



April 3, 2002

File: 0171 120 (CAM-5) 3.8

Ms. Rita Becker  
Nunavut Water Board  
P.O. Box 119  
Gjoa Haven, Nunavut  
X0B 1J0

Dear Ms. Becker:

**RE: Water Use License Application for the Site Investigation at CAM-5, Mackar Inlet**

UMA Engineering Ltd. is pleased to submit the attached Water Use License Application for the upcoming site investigation at the CAM-5, Mackar Inlet DEW Line Site, on behalf of Defence Construction Canada. The application includes an abstract in English and Inuktitut, the application form, the remote camp supplemental questionnaire and supporting background information.

I trust that sufficient information has been provided to process this application. If you require any further information or clarification, please contact the undersigned at (403) 270 9207 or Eva Schulz at (403) 270 9220. Thank you for your consideration of this application.

Sincerely,

**UMA ENGINEERING LTD.**

A handwritten signature in dark ink, appearing to read "Graham E.", followed by a horizontal line.

Graham Emmerson, EIT  
[gemmerson@umagroup.com](mailto:gemmerson@umagroup.com)

GJE:gje

Encl. Application for Water Use License  
Remote Camp Supplemental Questionnaire  
Abstract – English and Inuktitut

cc. Suzanne Belanger-Fontaine, DCC  
Daniella Looock, ESG  
Roland Merkosky/Michelle Rurka, UMA



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NUNAVUT WATER BOARD  
NUNAVUT IMALIRIYIN KATIMAYINGI

**WATER LICENCE  
APPLICATION FORM**

Application for: (check one)

☒ New    ☐ Amendment    ☐ Renewal    ☐ Assignment

**LICENCE NO:**

(for NWB use only)

NWB5 MAC

**1. NAME AND MAILING ADDRESS OF  
APPLICANT/LICENSEE**

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

Suzanne Belanger-Fontaine  
Environmental Officer, DEW Line Clean Up  
Defence Construction Canada, Place de Ville, Tower B  
112 Kent Street, Ottawa, Ontario, K1A 0K3

Phone: (613) 991-9358

Fax: (613) 998-1061

e-mail: BELANGSU@dcc-cdc.gc.ca

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

e-mail: \_\_\_\_\_

**as administered by:**

Eva Schulz, P.Ag.  
UMA Engineering Ltd.  
2540 Kensington Road NW  
Calgary, Alberta T2N 3S3  
Phone: (403) 270 9220  
Fax: (403) 270 0399  
e-mail: eschulz@umagroup.com

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

CAM-5, Mackar Inlet Distant Early Warning (DEW) Line Site  
NTS Map Segment provided in Appendix A, Figure 1. Site Plan showing work areas and potential camp location provided in Figure 2.

Latitude: 68°45'N Longitude: 109°04'W NTS Map No. 47B07 Scale 1:50 000

**4. DESCRIPTION OF UNDERTAKING** (attach plans and drawings)

The project involves supplemental activities to an environmental site investigation carried out in August 2000. A non-technical project description is provided in Appendix B (English and Inuituk)

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

- |   |  |
|---|--|
| <input type="checkbox"/> Industrial           | <input checked="" type="checkbox"/> <b>Remote/Tourism Camps – Conservation Activity</b>    |
| <input type="checkbox"/> Mine Development     | <input type="checkbox"/> Municipal   |
| <input type="checkbox"/> Advanced Exploration | <input type="checkbox"/> Power   |
| <input type="checkbox"/> Exploratory Drilling | <input checked="" type="checkbox"/> Other (describe): DEW Line Clean-Up Site Investigation |

**6. WATER USE**

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> To obtain water                 | <input type="checkbox"/> To divert a watercourse |
| <input type="checkbox"/> To modify the bed or bank of a watercourse | <input type="checkbox"/> Flood control           |
| <input type="checkbox"/> To alter the flow of, or store, water      | <input type="checkbox"/> Other (describe):       |
| <input type="checkbox"/> To cross a watercourse                     |  |

**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 water requirements for the camp will be up to 5,000 litres/day. Water will be used for operation of the camp for drinking, washing, food preparation and in the on-site laboratory. As the contract for the camp outfitter has not been awarded at this time, details of the camp water system has not been determined. In other site investigations at similar sites, however, water has been pumped into a portable water tank or truck and hauled to camp. Greywater is discharged to the ground surface a minimum of 30 m from a natural water body or drainage course. No water is directly returned to the source.

As the camp is likely to be re-established near the airstrip, it is anticipated that water will be obtained from the river adjacent to Borrow Area #2 (Figure 2, Appendix A).

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

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Sewage       | <input type="checkbox"/> Waste oil              |
| <input checked="" type="checkbox"/> Solid Waste  | <input checked="" type="checkbox"/> Greywater   |
| <input type="checkbox"/> Hazardous               | <input type="checkbox"/> Sludges                |
| <input type="checkbox"/> Bulky Items/Scrap Metal | <input type="checkbox"/> Other (describe) _____ |

Greywater will likely be disposed of in a greywater pit located at least 30 m from any water body or drainage course. The greywater pit will be backfilled prior to demobilization from the camp. Sewage will be buried on-site a minimum distance of 100 m from any water body or drainage course. Typically latrines are used during the site activities. Domestic garbage will be incinerated on site and the residuals will be buried with the sewage.

Following the investigation, all excess fuels, camp facilities, equipment and hazardous wastes generated by the investigation will be removed from site. Typically vehicles and equipment are serviced off site. Laboratory wastes, largely sample bottles, bags and plastic trowels, will be containerized and stored in the unheated vehicle storage at the airstrip or other DEW line facility for disposal during the subsequent clean-up activities.

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

CAM-5, Mackar Inlet, was a remote DEW Line site closed during the North Warning System upgrades. There are no communities or settlements in the immediate vicinity of the site. The majority of site investigation activities will be carried out within the boundaries of the existing Department of National Defence reserve.

**Land Use Permit**

DIAND ☒ Yes ☐ No If no, date expected \_\_\_\_\_

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.)

Please refer to the following: Site Investigation Project Description, Appendix B; Environmental Impact Summary Table, Appendix C; and Contingency Plans, Appendix D

NIRB Screening ☐ Yes ☐ No If no, date expected \_\_\_\_\_

NIRB Screening is currently undertaken for each DEW Line Site as part of the DEW Line Clean-Up Project and is not specifically performed for the site investigations preceding the site remediations.

**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?

Site investigation activities are not expected to have any effect on waters flowing through Inuit Owned Lands.

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?

N/A

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

A list of contractors and subcontractors is not available at this time as the camp outfitter contract has not yet been offered for tender. A list of contractors and subcontractors can be provided after the Outfitter Contract has been awarded.

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

Appendix E contains reports related to baseline, socio-economic and environmental impact studies performed at the site by the DLCU team.

**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 \_\_\_\_\_

**15. PROPOSED TIME SCHEDULE**

☐ Annual (or) ☐ Multi Year

Start Date: June 2002 Completion Date: September 2002

\_\_\_\_\_  
Name (Print)

\_\_\_\_\_  
Title (Print)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**For Nunavut Water Board use only**

**APPLICATION FEE**

Amount: \$ \_\_\_\_\_

Receipt No.: \_\_\_\_\_

**WATER USE DEPOSIT**

Amount: \$ \_\_\_\_\_

Receipt No.: \_\_\_\_\_