



Indian and Northern  
Affairs Canada

Affaires Indiennes  
et du Nord Canada

APPLICATION FOR LAND USE PERMIT  
DEMANDE DE PERMIS D=UTILISATION DES TERRES

Office use only - Réserve pour usage interne seulement

Application fee - Droits de demande de permis Land use fee - Droits d'utilisation des terres General receipt no. - N° de reçu Date Class - Catégorie Permit no. - N° de permis

To be completed by all applicants - A remplir par tous les requérants <

G New application

G Amendment

1. Applicant's name and mailing address (Full name, no initials) - Nom et adresse du ou des requérant (s) Nom au complet, pas d=initiales)

Biogenie, a division of Englobe Corp.  
1140 Levis Street  
Lachenaie, Quebec J6W 5S6

Fax no. - NE de télécopieur

450-961-0220

Telephone no. - NE de téléphone

450-961-3535  
Ext. 6222

2. Head office address - Adresse du siège social

4495 Wilfrid Hamel Blvd, Suite 100  
Quebec City, Quebec G1P 2J7

Fax no. - NE de télécopieur

418-781-0191 Tel

Telephone no. - NE de téléphone

418-781-0186 Fax

Field supervisor - Chef de chantier

Radio telephone - Téléphone-radio

Nancy Davis

3. Other personnel (Subcontractor, contractors, company staff, etc.) - Autre personnel (sous-Traitants, entrepreneurs, personnel desociété, etc.)

Sila Remediation  
Air Nunavut  
unaalik Aviation  
Aarruja Corporation  
TOTAL: 25 workers

4. Qualifications - Titres

refer to Section 21 - Territorial Land Use Regulations

consultez l'article 21 - du Règlement sur l'utilisation des terres territoriales

No(s) exploration permit mineral claims - if applicable  
NE(s) des permis d=exploration minière, s=il y a lieu

N/A

a(i) G

a(ii) G

a(iii) G

b G

c G

5. a) Summary of operation (Describe purpose, nature and locations of all activities - refer to Section 22 (2) (b) - Territorial Land Use Regulations). (Use last page of form if additional room is required).  
Résumé des opérations (exposez le but, la nature ainsi que l'emplacement de toutes les activités - consultez l'article 22 (2)(b) - du Règlement sur l'utilisation des terres territoriales). Utilisez la dernière page du formulaire si vous avez besoin d'espace supplémentaire.

Please refer to document attached

b) Please indicate if a camp is to be set up (Use last page to provide details).  
Indiquez si un camp doit être aménagé (Utilisez la dernière page pour donner des détails).

Please refer to document attached



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6. Summary of potential environmental and resource impacts (Describe the effects of the proposed program on land, water, flora & fauna and related socio-economic areas (Use separate pages if necessary)  
Résumé des conséquences possibles sur l'environnement et les ressources (décrire les effets du programme proposé sur les terres, l'eau, la flore et la faune et les domaines socio-économiques connexes (Utilisez des pages supplémentaires au besoin)

Please refer to document attached

7. Proposed restoration plans (please use last page if required) - Plans proposés de remise en état des terres (au besoin, utilisez la dernière page).

Please refer to document attached

8. Other rights, licenses or permits related to this permit application (mineral claims, timber permits, water licences, etc.)  
Autres droits, autorisations ou permis associés à cette demande de permis (claims miniers, permis de coupe, permis d'exploitation hydraulique, etc.)

Access to Inuit-owned Land (in progress) - Qikiqtani Inuit Assoc.

- Roads: Is this to be a pioneered road? Yes  
Routes: G La route doit-elle être aménagée? Please provide details on back page  
G La tracé a-t-il été établi et le terrain nivelé? Has the route been laid out of ground truthed? Cat train winter overland route (ice + snow)  
Donnez les détails sur la dernière page

9. Proposed disposal methods - Méthodes d'élimination proposées

1. Garbage: Incineration Fox-3  
Ordures: + transported South  
c) Brush & trees: Broussailles et arbres:  
b) Sewage (Sanitary & Grey Water):  
Eaux usées (Eaux d'égout et eaux ménagères)  
d) Overburden (Organic soils, waste material, etc.):  
Terrain de recouvrement: (Dépôts organiques, déchets, etc.)

To be transported South

10. Equipment (includes drills, pumps, etc.) (Please use last page if required) Also Please see document attached  
Matériel (comprend foreuses, pompes, etc.) (Utilisez la dernière page au besoin)

Type & Number - Type et nombre	Size - Dimension	Proposed use - Utilisation proposée
Challenger track tractors	low ground pressure	Haul equipment on sleighs
Farm tractor with Quad tracks		" "
Bulldozers		" "
Excavators		" "
Bombardier		Scouting
Snowmobiles		Scouting, haul kamotiks



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11. Fuels - Combustibles	Number of containers - Nombre de réservoirs	Capacity of containers - Capacité des réservoirs
Diesel 200000 L	1	21,000 L
Gasoline - Essence 4000 L	20 barrels	205 L
Aviation Fuel		
Propane		
Other		

12. Containment fuel spill contingency plans (Please attach separate contingency plan if necessary)  
Plans d'urgence d'isolement de carburant en cas de déversement (veuillez joindre un plan d'urgence distinct au besoin)  
Please see attached document

13. Methods of fuel transfer (To other tanks, vehicles, etc.) - Méthodes de transfert des combustibles (vers d'autres réservoirs, véhicules, etc.)  
Please see attached document.

