Indian and Northern Affairs Canada | Affaires indiennes et du Nord Canada

April 12, 2004

Your file Votre référence

Our file Notre référence

Mr. Jim Wall
Licencing Administrator
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0

Dear Mr. Wall:

RE: Water Use Licence Application for the Clean Up of Former CAM-F Intermediate DEW Line Site

Indian and Northern Affairs Canada is submitting the enclosed water use licence application for site investigation work, during 2004, at the former CAM-F Intermediate DEW Line Site. Some urgent work to environmentally secure the site until the remediation project work begins, is also proposed.

A detailed remediation project design will be developed using the information from the 2004 project.

Please find enclosed three copies of the application and supporting documents.

If you have any questions or comments, please do not hesitate to contact the undersigned at (867) 975-4585.

Sincerely,

Glen Stephens
Manger, Environment and Contaminants
Indian and Northen Affairs Canada

Encl. Water Use Licence Application
Exploration/Remote Camp Supplementary Questionnaire
Work Plan
Program Principles/Project Rationale
Environmental Screening Assessment
Fuel Containment and Spill Contingency Plan
Site Maps and Plans

Canada

Nunavut Water Board
NUNAVUT IMALIRIYIN KATIMAYINGI

WATER LICENCE
APPLICATION FORM

Application for: (check one)

_x_ **New** ___ **Amendment** ___**Renewal** ___**Assignment**

LICENCE NO: (for NWB use only)	
1. NAME AND MAILING ADDRESS OF APPLICANT/LICENSEE Phone:___(867) 975-4583_____ Fax: ____(867) 975-4560 _____ e-mail: _martinro@inac-ainc.gc.ca_	2. **ADDRESS OF CORPORATE OFFICE IN CANADA** (if applicable) Phone:___N/A_____ Fax: _____ e-mail:_____

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

CAM-F Abandoned DEW Line site near Sarcpa Lake, Melville Peninsula, Nunavut; Site & Route Map/Plan attached

Latitude:__68°33' N___ Longitude:___83°19' W__ NTS Map No.

4. DESCRIPTION OF UNDERTAKING (attach plans and drawings)

The principle activities of this project include:

- Conducting a detailed site assessment to:
    - Quantify the volume of contaminated soil at the site. This will include soil contaminated with heavy metals, PCBs, and petroleum hydrocarbons.
    - Quantify the volume of hazardous materials at the site, including asbestos containing materials and paint containing PCBs and/or lead.
    - Quantify the volume of liquid waste that can be incinerated on-site (hydrocarbons) or requires southern disposal (PCB-containing oil, chlorinated or metal-containing hydrocarbons).
    - Complete a waste audit of non hazardous materials.
    - Identify potential locations for an engineered landfill for the disposal of non-hazardous waste.
    - Identify borrow sources to supply enough granular material for the construction of the landfill by way of a full geotechnical evaluation.
    - Complete a human health and ecological risk assessment at the site. This will likely include the collection of flora, fauna, and sediment samples.
    - Evaluate the condition of the runway.
- Selection, consolidation and crushing of drums program at the site.
- Conduct some activities to increase the environmental security of the site until the final remediation work is initiated.
- Removal of previously containerized PCB's and disposal off-site.
- Evaluate and implement (if needed) a temporary landfill leachate collection system.
- Prepare a detailed design for future site remediation activities.

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

___ Industrial
___ **Mine Development**
___ **Advanced Exploration**
___ **Exploratory Drilling**
___ **Remote/Tourism Camps**
___ **Municipal**
___ **Power**
_x_ **Other** (describe) Environmental Investigation & Preliminary Waste Consolidation (completed questionaire attached)

6. WATER USE

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

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)

300 litres/day/person x 15 people x 14 days = 63,000 litres of water from Sarcpa/unnamed seasonal lake adjacent to site

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

(See attached Remote Camp Questionaire)

_x_ Sewage	_x_ Waste Oil
_x_ Solid Waste	_x_ Greywater
_x_ Hazardous	___ Sludges
_x_ Bulky items/Scrap Metal	___ Other (describe)_____

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

Land Use Permit

DIAND	_x_ Yes	___ No	If no, date expected_____
Regional Inuit Association	_x_ 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 _x_ Yes ___ No If no, date expected__attached_____

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?

No; a small amount of water will be used for non potable water usage during the camp period. No other impacts are expected. There will be no discharges to any waterbodies.

