOX-3 a more extensive list of first aid equipment will be available to the on-site medic (see Table IV). A complete list of the contents of the Medic's kit is presented in Appendix I.

Table IV: Medic's First Aid Equipment

Equipment	Quantity
Trauma Kit	1
Oxygen Kit	1
Spinal Kit	1
Defibrillator	1
Documentation Kit	1
Multimedia Kit	1
Medication and Supplies Kit	1
Intubation Kit	1

5.5 WILDLIFE ENCOUNTER

Because the work is being carried out in a remote area, it is possible that aggressive wildlife could be encountered. Throughout the work season, wildlife monitors will assess the work areas and the site to make sure the work areas are kept safe. During the CAT-train, wildlife monitors will travel with every load. In case of a wildlife encounter that presents a potential hazard, the following actions will be taken:

- Use of a vehicle, noise maker and, if necessary, a firearm to frighten the animal.
- Wildlife monitors will be contacted to alert them of the problem.
- Bear bangers and rubber bullets will be used. The animal will be shot only if it directly threatens human life. Shooting will only be considered as a last resort.

- If a bear is to be shot, the task will be assigned to the wildlife monitor.
- The animal's death will be reported to the wildlife officer, and the carcass will be disposed of upon instructions from the wildlife officer.

Biogenie will ensure that wildlife will not be subjected to any unnecessary disturbances or harassment during the course of work. During work season, wildlife monitors will be on duty at all times to ensure the security of the camp population. Proper waste handling will be enforced to minimize attraction of wildlife.

6 COMMUNICATIONS

6.1 AT FOX-3

During the project, communications will be maintained through the use of Skycom IP Services by Info Sat Communications. As a backup, two (2) hand-held satellite phones will be available at all times.

Mobile "walkie-talkie" radios will be supplied to maintain on-site communication between the DCC Site Engineer and the members of the contractor's team.

6.2 DURING CAT-TRAIN

During the CAT-Train operation, bases will be set up at Longstaff Bluff (FOX-2), Nadluardjuk Lake (FOX-B) and FOX-3. A radio wave communication system will be implemented to constantly keep communication between the CAT-Train and each base. As a back up, hand held satellite phones will be available at all times.

7 TRAINING AND EXERCISES

The Site Superintendent and the Health and Safety Officer from the Biogenie team will have received the 40-hour OSHA HAZWOPER training, the OSHA 8-hour supervisor training, first-aid, and fire extinguisher training.

In addition to this training, all site personnel will participate in the Worker Orientation Seminar (WOS). This course will allow workers to identify substances of concern on the site, as well as the available protective gear and emergency response equipment. A Wildlife Monitor will also be part of the WOS to review bear hazards. The following information will be included as part of the WOS:

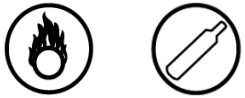
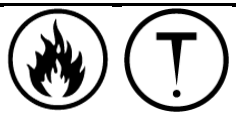
- Organization of response procedures.
- Lines of authority and communications to follow in a contingency situation.
- Specific response procedures to various contingency situations.
- Location of an emergency meeting point.
- Location of medical equipment and facilities.
- Location of spill response and protective equipment.
- Location and identification of potential hazardous material on-site.
- Procedures for reporting an incident.
- Emergency contact list.

During the course of the project, emergency response procedures will be revised during the weekly health and safety meetings.

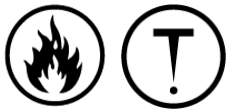
APPENDIX A

Material Safety Data Sheets

MATERIAL SAFETY DATA SHEETS

Item	Chemical Name	Hazard Classification		WHIMIS Label	Recovery Equipment	Personal Protective Equipment	Limit access in a perimeter (m)	ER Guidebook Reference (Orange Section)
		TDG Class	UN no.					
GASES								
1	Acetylene	2.1	1001		N.A.	• Face shield • Welding gloves	100	116
2	Oxygen	2.2	1072		N.A.	• Safety gloves • Work gloves • Chemical protective clothing	100	122
3	Argoshield	2	1956		N.A.	• Safety gloves • Work gloves • Chemical protective clothing	100	126
4	Propane	2.1	1075		N.A.	• Safety gloves • Work gloves • Thermal protective clothing	100	115
FLAMMABLE LIQUIDS								
5	Acetone	3	1090		• Absorbents • Extinguisher • 205 L open-top drum with liner • Shovel or heavy equipment	• Half face mask with carbon cartridges • Nitril gloves • Goggles and splash shields	25	127
6	Kerosene(Petrosol 3355)	3	1223				50	128
7	Diesel Fuel	3	1202				25	128

MATERIAL SAFETY DATA SHEETS (cont.)

Item	Chemical Name	Hazard Classification		WHIMIS Label	Recovery Equipment	Personal Protective Equipment	Limit access in a perimeter (m)	ER Guidebook Reference (Orange Section)
		TDG Class	UN no.					
FLAMMABLE LIQUIDS (CONT.)								
8	Fuel Oil (diesel additive)	3.3	1993		• Absorbents • Extinguisher • 205 L open-top drum with liner • Shovel or heavy equipment	• Half face mask with carbon cartridges • Nitril gloves • Goggles and splash shields	25	128
9	Gasoline	3	1203				25	128
10	Hexane	3	1208				25	128
11	Jet A-1 Fuel	3	1863				25	128
OXIDIZERS								
12	Ammonium Nitrate	5.1	1942		• Shovel • 205 L open top drum • Extinguisher	• Coverall • Nitril gloves	25	140

MATERIAL SAFETY DATA SHEETS (cont.)