14. Period of operation (includes time to cover all phases of project work applied for, including restoration)  
Période d'opération (comprend toute période du début à la fin des projets, y compris la remise en état)  
end Feb/March-May 2012

15. Period of permit (up to two years, with maximum of one year extension)  
Période du permis (valable pour une durée de deux ans et prolongation maximale d'un an)  
Start date - Date du début du projet Completion date - Date d'achèvement  
' 15 Feb 2012 ' 31 May 2012

16. Location of activities by map co-ordinates (attached maps and sketches)  
emplacement de activités selon les coordonnées géographiques (cartes et esquisses ci-jointes) (Approximate)

Minimum Latitude Degrees	Minutes	Seconds	Minimum Longitude Degrees	Minutes	Seconds
68	33	29	68	51	28
Maximum Latitude Degrees	Minutes	Seconds	Maximum Longitude Degrees	Minutes	Seconds
68	41	42	71	16	05

Map Sheet No.  
NE de feuille de carte 27B

17. Applicant - Requérant  
Print name in full - Ecrire votre nom au complet en lettre moulée

NANCY DAVIS  
Signature: [Signature] Date: November 23, 2011

18. Fees - Droits  
G Class A \$150.00  
Land use fees: \_\_\_\_\_ Hectare @ \$50.00 = \_\_\_\_\_  
Droits d'utilisation des terres: \_\_\_\_\_ (Less than or equal to 2 ha.) \$ \_\_\_\_\_  
\_\_\_\_\_ Hectare @ \$50.00 = \_\_\_\_\_  
(Each additional ha. Or portion of a ha. In excess of 2 ha.) \$ \_\_\_\_\_

Total application and land use fees  
Federal Government Contract  
(DCC DEW Line Cleanup)



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Total des droits de demande de permis et d'utilisation des terres

\$

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19. Calculation of area involved (including access, staging areas, airstrips, campsites, etc.)  
Calcul des aires en cause (comprend l=accès, les aires de transit, les pistes d=atterrissage, les camps, etc.)

Total area (Ha.)  
Superficie totale

Less 2 hectares  
Moins 2 hectares (-2)

TOTAL (For fee calculation)  
(Aux fins du calcul des droits)

20. Application checklist - Vérification de la demande

a) G Application signed and dated  
Demande signée et datée

✓

f) G Timber permit applied for  
Permis de coupe du bois demandé

b) - Fees attached  
Droits ci-joints

g) - Fees attached  
Droits ci-joints

c) - Map included  
Carte incluse

✓

h) - Lease applied for  
Bail demandé

d) - Address and telephone number  
Adresse et numéro de téléphone

✓

e) - Screening report  
Rapport d'examen

Accepted by - Acceptée par

Date

Remarks - Remarque



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21. Additional information (attach additional pages if necessary) - Renseignements additionnels (joindre des pages supplémentaires au besoin)

Please see document attached

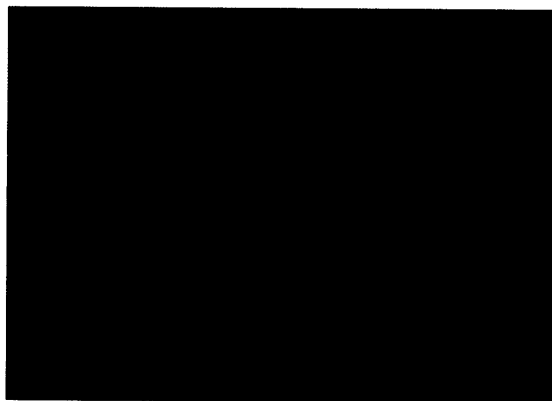
**OVERLAND ROUTE FROM FOX-3 DEWAR  
LAKES TO FOX-CA KANGOK FJORD**

**CLEANUP OF THE FOX-3 DEW LINE SITE**  
Dewar Lakes, Nunavut

**APPLICATION FOR LAND USE PERMIT**  
(O/Ref.: CD8178)

**INDIAN AND NORTHERN AFFAIRS CANADA**

November 2011



Biogenie  
1140 Levis Street  
Lachenaie, Quebec  
J6W 5S6

Tel.: 450-961-3535  
Fax: 450-961-0220

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## 1 DESCRIPTION OF LAND USE OPERATION

Biogenie, a Division of EnGlobe Corp. (hereinafter called "Biogenie") has completed the remediation of the FOX-3 Dewar Lakes DEW Line Site and now needs to demobilize its equipment, and camp from this remediated site to Kangok Fjord where they will be stored on a staging area until the 2012 sealift to the South. To do so, the material will be placed on sleighs and transported using track tractors and bulldozers via an overland route during the winter.

