# REMOTE CAMP SUPPLEMENTAL QUESTIONNAIRE

P.O. Box 119
Gjoa Haven, NT X0E 1J0 ᓄᓇᕗᑦ ᐃᒪᓕᕆᔨᑦ ᑲᑎᒪᔨᖏᑦ
Tel: (867) 360-6338 NUNAVUT WATER BOARD
Fax: (867) 360-6369 NUNAVUT IMALIRIYIN KATIMAYINGI

# EXPLORATION/ REMOTE CAMP SUPPLEMENTARY QUESTIONNAIRE

**Applicant:** Defence Construction Canada **Licence No:** _____
(For NWB Use Only)

## ADMINISTRATIVE INFORMATION

1. **Environment Manager:** Eva Schulz Tel: (403) 270 9220 Fax: (403) 270 0399
E-mail: eschulz@umagroup.com

2. **Project Manager:** Lt-Col. Daniel Paquette, P.Eng., M.Eng., CEA, CD
Tel: (613) 945 7456 Fax: (613) 998 1061 E-mail: Paquet.DA@forces.ca

3. **Does the applicant hold the necessary property rights?**
Yes, the project is being performed within the Department of National Defence reserve.

4. **Is the applicant an 'operator' for another company (i.e., the holder of the property rights)?**
**If so, please provide letter of authorization.**
No.

5. **Duration of the Project**
**[ ] Annual**
**[ ] Multi Year:**
**If Multi-Year indicate proposed schedule of on site activities**
**Start:** _____ **Completion:**_____

## CAMP CLASSIFICATION

6. **Type of Camp**
**[ ] Mobile (self-propelled)**
**[X ] Temporary**
**[ ] Seasonally Occupied:** _____
**[ ] Permanent**
**[ ] Other:**_____

7. **What are the design population of the camp and the maximum population expected on site at one time? What will be the fluctuations in personnel?**
The average population of the camp will be approximately 15 people including site investigation staff, camp outfitters, bear monitors and an equipment operator. The work will be completed in stages with the maximum number of people on site not likely to exceed 20 people.

8. **Provide history of the site if it has been used in the past.**
During the 1950's and 60's the site was an operational Distant Early Warning (DEW Line) radar station, designated CAM-5 and operated by the Department of National Defence. In 1992 the site was permanently closed as part of the North Warning System upgrade. No other development of the area is recorded.

## CAMP LOCATION

9. **Please describe proposed camp location in relation to biogeographical and geomorphological features, and water bodies.**
Figure 1 is an NTS Map segment showing the location of the CAM-5 site in relation to topographical features of the area. A key map shows the location of the site to other DEW Line sites in the Canadian Arctic. Figure 2 is an overall site plan of the station showing the sites proximity to Committee Bay, Bagnall Lake and other minor water bodies on site. The camp will likely be located in the vicinity of the airstrip.

10. **How was the location of the camp selected? Was the site previously used? Was assistance from the Regional Inuit Association Land Manager sought? Include maps and/or aerial photographs.**
The site investigation camp will be situated within the DND reserve in a previously disturbed area. The exact camp location has not been finalized at this point, however, it will likely coincide with the location of a previous site investigation camp sited on the airstrip apron. The criteria for camp selection is proximity to the airstrip and access roads, previous disturbance, proximity to potable water sources and shelter and base stability. Figure 1 is a topographical map segment showing the location of the DEW Line site.

11. **Is the camp or any aspect of the project located on:**
**[X] Crown Lands** **Permit Number (s)/Expiry Date:** _____.
**[ ] Commissioners Lands** **Permit Number (s)/Expiry Date:** _____.
**[ ] Inuit Owned Lands** **Permit Number (s)/Expiry Date:** _____.

12. **Closest Communities (distance in km):**
The closest communities to the site are Hall Beach and Igloolik located on the east side of the Melville Peninsula, approximately 180 km and 190 northeast respectively; Pelly Bay on the west Simpson Peninsula, approximately165 km west and Repulse Bay approximately 200 km south.

13. **Has the proponent notified and consulted the nearby communities and potentially interested parties about the proposed work?**
Community input, including community consultations and inclusion of traditional knowledge into the remediation design is a prominent part of the environmental screening process for the DEW Line Clean Up Project (DLCU). Prior to the site investigations a community DLCU committee is established by DND and NTI to facilitate the flow of local knowledge to project team. To accomplish this, the Environmental Working Group (EWG) visits local communities and conducts interviews with local residents, administrators and Hunters and Trappers Orginizations.
Throughout the project, DND has held community meetings to seek input from stakeholders; provide updates on project activities, schedules and project designs; address public concerns; and obtain information regarding local labour and contracting capabilities. Igloolik, Hall Beach

and Pelly Bay were amount the communities visited by the DLCU project team in 1992 and 1993. Additional public consultation meetings have been held in 1994, 1996 and 1997 to provide updates and focus on general DLCU issues. Prior to the commencement of clean up activities at a particular site, public meetings are held in the nearby communities to seek additional community input and answer questions related to the project.