Item	Chemical Name	Hazard Classification		WHIMIS Label	Recovery Equipment	Personal Protective Equipment	Limit access in a perimeter (m)	ER Guidebook Reference (Orange Section)
		TDG Class	UN no.					
MISCELLANEOUS DANGEROUS GOODS								
16	Aluminum Sulphate	9.2	1760		• Acid Neutrilizer • Heavy duty plastic bags • 205 L open-top drum with liner	• Nitril gloves • Coverall • Cover boot • Goggles and splash shields	10	171
17	Polychlorinated Biphenyls (solid)	9.1	2315		• Shovel, tools, heavy equipmen • 205 L open top 16 gauge drum or steel container	• Nitril gloves • Coverall • Cover boots	10	171

MATERIAL SAFETY DATA SHEETS (cont.)

Item	Chemical Name	Hazard Classification		WHIMIS Label	Recovery Equipment	Personal Protective Equipment	Limit access in a perimeter (m)	ER Guidebook Reference (Orange Section)
		TDG Class	UN no.					
NON-HAZARDOUS MATERIALS								
18	Diesel Engine Oil SAE 0W30	NA	NA	NA	• Absorbents • Heavy duty plastic bags or drum	• Nitril gloves • Goggles and splash shields (impermeable suit) if required	NA	NA
19	Heavy Duty Diesel Engine Oil 15W40	NA	NA	NA			NA	NA

MATERIAL SAFETY DATA SHEETS (cont.)

Item	Chemical Name	Hazard Classification		WHIMIS Label	Recovery Equipment	Personal Protective Equipment	Limit access in a perimeter (m)	ER Guidebook Reference (Orange Section)
		TDG Class	UN no.					
NON-HAZARDOUS MATERIALS								
20	Diesel Engine Oil 10W30	NA	NA	NA			NA	NA
21	Diesel Engine Oil 15W40	NA	NA	NA			NA	NA
22	Ethylene Glycol	NA	NA	NA			NA	NA
23	Farm Tractor Lubricant	NA	NA	NA			NA	NA
	Crankcase Oil Heavy Duty 10W	NA	NA	NA			NA	NA
	Transmission Oil	NA	NA	NA			NA	NA
24	Gear Lubricant 75W90	NA	NA	NA			NA	NA

EMERGENCY CONTACT LIST

RESOURCE	CONTACT/LOCATION	PHONE NUMBER
Site Phones		
	FOX-2 sat phone	
	FOX-2 camp	
	FOX-B sat phone	
	FOX-3 sat phone	
	FOX-3 Nasittuq camp	
Air Transportation		
Air Nunavut **(MEDEVAC)**	Air Ambulance Iqaluit	**867-979-4018**
Kenn Borek Air **(MEDEVAC)**	Iqaluit	**867-979-0040**
Helicopter Advanced Exploration Mining	Roche Bay site office Hall Beach Office	**(604)-759-3432** **(867)-928-8030**
Canadian Helicopter	Hall Beach	**705-494-6011 ext. 4832**
	Iqaluit	**709-686-2095**
North Warning System Operations (Hall Beach)	Operation manager	**867-928-8987 ext. 4822**
Fire		
Local Fire Department	Iqaluit – Fire or medical emergencies	**867-979-4422**
	Hall Beach	**867-928-8888**
	Clyde River	**867-924-6223**
Police		
Police Department	Hall Beach	**867-928-1111**
	Clyde River	**867-924-0123**
Hospitals		
Hall Beach Health Center	Hall Beach	**867-928-8827**
Clyde River Health Center	Clyde River	**867-924-6377**
Baffin Regional Hospital	Iqaluit	**867-979-7300**
Environmental Emergency		
24-hour Spill Line	NWT/Nunavut	**867-920-8130**
Canadian Transport Emergency Centre (CANUTEC)	24 hour service	**613-996-6666**

EMERGENCY CONTACT LIST

RESOURCE	CONTACT/LOCATION	PHONE NUMBER
Environmental Emergency (cont.)		
Environment Canada	Jimmy Noble, Enforcement Officer Environment/Emergencies	**867-975-4644**
Department of sustainable development, Gov't of Nunavut	Robert Eno Manager Pollution Control and Air Quality Environmental Protection Service	**867-975-5907**
Qikiqtani Inuit Association	Officers available 24 hours	**867-975-8419**
INAC Water Resources	Iqaluit	**Tel.: 867-975-4298** **Fax: 867-979-6445**
Health and Safety		
Workers' Compensation Board 24-hour Accident Reporting Line	Barron Building/1091 Box 669 Iqaluit, NU X0A 0H0	**1-877-404-4407**
Department of Human Resources	Qikiqtaaluk Region	**1-800-682-9033**
	Kivalliq Region	**1-800-933-3072**
Wildlife Management		
Nunavut Wildlife Management Board	P.O. Box 1379, Lot 924 Parnaivik Building Iqaluit, NU X0A 0H0	**867-975-7300**
Hunters and trappers association	Hall beach	**867-928-8994**
	Clyde River	**867-924-6202**
Heritage Resources		
Inuit Heritage Trust Incorporated	P.O. Box 2080 Iqaluit, NU X0A 0H0	**867-979-0731**
Management		
DCC Project Management Office	Ottawa	**613-998-9548**
	Stewart Dafoe (Manager Site Operations)	**613-949-4511**
	Patricia O Donnell (Contract coordinator)	**613-990-2857**
Biogenie S.R.D.C. Inc Project Management	Sylvain Laberge, Project Director	**514-895-4517**
	Montreal Office	**450-961-3535**
Biogenie Hall Beach	Office / Garage	**867-928-8022**