Biogenie will also transport containerized CEPA soil in 182 Sea-can containers that are presently stored on site at FOX-3. These containers are 6 feet in length, have a 2.4-cubic metre storage capacity, a 2727-kg load capacity, are ISO 9001:2000 certified and Transport Canada approved. Each sea-can will carry approximately 1.6 cu.m of soil.

### 1.1 CAT-TRAIN ROUTE

The route has been chosen based on the following criteria:

- Rivers and lakes are preferable to open land: these water bodies are lower in elevation than their surroundings. Snow therefore accumulates in larger quantities and provides a good ground for sleighs.
- Travel directly on land should be limited to flat areas and lower elevations where snow will accumulate and boulders and large rocks will be covered. Uncovered rocks may seriously damage sleighs and the equipment being transported.
- Travel on flat tundra should be minimized in order to ensure the integrity of this environment.

The route was selected for its smooth topography. The total distance of the route is approximately 100 km. The route has been plotted on the map provided in Figure 1 hereafter and includes the GPS coordinates and the location of camps and emergency shelter.



**Emergency Shelter**  
(approximate location)

19 W	4087.66.47 E	7617.956.85 N	FOX-3
19 W	415526.47 E	7619500.40 N	
19 W	424823.16 E	7618393.64 N	
19 W	435941.50 E	7619685.66 N	
19 W	435519.47 E	7618081.59 N	EMERGENCY SHELTER
19 W	463142.38 E	7606115.11 N	
19 W	472899.73 E	7616406.14 N	
19 W	483366.57 E	7609095.33 N	
19 W	499520.82 E	7603599.05 N	
19 W	506145.04 E	7614893.15 N	FOX-CA

1	FINAL	2011-11-23	D.D.	N.D.	N.D.
NO.	VERSION	DATE	BY	VERIF.	APPR.

**SITE REMEDIATION SOLUTIONS**

Biogenie, a division of Englobe Corp.  
1140 Lakeshore, Lachine, Quebec, CANADA, J6W 5S6  
Tel: (450) 961-3535 Fax: (450) 961-0220

DATE/DEATH INFO	DATE (month-year)
NETWE	NOVEMBER 2011
DEATH BY	UNKNOWN BY
A. DROST	M. DAVIS
PROJECT NO.	DEATHS NO.
CS0878401	CS0878401-115-1
	NAME
PS	

**FIGURE 1**



## 1.2 SCHEDULE OF ACTIVITIES

A 25-man crew (1050 person-days) will be necessary for the Cat-train, and it will include a superintendent, a foreman, operators, mechanics, scouts/bear monitors, labourers, and cooks. The first crew will arrive at FOX-3 via a Twin Otter equipped with skis at the beginning of March 2012. Some of the crew will then travel to Kangok Fjord on snowmobile and Bombardiers to evaluate the route. The following items will be validated:

- Size of identified obstacles, and if required, alternate routes
- Snow accumulation: thickness and compaction
- Ice thickness
- Road width with snow/ice cover

Once at Kangok Fjord, they will start up the camp and clear the airstrip in order to allow the Twin Otter to land in case of emergency. Weekly flights to FOX-3 will ensure re-supply and crew rotation if necessary.

Once the final route has been plotted, the transport of material will commence. Once at Kangok Fjord, material and equipment will be placed on a previously authorized staging area. We estimate that approximately 5-6 weeks of intense activities will be necessary to conduct scouting and marking of the route, ice profiling, and transportation of the material and equipment.

## 2 PROPOSED LAND TO BE USED

Biogenie's crew will be housed in our camp already installed at FOX-3. A temporary self-sufficient survival trailer made from a 20' shipping container will be set up roughly halfway between FOX-3 and Kangok Fjord. This shelter will also serve as a relay point for radio communications. It will be equipped with a generator, a radio repeater, a windmill to keep the batteries charged, bunks and a heating system, First Aid material, frozen food, a microwave oven

and cooking devices. The precise location of the shelter will be determined on-site with the communications technician.

### **3 LOCAL ENVIRONMENT**

The work period for the CAT-train will be between March and April 2012. This period is outside of any calving, post-calving, spawning, nesting and breeding periods. It is possible that polar bears may be encountered in areas closer to the sea shore while caribou, arctic foxes, and hares are expected to be seen inland. Biogenie will make every effort to ensure that disturbance to wildlife is minimized. Biogenie will maintain a daily record of wildlife observations along with GPS coordinates of the sighting area.

The climate at FOX-3 includes long cold winters and short mild summers. It has been our experience over the past 7 years that snow cover is sufficient to support Cat-trains during the winter months, especially considering that the route to be used is located in low lying areas where most of the snow accumulates. Furthermore, the winter months are cold enough to provide a thickness of 40 inches of good quality ice in order to bear the weight of the loads being transported.