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)

Tender documents were submitted to Public Works and Gov't Svcs. Canada contracting department on March 26, 2004. The tender document is for supply of camp, equipment and support services for all assessment and minor works during the summer of 2004 has been posted on MERX as a service contract. The closing date has been set to be April 22 and awarding dates is estimated to be during the last week of April. Contract has been initiated as a set aside. There are 2 contractors that own equipment locally and are at minimum 50% Inuit owned and operated. It is anticipated that these 2 contractors will bid on the project. They include Inukshuk Construction Limited and Kudlik Construction Ltd.

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

See section 8 of attached Remote Camp Questionaire

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

Supplementary Questionnaire (where applicable: see section 5) _x_ Yes ___ No
If no, date expected_____

Inuktitut/English Summary of Project _x_ Yes ___ No
If no, date expected_____

Application fee $30.00 (c/o Receiver General for Canada) _ __ Yes __x_ No
(Application being made by a federal gov't department)
If no, date expected_____

15. PROPOSED TIME SCHEDULE

_x_ Annual (or) ___ Multi year

Start Date:__May 21, 2004_____ Completion Date:__August 16, 2004_____

Name (Print)	**Title (Print)**	**Signature**	**Date**

For Nunavut Water Board use only
APPLICATION FEE Amount: $_____ Receipt No.:_____

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

WATER USE LICENCE APPLICATION

For the Clean Up of CAM-F Intermediate DEW Line Site

Submitted by: **Department of Indian Affairs and Northern Development**
Northern Affairs Program

Prepared by: **Public Works and Government Services Canada**
Real Property Services
Architectural & Engineering Services
Environmental Services
Western Region

April 2004

Executive Summary

1. BACKGROUND

The federal government has initiated the Federal Contaminated Sites Accelerated Action Plan (FCSAAP) this year to clean up federally owned contaminated sites and to deal with their related liability. The FCSAAP program provides funding for the remediation of contaminated sites posing risk to human health or the environment. The Department of Indian Affairs and Northern Development (DIAND) has applied for funding during the initial 4 year period of the program. The investigation and remediation of the abandoned intermediate DEW Line site at CAM-F (Sarcpa Lake) has been funded under this program, primarily based on the presence of PCB's in building materials and soils.

The former DEW Line site was constructed in 1957 and subsequently closed and abandoned in 1963. The site was converted to a scientific research station in 1977 under the auspices of the Science Institute of the Northwest Territories and DIAND. In 1985, a hazardous materials removal program was implemented with the removal of hazardous materials found in equipment and surface contaminants. Assessments completed in 1987/88 and 1994 have confirmed th e presence of various hazardous materials and contaminated soil. In 1989, a partial clean up of PCB contaminated walls and floors at the station was carried out to limit the exposure of workers to PCBs. An asbestos abatement program and clean up of Dump A was carried out in 1997.

The proposed project consists of an evaluation of the existing information regarding hazardous materials and contaminated soil at the site, identification of any information gaps and the implementation of a detailed assessment plan to delineate contaminants. As well some waste management activities are planned to make the site more environmentally secure until the clean-up begins. Based on the 2004 information a remedial action plan will be developed for the site and implemented in 2005 under a separate regulatory submission.

2. PROJECT LOCATION

CAM-F is located at 68°33' N, 83°19' W on Melville Peninsula, between Foxe Basin and Committee Bay in Nunavut Territory. The main station is situated at an elevation of 260 m above sea level on a hill approximately 2 km north of the west arm of Sarcpa Lake. Terrain around the site consists of rolling tundra highland with gravel deposits, several lakes and numerous rivers. The site, which is approximately 85 km west of Hall Beach and 100 km southwest of Igloolik, is landlocked and inaccessible by sea-lift. It can be reached by canoe or an overland winter route by way of Hall Lake and Kingaroo River. As well, there is an airstrip, which is accessible for most of the year. Airplanes equipped with floats may land on Sarcpa Lake during the short summer.

3. PROJECT ACTIVITIES & SCHEDULE

The primary purpose of the site activities proposed for the summer of 2004 at CAM-F is to complete site assessment in preparation for a remediation program to begin at the site in 2006. Waste consolidation and removal of packaged waste will also be initiated while on-site in Summer 2004. All activities will be completed in the immediate vicinity of the former military facility. Initially some equipment will be moved over the ice to the site late in the spring of 2004.

Assessment activities to be completed at the site will include the delineation of various contaminants (PCBs and heavy metals); characterization of landfill contents; identification of potential borrow sources for future cover requirements; site evaluation to determine if an engineered landfill can be constructed on-site; and the identification of remaining hazardous materials/wastes (asbestos, leaded paint and PCB-containing equipment).