Separate pubic notifications and community meetings are not held prior to the Site Investigations with the exception of tender invitations to outfitting companies and hunting and trapping organizations for camp services and wildlife monitors respectively.

14. **Will the project have impacts on traditional water use areas used by the nearby communities? Will the project have impacts on local fish and wildlife habitats?**
The site investigation is not expected to have any significant impact on traditional water use areas, local fish or wildlife habitats. Appendix C contains a summary table of Environmental Impacts.

## PURPOSE OF THE CAMP

15. ○ **Mining**
○ **Tourism (hunting, fishing, wildlife observation, adventure/expedition, etc.)**
**(Omit questions # 16 to 21)**
●**Other** Conservation, DEW Line Clean Up Site Investigation
**(Omit questions # 16 to 22)**

16. ○ **Preliminary site visit**
○ **Prospecting**
○ **Geological mapping**
○ **Geophysical survey**
○ **Diamond drilling**
○ **Reverse circulation drilling**
○ **Evaluation Drilling/Bulk Sampling (also complete separate questionnaire)**
○ **Other:** _____

17. **Type of deposit:**
○ **Lead Zinc**
○ **Diamond**
○ **Gold**
○ **Uranium**
○ **Other:** _____

## DRILLING INFORMATION

18. **Drilling Activities**
○ **Land Based drilling**
○ **Drilling on ice**

19. **Describe what will be done with drill cuttings?**

**20. Describe what will be done with drill water?**

**21. List the brand names and constituents of the drill additives to be used? Includes MSDS sheets and provide confirmation that the additives are non-toxic and biodegradable.**

**22. Will any core testing be done on site? Describe.**

## SPILL CONTINGENCY PLANNING

**23. Does the proponent have a spill contingency plan in place? Please include for review.**
Appendix D contains a spill contingency plan for the site investigations.

**24. How many spill kits will be on site and where will they be located?**
Fuelling and fuel storage activities will be confined to on location. A complete spill kit, including absorbent materials, personal protective equipment, shovels and containment materials will be kept at the fuel storage location. The camp outfitter will be required to provide and maintain spill kits on site.

**25. Please describe the types, quantities, and method of storage of fuel and chemicals on site, and provide MSDS sheets.**
It is estimated that the camp operation will require a combined total of 4,000 litres of gasoline and diesel fuel. Fuel will be stored in 205 litre barrels in a location situated more than 100 metres from any natural water body or drainage course. MSDS sheets are supplied by the manufacturer at the time of fuel purchase and will be maintained by the camp outfitter.

The site investigation laboratory will also have minor amounts of chemicals used for calibration of investigation equipment and in the analytical process. Any chemicals present will be stored in the manufacturer's shipping container until used and will conform to Transportation of Dangerous Goods legislation. The types and quantities of laboratory chemicals will not be determined until the site investigation requirements have been finalized and MSDS sheets will be available at that time. Samples are not acidified on site.

## WATER SUPPLY AND TREATMENT

**26. Describe the location of water sources.**

It is assumed that the 2002 site investigation camp will utilize the same potable water source as the 2000 site investigation. The potential sources is a river feeding Bagnall Lake adjacent to a former borrow area (See Figure 2, Appendix A). Bagnall Lake may be a second possible source of potable water.

**27. Estimated demand (in L/day * person):**

- ● **Domestic Use:** 4000 litres/day **Water Source:** River
- ○ **Drilling Units:** _____ **Water Source:** _____
- ● **Other:** Laboratory - 1000 litres/day **Water Source:** River

**28. Describe water intake for camp operations? Is the water intake equipped with a mesh screen to prevent entrapment of fish? Describe:**

The water intake point will likely be a former borrow area adjacent to river feeding into Bagnall Lake. The location was chosen due to its proximity to the camp and road access. With similar site investigations water is pumped into a water truck or mobile tank using a small portable pump equipped with screened hoses. The tank is then hauled to camp as needed. No water is returned to source.

**29. Will drinking water quality be monitored? What parameters will be analyzed and at what frequency?**

Drinking water quality is monitored by site investigation personnel at the outset of camp operations. Appendix E contains potable water supply requirements.

Several sources of fresh water at the site were analyzed for potablility during the 2000 site investigation. The investigation found that water collected from Bagnall Lake was acceptable as untreated drinking water and that the stream feeding Bagnall Lake requires treatement to reduce coliform levels. It is likely that water from either source would be treated to reduce coliforms prior to use as potable water. During other site investigations where on-site sources of freshwater have not met potablity standards, drinking/cooking water was flown in and on-site sources were used strictly for washing and lab operations.

**30. Will drinking water be treated? How?**

If required, drinking water will be treatged in accordance with the Health Canada Guidelines for Canadian Drinking Water Quality. Iodine and thermal methods are common on-site drinking water treatments. Potable water may also be flown in as an alternative to on-site treatment.