### **4 POTENTIAL ENVIRONMENTAL IMPACTS**

We anticipate minimal impact on tundra conditions as our equipment will be hauled on sleighs, thus limiting us to travel over waterways and areas with ample snow cover. Emergency shelter locations will be cleaned after demobilization activities and the disturbed area will be restored to its original state. Potential impacts and mitigation measures are detailed on Table I hereafter.

**Table I : Potential Environmental Impacts and Mitigation Measures**

<b>Critical Events</b>	<b>Probability</b>	<b>Probable Impact on the Project</b>	<b>Mitigation Measures</b>
Presence of wildlife	Average	Injury to workers and damages to installations could cause schedule delays.	<p>The hiring of Wildlife Monitors will ensure that the workers are protected at all times from polar bears and other wildlife.</p> <p>Bear bangers and rubber bullets will be used as deterrents.</p> <p>Food and garbage will be stored in closed containers and kept inaccessible to wildlife</p>
Accidental spill or loss of material during transport.	Low	Spillage could have negative environmental impacts.	<p>Containers transporting fuel are designed and tested to accommodate falls from short heights. Each convoy will have a spill kit on board.</p> <p>All containers used for the transport of materials at the site respect the applicable transportation requirements and specifications.</p> <p>Spill kits and cleanup equipment will be available at all times in each work area and the use of the equipment will be part of the initial training.</p> <p>A site-specific spill response plan will be developed and presented to workers prior to commencing work.</p>

## **5 WASTE DISPOSAL METHODS**

### **5.1 WASTE MANAGEMENT**

Domestic waste and packaging waste generated during the CAT-train will be containerized in covered 205-litre drums and kept inaccessible to wildlife. It will be transported to FOX-3 for incineration. Any items that cannot be incinerated will be kept in drums and transported south on the sealift.

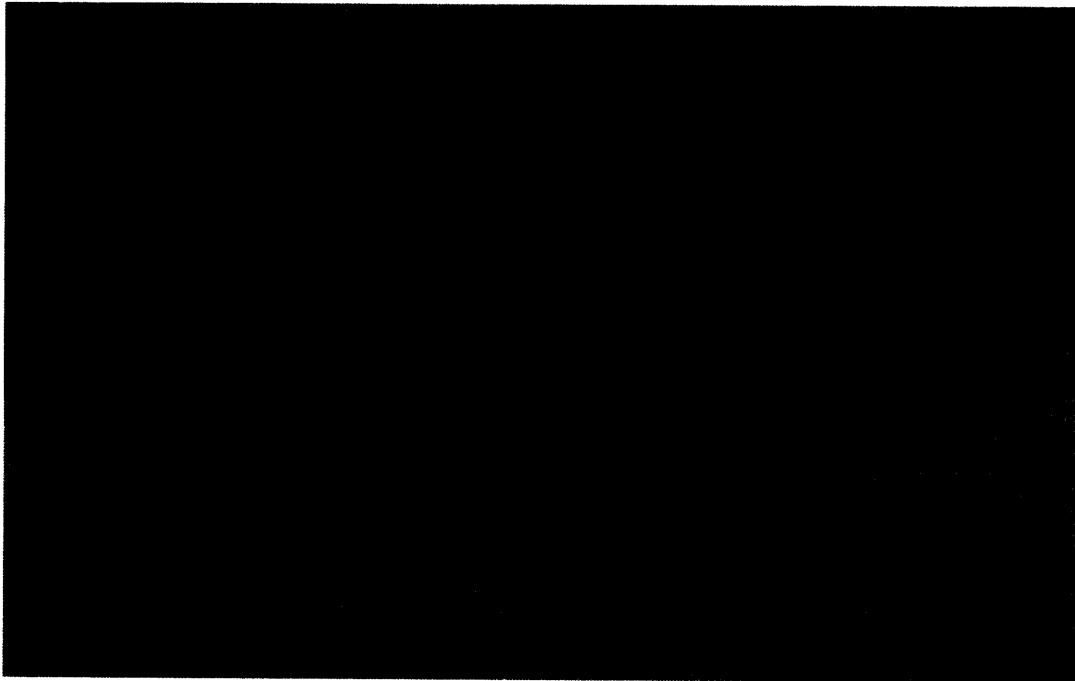
Heavy equipment maintenance will be done at our garage in FOX-3 and any waste generated from this activity will also be stored in drums for transport south.

