P.O. Box 119
GJOA HAVEN, NU X0E 1J0
TEL: (867) 360-6338
FAX: (867) 360-6369
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NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN

WATER LICENCE APPLICATION FORM

Application for: (check one)

✓**New** ___ **Amendment** ___**Renewal** ___**Assignment**

LICENCE NO:
(for NWB use only)

1. NAME AND MAILING ADDRESS OF APPLICANT/LICENSEE

Scott Hamilton, Environmental Officer
Defence Construction Canada Ltd.
Place de Ville, Tower B
112 Kent Street, 17th Floor
Ottawa, Ontario K1A 0K3

Phone: 613-998-4583
Fax: 613-998-1061
e-mail: HAMILTSC@dcc-cdc.gc.ca

as administered by:
Eva Schulz, P.Ag., Environmental Scientist
UMA Engineering Ltd.
2540 Kensington Road NW
Calgary, Alberta T2N 3S3

Phone: 403-270-9200
Fax: 403-270-0399
e-mail: eschulz@umagroup.com

2. ADDRESS OF CORPORATE OFFICE IN CANADA (if applicable)

Phone:_____
Fax: _____
e-mail: _____

3. LOCATION OF UNDERTAKING (describe and attach a topographical map, indicating the main components of the Undertaking)

The former CAM-2, Gladman Point DEW Line site is located on the south coast of King William Island. The closest community with charter aircraft service is Gjoa Haven, approximately 80 km to the east. The CAM-2 site is located on a Department of National Defence (DND) reserve on Crown lands.

Latitude: 68°40'09"N Longitude: 97°48'33"W NTS Map No. 57B Scale 1:250,000

B30106 NWBSGLA App form - ILAE

4. DESCRIPTION OF UNDERTAKING (attach plans and drawings)

The purpose of the project is to complete the environmental cleanup of the CAM-2 site. The main components of the undertaking include the following:

- Demolish and remove existing facilities that are not required for the operation of the North Warning System;
- Removal of contaminated soils;
- Remediate existing landfills;
- Clean up surface debris; and,
- Physically restore the site to as natural a state as practical.

See Appendix I for a project description of the work to be completed at CAM-2.

5. TYPE OF UNDERTAKING (A supplementary questionnaire must be submitted with the application for undertakings listed in **"bold"**)

___ Industrial	✓ **Remote/Tourism Camps**
___ **Mine Development**	___ **Municipal**
___ **Advanced Exploration**	___ Power
___ **Exploratory Drilling**	___ Other (describe): please see attached.

6. WATER USE

✓ To obtain water	___ To divert a watercourse
___ To modify the bed or bank of a watercourse	___ Flood control
___ To alter the flow of, or store, water	✓ Other (describe): see below
___ To cross a watercourse	

The Airstrip Landfill (refer to Appendix I for a description of the Airstrip Landfill) at the site is located in close proximity to the ocean, the toe of the landfill is in the intertidal zone and is actively eroding, and will therefore be excavated. The installation of a coffer dam, with a floating silt fence and absorbent boom will be required. In addition, because of the location of the landfill, the area is quite wet and it is likely the excavation area must be dewatered during construction. Dewatering will consist of creating a drainage trench and temporary sump to keep water out of the excavation. An application to the Department of Fisheries and Oceans in Iqaluit has been submitted for this work.

7. QUANTITY OF WATER INVOLVED (litres per second, litres per day or cubic metres per year, including both quantity to be used and quality to be returned to source)

It is estimated that the quantity of water to be used for running the camp, including contractor use, will be 30,000 litres/day. The camp requirements are approximately 12,000 litres/day, and contractor use is estimated at 18,000 litres/day. Contractor use will vary depending on daily activities, but may include dust suppression and granular material wetting. Water from the existing water supply lake will likely be pumped into a water tank on a truck using a portable pump and then transferred to a water storage tank at the Camp. As the contract for the work has not yet been awarded, the size of the tank is not available. No water will be returned to the source.

8. **WASTE** (for each type of waste describe: composition, quantity, methods of treatment and disposal, etc.)