**31. Will water be stored on site?**

Water will be stored at the camp in a mobile tank.

## WASTE TREATMENT AND DISPOSAL

**32. Describe the characteristics, quantities, treatment and disposal methods for:**

- **Camp Sewage (blackwater)**

Sewage will be buried on site a minimum of 100 m from the camp, any natural drainage course or water body.

- **Camp Greywater**

Greywater from camp operations will be discharged to a greywater pit and buried a minimum of 30 metres from the camp or any natural drainage course or water body.

- **Solid Waste**

Domestic garbage will be incinerated on site and the residual waste will be buried along with the sewage. Any laboratory waste will be containerized and stored in an on site building such as the warehouse for disposal during the DEW Line site clean up.

- **Bulky Items/Scrap Metal**

All excessive fuels, camp equipment and facilities will be removed from the site after completion of the site investigation. Large or cumbersome items that are unable to be removed from the site via a aircraft or that may be required during the subsequent site clean up will be containerized or stored in an appropriate on site building such as the warehouse, unheated vehicle storage or air terminal building.

- **Waste Oil/Hazardous Waste**

It is not anticipated that the site investigation activities will generate hazardous wastes.

- **Empty Barrels/Fuel Drums**

Empty fuel barrels will be removed from site during supply runs or at the completion of the site investigation activities.

- **Other:**

**33. Please describe incineration system if used on site. What types of wastes will be incinerated?**

Domestic wastes (food scraps, packaging, papers, untreated/painted wood and selected plastics) will be incinerated in an enclosed space (steel barrel or other small metal enclosure) located 100 m away from the camp, any site facilities or drainage courses and water bodies. A fire extinguisher will be maintained at the incineration site.

**34. Where and how will non-combustible waste be disposed of ? If in a municipality in Nunavut, has authorization been granted?**

Non combustible waste will be contained and stored in an on site DEW Line building until it can be appropriately disposed of during the subsequent clean up activities at the DEW Line site. Appropriate disposal may mean placement in an on site, engineered landfill or transportation off site to a licensed waste treatment centre in the south.

35. **Describe location (relative to water bodies and camp facilities ) dimensions and volume, and freeboard for sumps (if applicable).**

N/A

36. **Will leachate monitoring be done? What parameters will be sampled and analyzed, and at what frequency?**
N/A

## OPERATION AND MAINTENANCE

37. **Have the water supply and waste treatment and disposal methods been used and proven in cold climate? What known O&M problems may occur? What contingency plans are in place?**
The water supply and waste treatment/disposal methods to be employed during the CAM-5 Site Revisit have been used during previous DEW Line Site Investigations (21 sites within the Canadian Arctic). Appendix D contains contingency plans for the Site Investigations.

## ABANDONMENT AND RESTORATION

38. **Provide a detailed description of progressive and final abandonment and restoration activities at the site.**
All equipment, supplies and materials mobilized to site for the purpose of the site investigation will be removed form the site at the completion of the activities. All test pits will be backfilled and products will be disposed of as previously mentioned.

## BASELINE DATA

39. **Has or will any baseline information be collected as part of this project? Provide bibliography.**
    - ● **Physical Environment (Landscape and Terrain, Air, Water, etc.)**
    - ● **Biological Environment (Vegetation, Wildlife, Birds, Fish and Other Aquatic Organisms, etc.)**
    - ● **Socio-Economic Environment (Archaeology, Land and Resources Use,**
    - ● **Demographics, Social and Culture Patterns, etc.)**
    - ○ **Other:**

Appendix E contains a report entitled Environmental Clean-Up Study of 21 DEW Line Sites in Canada – Volume 17 CAM-5 Mackar Inlet. The report documents the preliminary and baseline

environmental studies carried out at the CAM-5 site. The purpose of the 2002 site investigation is to delineate the environmental impacts on-site in preparation for the remediation design.

A second report included in Appendix E, entitled Project Description for Nunavut Impact Review Board – Clean Up of Fifteen DEW Line Sites in the Nunavut Settlement Area, describes the self directed screening process undertaken by DND for all sites within the NSA .

## REGULATORY INFORMATION

**40. Do you have a copy of**

- **Article 13 - Nunavut Land Claims Agreement**
- **NWB - Water Licensing in Nunavut - Interim Procedures and Information Guide for Applicants**
- **NWB - Interim Rules of Practice and Procedure for Public Hearings**
- **NWTWB - Guidelines for the Discharge of Treated Municipal Wastewater in the NWT**
- **NWTWB - Guidelines for Contingency Planning**
- **DFO - Freshwater Intake End of Pipe Fish Screen Guideline**
- **Fisheries Act - s.35**
- **RWED - Environment Protection- Spill Contingency Regulations**
- **Canadian Drinking Water Quality Guidelines**
- **Public Health Act Camp Sanitation Regulations**
- **Public Health Act Water Supply Regulations**
- **Territorial Land Use Act and Regulations**

**You should consult the above document, guidelines, and legislation for compliance with existing regulatory requirements.**