### **5.2 SEWAGE WATER MANAGEMENT**

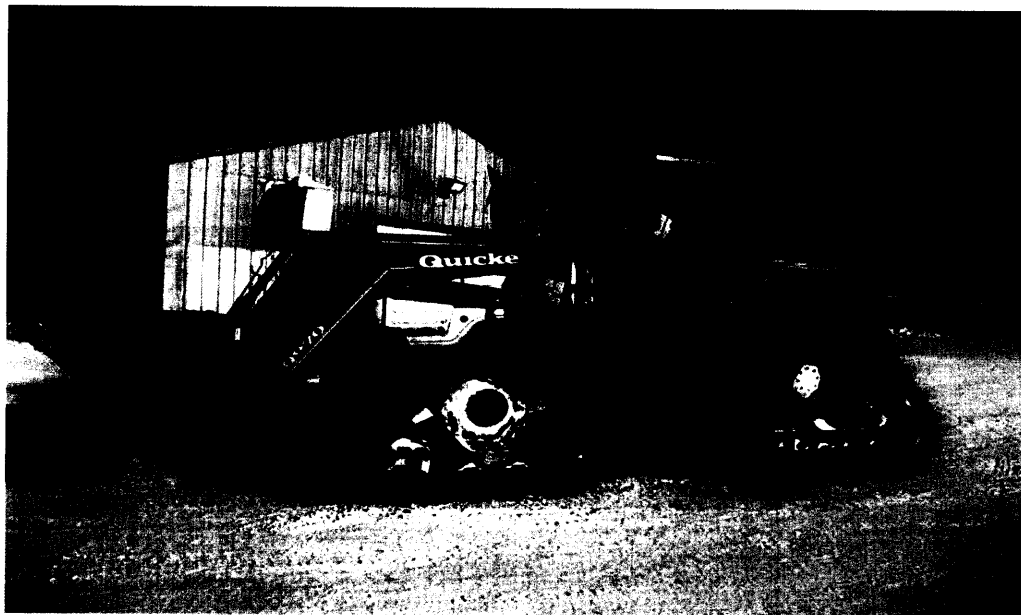
Temporary survival trailers will be equipped with dry toilets. Grey water from these temporary facilities will be containerized in 205-liter drums and sent South for disposal. It is expected that 10 drums of sewage water will be generated during CAT-Train activities.

## **6 EQUIPMENT USED**

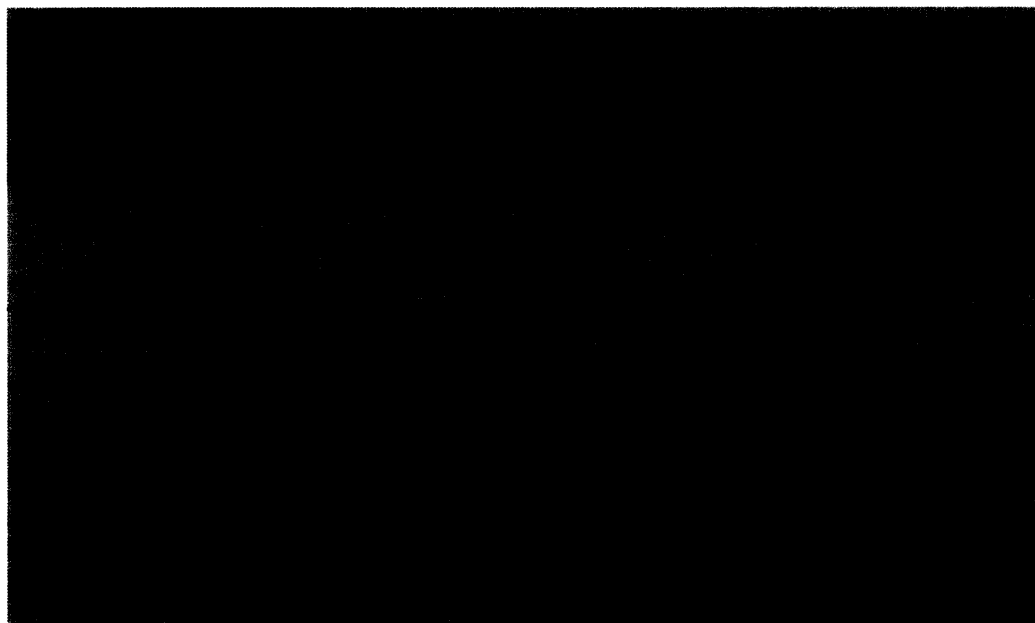
It is anticipated that seven (7) track tractors (Challenger) (Photo 1), a Farm Tractor equipped with Quadtracks (Photo 2) and two (2) bulldozers (Photo 3) will be used to demobilize the equipment. Trucks, trailers, and containers will be placed on sleighs and will be hauled. Excavators will travel on their own power as they are too large and too heavy to be efficiently towed. Snowmobiles and a Bombardier will be used to provide communication links in case of emergency and for trail scouting. All heavy equipment to be used is equipped with wide tracks and is recognized in the industry as low ground pressure equipment.