Waste consolidation activities at the site will focus on the approximately 5900 abandoned oil drums that have been identified at the site, most of which are empty. The proposed work plan for these items is to collect them using all-terrain vehicles and crush them in accordance with the DEW Line Cleanup Criteria for Barrels. Any drums that contain liquid (hydrocarbons or water) will be left in-place until the comprehensive remediation plan is implemented.

Waste removal activities will comprise the removal of 164 barrels of PCB containing soil and waste. This material will be airlifted from site during the summer and flown to Hall Beach where it will be loaded on to a barge for shipment to Montreal where it will ultimately be destroyed.

A temporary camp will be set up at the site that will consist of approximately ten "Labrador-style" canvas tents. This will include accommodation for a maximum of approximately 20 people at the site as well as kitchen facilities and an engineer's tent. The camp will be transported to the site by cat train in late May 2004, erected in July, dismantled in late August, and removed from the site by cat train prior to March 2005.

All additional works to remediate the site will be carried out under a separate project that will be designed following completion of the site investigation.

4. SOCIAL IMPACT OF THE PROJECT

During any remediation project, whenever possible, DIAND strives to support and enhance the development of healthy, sustainable communities by leveraging local skills and knowledge into their approach to addressing environmental issues associated with contaminated sites. By these means core competencies are maximized and deployed. Whenever possible, the project will also adopt solutions tailored to the northern environment and its inhabitants. This includes leveraging local knowledge and the incorporation of provisions accounting for the unique needs of northerners and the needs

of the environment in which they live into the development and implementation of policies and procedures.

Community presentations were carried out in Hall Beach and Igloolik in January 2004 to obtain input into the development of plans to remediate the site. The Hamlet Councils, Hunters & Trapper Organizations and Qikiqtani Inuit Association were in attendance. Presentations were generic in scope and focused on the clean up of CAM-F within the near future although specific dates were not defined. The same presentation was made to representative(s) of Fisheries and Oceans Canada Habitat Assessment, Environment Canada Environmental Protection Branch, Department of Indian Affairs and Northern Development Land Use and the Nunavut Impact Review Board. The project has also been discussed with the Nunavut Water Board and the Nunavut Planning Commission.

Following a March 16, 2004 visit to CAM-F, there was an opportunity for a second meeting in Hall Beach on March 17th. Community members in attendance were representatives of the same groups as at the previous meeting in Hall Beach. Again, the presentation was generic in scope. The probability that the project scope would be reduced to a year of investigation with some waste management activities was introduced. Community ideas were sought and received on the overall site remediation plan and the site investigation project.

Meetings to present the site investigation plan to the public of both communities are being planned. As well, meetings to update the Federal and Territorial regulatory bodies are being planned. Resources for on-going communications, as requested by the communities, have been budgeted for.