✓ Sewage	___ Waste oil
✓ Solid Waste	✓ Greywater
___Hazardous	___ Sludges
✓ Bulky Items/Scrap Metal	___ Other (describe):_____

Camp sewage will be directed to a two-cell lagoon situated a minimum of 100 metres from the camp, any natural drainage course and 450 m from water bodies that support aquatic life. The sewage effluent will be tested once per month during operation, prior to discharge and tested for the following parameters: Biological Oxygen Demand, Total Suspended Solids, Oil & Grease; Ammonia and pH. Greywater from camp operations will be discharged to a pit and buried a minimum of 30 metres from the camp, or any natural drainage course or water body. Domestic garbage will be incinerated in an approved container and the residual waste buried in an on-site landfill. All excess fuels, camp equipment and facilities will be removed from the site after completion of the clean up activities. It is not anticipated that the clean up activities will generate any hazardous wastes. Hazardous wastes already existing at the site will be dealt with according to the Environmental Protection Plan in Appendix II. Empty barrels and fuel drums will be disposed of according to the DEW Line Clean Up – Barrel Protocol, which is in Appendix IV.

9. **PERSONS OR PROPERTIES AFFECTED BY THIS UNDERTAKING** (give name, mailing address and location; attach if necessary)

Land Use Permit

DIAND ✓ Yes ___ No If no, date expected _____

A land use permit has been applied for, but has not yet been received.

Regional Inuit Association ___ Yes ___ No If no, date expected _____

Commissioner ___ Yes ___ No If no, date expected _____

10. **PREDICTED ENVIRONMENTAL IMPACTS OF UNDERTAKING AND PROPOSED MITIGATION MEASURES** (direct, indirect, cumulative impacts, etc.)

NIRB Screening ✓ Yes ___ No If no, date expected.

A project description/environmental screening report has been submitted to NIRB, and is included as Appendix I. This includes a summary of potential environmental impacts and proposed mitigation measures.

11. **INUIT WATER RIGHTS**

Will the project or activity substantially affect the quality, quantity, or flow of water flowing through Inuit Owned Lands and the rights of Inuit under Article 20 of the Nunavut Land Claims Agreement?

Not applicable.

If yes, has the applicant entered into an agreement with the Designated Inuit organization to pay compensation for any loss or damage that may be caused by the alteration. If no compensation agreement has been made, how will compensation be determined?

Not applicable.

12. CONTRACTORS AND SUB-CONTRACTORS (name, address and functions)

The contract for the clean up work has not yet been tendered or awarded. Therefore, the names, addresses and functions of the contractors and sub-contractors involved in the clean up of the CAM-2 site are not available at this time.

13. STUDIES UNDERTAKEN TO DATE (list and attach copies of studies, reports, research, etc.)

During the radar upgrade program in the early 1990's, prior to the start of the DEW Line Clean Up, a number of environmental and engineering investigations were conducted at the DEW Line sites. The objectives of these studies were as follows:

- To identify the nature and extent of chemical contamination at the sites;
- To determine the possible impact of these contaminants on the Arctic ecosystem in general and the food chain in particular; and
- To develop practical environmental clean up strategies appropriate for the Arctic.

See Appendix I for a list of the previous investigations.

14. THE FOLLOWING DOCUMENTS MUST BE INCLUDED WITH THE APPLICATION FOR THE REGULATORY PROCESS TO BEGIN

Supplementary Questionnaire (where applicable: see section 5) ✓ Yes ___ No If no, date expected _____

Inuktitut/English Summary of Project ✓ Yes ___ No If no, date expected _____

Application fee $30.00 (c/o of Receiver General for Canada) ___ Yes ✓No If no, date expected. Because the application is being submitted in behalf of a federal proponent, no application fees are required.

15. PROPOSED TIME SCHEDULE

___ Annual (or) ✓ Multi Year

Start Date: July 2003 Completion Date: October 2006

Eva Schulz	**Environmental Scientist**		Dec-20, 2002
Name (Print)	**Title (Print)**	**Signature**	**Date**

For Nunavut Water Board use only

APPLICATION FEE **Amount: $**_____ **Receipt No.:**

WATER USE DEPOSIT **Amount: $**_____ **Receipt No.:**