**Photo 1: Track tractor (Challenger) pulling sleigh**



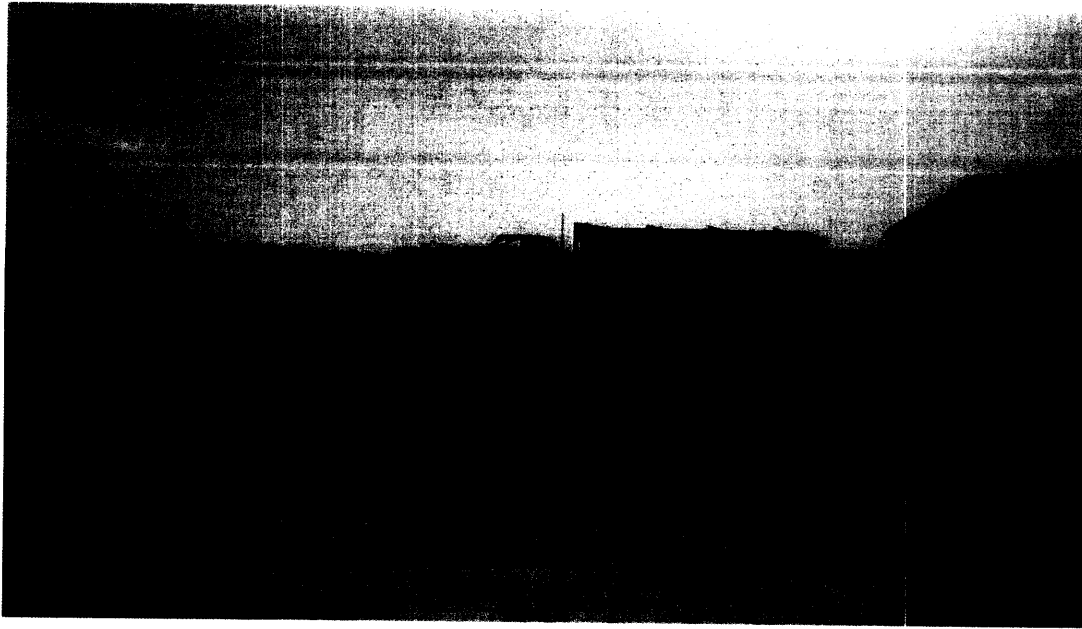
**Photo 2: Farm tractor equipped with Quatracks**



**Photo 3: Bulldozer pulling dump truck on sleigh**



**Photo 4: Snowmobile/wildlife monitoring**



**Photo 5: Bombardier for scouting**

## **7 FUEL**

### **7.1 TYPE, VOLUME AND CONTAINMENT**

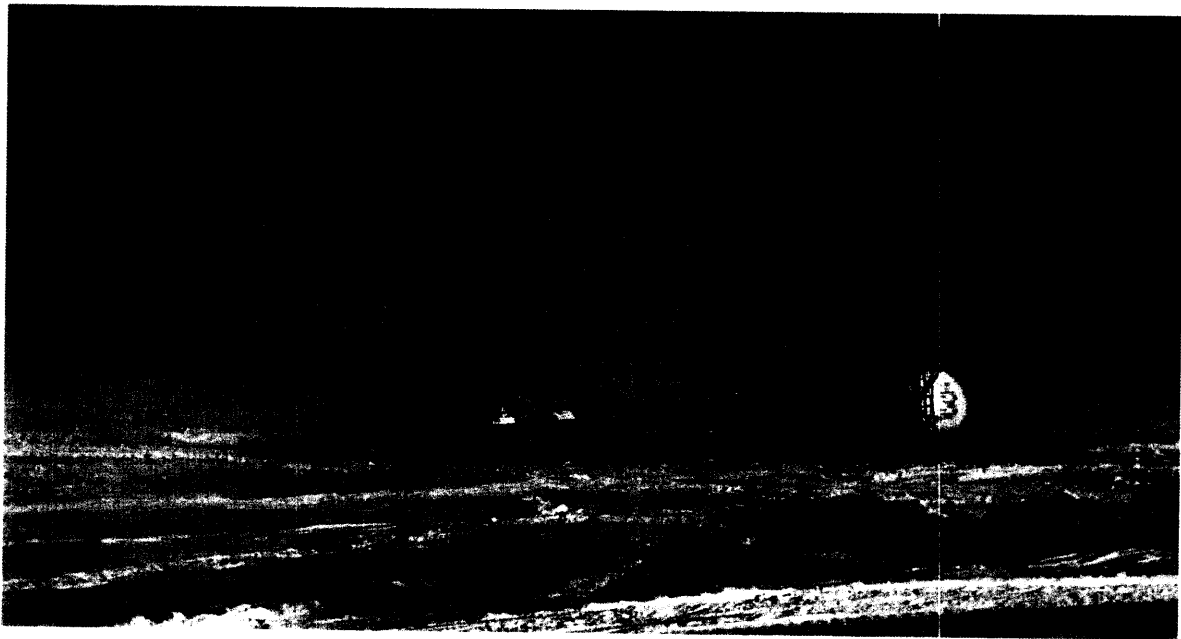
Biogenie intends to use 21,000-litre capacity ISO tanks for the transportation of fuel. These tanks are insulated and designed for transportation purposes. They have been successfully used for the CAM-F and CAM-5 cleanup projects. It is expected that 200,000 litres of diesel fuel will be necessary to complete the CAT-Train. In addition, approximately 4,000 litres of gasoline will be used. The drums may be stored at the temporary shelters and will have secondary containment in the form of an Insta-berm.