ⲋⲥⲂⲁⲇⲟⲥ (CAM-F) ⲂⲖⲤⲖⲥ ⲀⲋⲣⲘⲞⲔⲔⲢⲘⲟⲥ ⲥⲂⲀⲔⲢⲥ ⲗⲉⲢⲀⲣⲘⲔⲔ
Ⲃⲟⲣⲙⲣⲋⲋⲇⲥ ⲃⲉⲥⲢ

ⲀⲆⲥⲢⲘⲔⲢⲀⲣⲟⲥ ⲉⲂⲁⲉⲔⲢⲖⲣⲥ

1. ⲔⲃⲟⲂⲥⲣⲔⲥⲢⲆⲢⲢⲔ

ⲖⲣⲖⲋⲔⲃⲇⲥ ⲀⲢⲀⲤⲘⲢⲘⲥⲢⲆⲤⲔ ⲖⲣⲖⲋⲔⲃⲇⲥ ⲢⲋⲣⲔⲉⲁⲔⲋⲥⲣⲘⲢⲖⲏⲔⲢⲉⲟⲥ
ⲢⲃⲃⲖⲥⲢⲀⲋⲘⲃⲏⲔⲢⲥ ⲀⲥⲣⲙⲀⲃⲏⲟⲥ ⲥⲈⲁⲆⲘ ⲤⲖⲋⲖⲟ ⲆⲢⲆⲢ ⲏⲋⲖⲔⲃⲏⲔⲋⲆⲥⲣⲀⲃⲔⲋⲋⲋⲋⲥ
ⲖⲣⲖⲋⲔⲃⲇ ⲉⲔⲢⲟⲣⲃ ⲢⲋⲣⲔⲃⲘⲃⲢⲖⲏⲔⲢⲥ ⲟⲉⲂⲥ ⲀⲖⲖ ⲤⲀⲖⲉⲂⲁⲂⲋⲥⲣⲙⲁⲟⲥ
ⲀⲢⲣⲥⲙⲁⲀⲃⲔⲋⲥ. ⲤⲖⲉⲁ ⲖⲣⲖⲋⲔⲃⲇⲥ ⲢⲋⲣⲔⲉⲁⲔⲋⲥⲣⲘⲢⲖⲏⲔⲢⲉⲟⲥ ⲢⲃⲃⲖⲥⲢⲀⲋⲘⲃⲏⲔⲢⲥ
ⲀⲥⲣⲙⲀⲃⲏⲟⲥ ⲥⲈⲁⲆⲘ ⲀⲥⲣⲙⲘⲥⲘⲏⲔⲋⲥⲣⲘⲔ ⲋⲟⲢⲢⲖⲥⲣⲁⲘⲃ ⲢⲉⲆⲏⲔⲃⲏⲟⲃ
ⲀⲆⲢⲢⲘⲤⲢⲆⲔⲇⲥⲣⲁⲢⲥ ⲢⲋⲣⲔⲉⲁⲔⲋⲥⲣⲘⲔ ⲀⲥⲣⲤⲔⲉⲢⲉⲁⲔⲋⲥⲣⲘⲔ ⲂⲀⲋⲢⲢⲥ ⲔⲃⲟⲢⲘⲥⲘⲔⲔⲘⲂⲉⲔⲋⲥⲣⲘⲔ
ⲆⲉⲈⲃⲉⲟⲥ ⲀⲈⲢⲘⲂⲢ. Ⲁⲟⲣⲙⲣⲋⲋⲇⲥ ⲆⲋⲣⲔⲃⲏⲢⲖⲏⲔⲢⲉⲟⲥ ⲢⲉⲆⲏⲔⲃⲏⲟⲃ ⲈⲀⲖⲔⲢⲘⲥⲣⲘⲔ ⲀⲥⲣⲙⲀⲃⲏⲟⲥ
ⲀⲆⲢⲢⲘⲤⲢⲆⲔⲇⲥⲣⲁⲢⲥ ⲢⲋⲣⲔⲉⲁⲔⲋⲥⲣⲘⲔ ⲀⲥⲣⲤⲔⲉⲢⲉⲁⲔⲋⲥⲣⲘⲔ ⲂⲀⲋⲢⲢⲥ ⲔⲃⲟⲢⲘⲥⲘⲔⲔⲘⲂⲉⲔⲋⲥⲣⲘⲔ
ⲆⲉⲈⲃⲉⲟⲥ ⲀⲈⲢⲘⲂⲢ. ⲤⲖⲉⲁ ⲖⲣⲖⲋⲔⲃⲇⲥ ⲢⲋⲣⲔⲉⲁⲔⲋⲥⲣⲘⲢⲖⲏⲔⲢⲉⲟⲥ ⲢⲃⲃⲖⲥⲢⲀⲋⲘⲃⲏⲔⲢⲥ
ⲀⲥⲣⲙⲀⲃⲏⲟⲥ ⲥⲈⲁⲆⲘ ⲀⲥⲣⲙⲘⲥⲘⲏⲔⲋⲥⲣⲘⲔ ⲂⲀⲋⲢⲢⲥ ⲔⲃⲟⲢⲘⲥⲘⲔⲔⲘⲂⲉⲔⲋⲥⲣⲘⲔ
ⲂⲀⲋⲢ