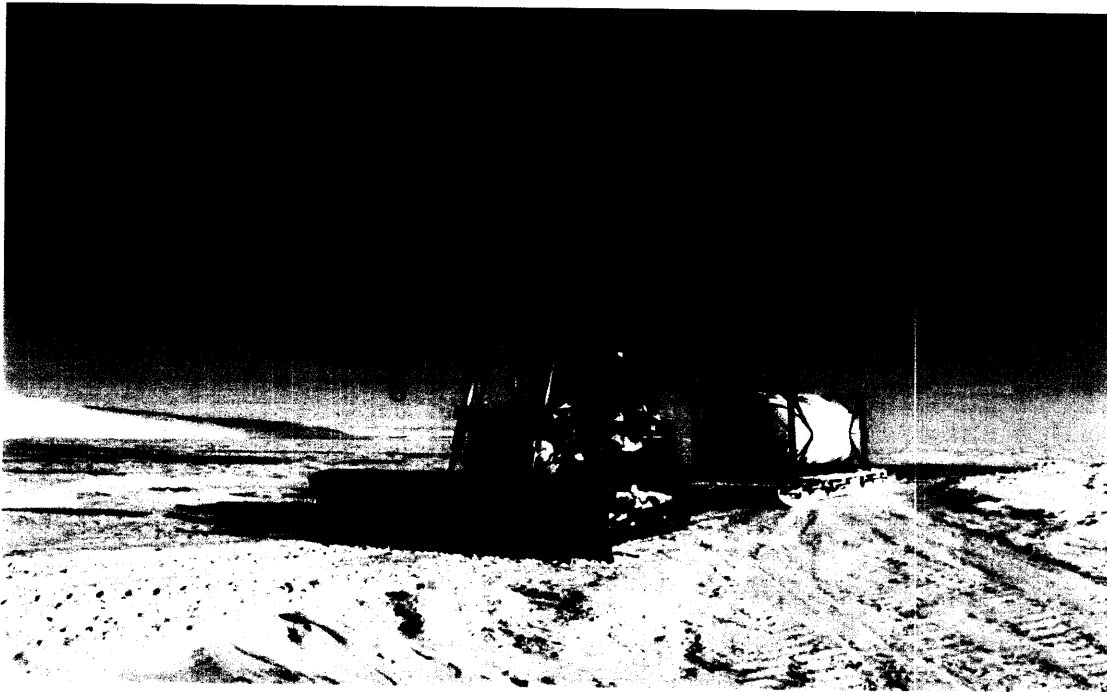
## 7.2 METHOD OF FUEL TRANSFER

Heavy equipment and generators will be refuelled using the following procedure:

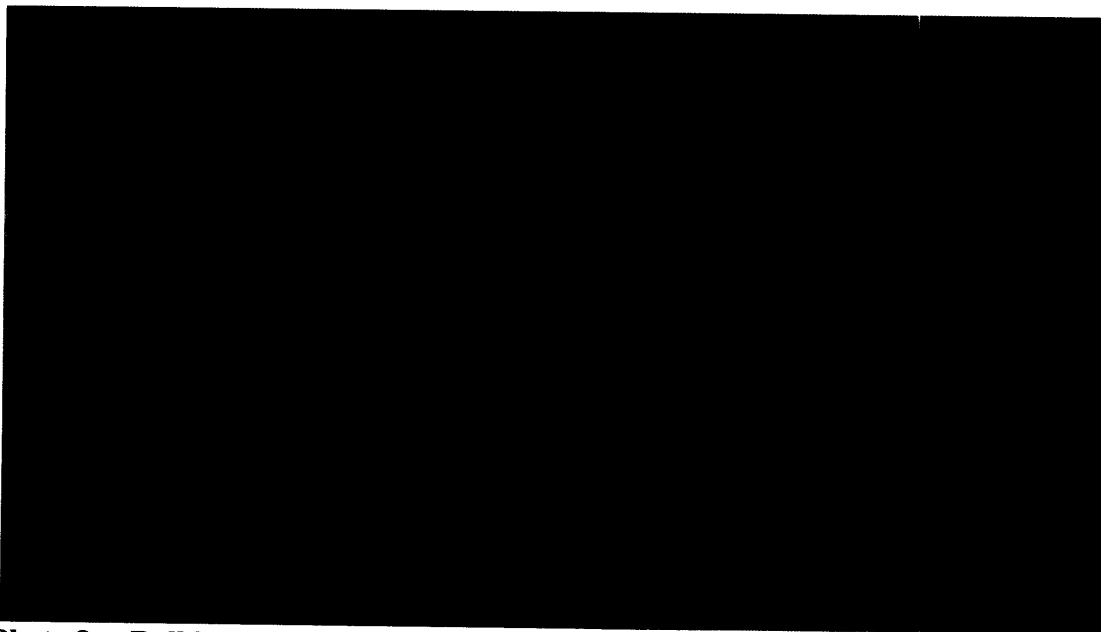
- A refueling device will be installed on the ISO tanks located at the emergency shelter.
- All fuelling of equipment will be recorded and the register kept in each unit of equipment. The fuelling device will be equipped with a counter.
- During fuelling, drip pans under the equipment fill nozzle will be used and absorbent pads will be available at all times during fuelling of equipment.
- Operators will be in attendance for the duration of refuelling operations.
- Smoking will be prohibited within 10 m of a fuel storage area.
- Each refuelling device will have fully stocked and maintained spill kits for immediate response to small spills. Personnel will be trained on action to take in the event of a spill and will be familiar with the contents of the kits. Emergency response procedures will be posted inside the survival trailers and in the camps at either end of the trail.



**Photo 6: Challenger tractor pulling ISO tank on sleigh**



**Photo 7: Bulldozer D6 pulling ISO tank**



**Photo 8: Bulldozer D6 pulling ISO tank in mountains**

## **8 SPILL RESPONSE CONTINGENCY PLAN**

Environmental issues are of great importance to Biogenie and to the community and we put strong emphasis on safe handling of hydrocarbons and other deleterious substances. As such, we have developed specific measures to be taken in the event of a fuel or chemical spill to ensure that efficient and environmentally-safe measures will be taken and that the actions prescribed hereafter meet all regulatory requirements. It provides the protocols for responding to spills (or potential spills) in order to minimize impacts on health and safety as well as the environment.

### **8.1 METHODOLOGY**

The greatest risk, in terms of likelihood of occurrence, and volume of potential spilled material, is that associated with POL transport.

During fuel transportation, spill kits, pumps and a spare tank will be available to transfer products in the event of a spill or leak. For the refueling of heavy equipment, generators, pumps, and tools, drip pans will be used to prevent spills, when required. An automatic stop-fill valve will be used. Absorbent pads will be available at all times. Please refer to Table II for spill kit contents and location.

Visual inspection will be performed periodically, and trails will be maintained in good condition to ensure safe transportation.

In the event of a spill, emphasis will first be placed on human health. Any person detecting a spill shall take every safety precaution and wear adapted protective gear prior to approaching the spill area.

**Table II : Spill Kit Description and Location**

<b>Spill Kit</b>	<b>Location of spill kit</b>	<b>Contents</b>
Liquid spill (4) (petroleum products, sludge, contaminated water)	Refuelling equipment  Cat-train fuel hauling equipment	<ul style="list-style-type: none"> <li>• Four bags (10 kg each) of loose absorbent material (3M Powersorb™, vermiculite, or equivalent)</li> <li>• Four booms containing absorbent material (3M Powersorb™ or equivalent)</li> <li>• Twelve pads of absorbent material (3M Powersorb™ or equivalent)</li> <li>• Five heavy-duty disposable bags</li> <li>• Two sets of protective clothing and equipment including chemical resistant gloves, a half-face respirator and cartridges, goggles, disposable coveralls (Tyvek™ or equivalent)</li> <li>• A container for storing the above</li> <li>• A spark-proof shovel</li> <li>• 10 m² of polyethylene</li> </ul>

In the event of a spill, the person in charge shall:

- Isolate or eliminate all sources of ignition and identify the spilled material, if possible.
- Warn people and evacuate the area, if 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, if possible;
  - the flow direction of the spill.
- Ensure adequate use of spill response equipment.
- Document all events and measures taken.

Depending on the physical location of the spill, specific supplemental precautions must be taken:

- ***On Land***
  - Prevent dispersion in a drainage system or ditch.
  - Contain material with sorbent booms or a dyke of snow or earth.
  - Remove small spills with sorbent pads.
- ***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 floating sorbent booms to contain free-phase product.
  - Use skimmer or sorbent pads to recover free-phase product.

## 8.2 FINAL SPILL REPORT

Spills will immediately be reported to Biogenie's Site Superintendent who will initiate cleanup and report the spill to the Nunavut 24-hour Spill Report Line. All spill kits located at sources of fuel will include contact information for the Spill Report Line (prominently displayed).

### **8.3 EMPLOYEE TRAINING AND EXPERIENCE**

Among the employees working on the Cat-train, several will be qualified to handle fuel and other hazardous material using available site-specific equipment and will be trained in WHMIS, the OSHA 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) course and Transportation of Dangerous Goods (TDG). Supervisory personnel will have an extra OSHA 8-hr training.

Other employees will be properly informed of the available spill response material and safety equipment and its adequate use for maximum efficiency.