3. ᐱᓕᓵᐊᔭᓄᓂ ᖃᓄᐃᓕᓕᐅᖅᑕᐅᓕᐊᖅᑐᑦ ᐊᒪᒪᓗ ᐅᑦᓗᓵᓕᐊᖅᑕᖏᑦ

ᐱᔨᔪᑎᑭᓗᐊᖅᑕᖓ ᑕᐃbᓕ ᖃᓄᐃᓕᓕᐅᖅᑕᐅᓕᐊᖅᑐᑦ ᑐᑭᓯᐅᑕᐅᔪᖅ ᑲᑦdᓐᓄᖓ ᐱᑦᓗᒍ ᐃᓕᓴᕐᕋᐅᑦᓂᖓᓄᓂ ᐊᐅᐸᖓ 2004 ᑐᓪᐃdᓂᑦ (CAM-F) ᑭᓯᓵᖁᐃᓕᑦᓗᒍ ᐱᓕᓵᐊᖓᒍᓗᓄ ᖃᐅᔨᒪᖅᑕᐅᓗᓄ ᐱᓕᕐᓂᖅᐅᓗᓄ ᑕᒪᑐᒍᖓ ᐱᐅᑎᑕᐅᓕᕐᓂᒪᖓᓄᓂᑦ ᐱᓕᓵᑎᑦᑎᔪᐊᑕᐅᓕᐊᖅᑐᑦᑎᒃ ᐱᑎᐊᑦᓗᓄ ᐃᓕᖓ ᐅᑭᐅᒥ 2005. ᐃᑎᑕᒪᓄᓂᑦ ᓄᐊᑎᓵᖁᖓᓐᓂ ᐊᒪᒪ ᐊᑦᖢᑕᐅᓕᕐᓂᖓ ᐃᑎᑕᒪᐊᐃᑦ ᑕᒪᒃdᐊ ᐊᐅᓪᓚᑦᓗᓄ ᐃᓕᓴᕐᕋᐅᑦᓂᖓᓄᓂᑦ ᐃᓕᑎᕐᓂᖅᐅᓗᓄ ᐊᐅᐸᖓᓐᓄᓂ 2004. ᑕᒪᖏᑕᓚᖅ ᖃᓄᐃᓕᓕᐅᖅᑕᐅᓕᕐᓂ ᐱᖃᓵᖅᑕᐅᓗᑎᒃ ᐃᓱᓕᓗᑎᒃ ᑕᐃbᓕ ᐊᕐᑕᑦᓗᓄ ᐅᓇᑕᖅᑐᒃᓴᖅᑎᐃᓕᖅᖢᖅ ᐃᒪᓗᖅdᑎᖓᓚᑦ. ᑕᐃᒪᓕ ᐃᓱᓕᓗᑎᒃ ᐊᐅᓪᓚᑦᓗᓄ 2004. ᑕᒪᖏᑕᒪᓚᖅ ᖃᓄᐃᓕᓕᐅᖅᑕᐅᓕᕐᓂ ᐱᖃᓵᖅᑕᐅᓗᑎᒃ ᐃᓱᓕᓗᑎᒃ ᑕᐃbᓕ ᐊᕐᑕᑦᓗᓄ ᐅᓇᑕᖅᑐᑦᑎᒃᓴᖅᑎᐃᓕᖅᖢᖅ ᐃᒪᓗᖅdᑎᖓᓚᑦ. ᑕᐃᒪᓕ ᐃᓕᖓ ᐱᖃᓵᖅᑕᐅᓗᑎᒃ ᐃᓱᓕᓗᑎᒃ ᑕᐃbᓕ ᐃᓕᓴᕐᕋᐅᑦᓂᖓᓄᓂᑦ ᐃᓕᑎᕐᓂᖅᐅᓗᓄ ᐃᓕᖓ ᐅᑭᐅᒥ

ᑐᓪᐃᓂᓕᒃ (CAM-F) ᐃᒪᓐᒧᑦ ᐊᑐᕈᑎᒃᓴᖅᓯᓄᑦ ᓱᐃᓴᓂᒥᒃ ᐱᓇᓂᐊᕈᑎᖏᑦ
ᐃᓄᓕᓵᓂᑐᖅᐳᑦ ᑲᓇᑕᒥ

4. ᐃᓄᓂᓴᖅᓯᓄᑦ ᐊᒃᑐᐃᓂᒪᓕᖅᓱᒃᓴ ᑕᒪᓇ ᐱᓕᓵᐊᖏᑦ

ᑕᐃᓂᒪᓕ ᓇᑦᓕᐊᑐᐃᓇᖅ ᐱᐅᓂᑎᑕᐅᓇᓂᐊᖅᑐᓄᑦ ᐱᓕᓵᑎᑎᑎᑦᔨᓂᑕᐅᓂᑦ, ᖃᖏᓐᑐᐃᓇᓇᑲᐅᑦ, ᐃᓄᓕᓵᓂᑐᖅᐳᑦ ᐃᑲᓂᓂᓴᖅᓯᓄᑦ ᐊᑎᒪ ᐱᐅᓂᓂᑐᖅᐳᑦ ᐊᑎᒪᓗ ᐊᐅᓂᓂᑐᖅᐳᑦ ᖃᓄᐃᓕᓐᓂᖅᓯᓄᑦ ᐊᓂᓵᓇᖅᓄᓂᓕᒫᑦ ᐊᐅᓂᓂᑐᖅᐳᑦ ᐊᐅᓂᓂᑐᖅᐳᑦ ᐊᑎᒪᓗ ᖃᐅᔨᓕᕆᓂᖅᓯᓄᑦ ᐊᐅᓂᓂᑐᖅᐳᑦ ᐊᑎᒪᓗ

Table of Contents