

P.O. Box 119 GJOA HAVEN, NU XOB 1JO TEL: (867) 360-6338 FAX: (867) 360-6369 ຼຼລວ້ ΔL ፫ ሊትና ቴበLትዣ NUNAVUT IMALIRIYIN KATIMAYINGI NUNAVUT WATER BOARD OFFICE DES EAUX DU NUNAVUT

July 9, 2007 NWB File No: 3BC-UMA0000

Dr. Brooke Milne Department of Anthropology University of Manitoba Winnipeg, Manitoba R3T 5V5

Dear Dr. Milne,

Re: Application for Water License for Archeological Field Project Small Tent Camp near Mingo Lake

The Nunavut Water Board (NWB) received the above water license application from Indian and Northern Affairs Canada on June 18, 2007. The NWB understands that the purpose of the water license is to establish a small tent camp to conduct an archeological field project for a four week period commencing July 2, 2007.

The NWB appreciates receiving your application. In consultation with Indian and Northern Affairs Canada, and without setting a precedent, at this time the NWB is prepared to consider this use of water as domestic use. This decision is made solely on the basis of the unique facts of your application, including: the short duration (4 weeks), small camp size (10 or fewer personal tents), and the small volume of water (less than 100 m³ per day) for the sole purpose of personal sanitation and consumption. Accordingly, a water license is not required provided the camp is operated in a manner consistent with the Attachments for Land Use Permit Application accompanying your water license application (attached) and any screening conducted by the Nunavut Impact Review Board.

The Board notes that you have requested a water license for a multi-year term. As part of a review of water regulations in Nunavut, domestic use is currently under review. Accordingly, we request that you monitor the actual use of water and disposal of waste to ensure an accurate application in subsequent years.

We also advise you to contact the NWB at least 90 days before you intend to resume your project next year to determine if a water license is required for subsequent years.

Sincerely,

Dionne Filiatrault, P. Eng., Acting Executive Director

cc: Michael Nadler, Indian and Northern Affairs Canada

Attachment

#### **Attachments for Land Use Permit Application**

**Project Title:** Culture Continuity and Change in the Interior of Southern Baffin Island: Revisiting the Pre-Dorset/Dorset Transition.

**Principle Researcher:** Dr. Brooke Milne, Department of Anthropology, University of Manitoba

### 1. Outline project activities, their necessity, their expected duration, and alternatives.

Activities for the proposed project will include site testing, site excavation, and limited site survey. All subsurface site testing and excavation will follow standard archaeological procedures for sites in the Arctic. Each site will be mapped and photographed prior to excavation to take note of surface features and artifact distributions. Test units ranging in size from  $50~\text{cm}^2$  to  $2~\text{m}^2$  will be established. A small number of larger excavation areas (up to a maximum of 5~x~5~m) will also be opened. All soil removed from these units will be screened to ensure all cultural materials are collected. Upon completion of all subsurface activities, the units will be backfilled and the surface vegetation replaced so as to return the feature to its original state prior to investigation.

The survey component will involve walking the land using a systematic approach where selected areas (e.g. an esker or shoreline) will be examined at set intervals of five to ten meters depending on the nature of the ground surface and any visible artifact distributions. The locations of all surface features (e.g. tent ring, cache) will be recorded using GPS. They will also be mapped for future reference and photographed for documentation purposes.

These activities are important for expanding our present understanding of how the interior region of southern Baffin Island was used over time by all peoples who lived on the land. At present, there is little information available to examine how the earliest populations some 4000 years ago used this region as part of their seasonal round. Only seven Pre-Dorset sites are presently known in the interior of the island, and of these, only two have been intensively excavated (Milne 2003, 2005; Stenton 1986). We plan to more fully investigate two of these other sites (LdFa-1, LeDx-42), which will help us to determine how these earliest populations were exploiting the inland ecosystem and how these patterns may have changed over time

The duration of this project will be approximately 4 ½ weeks. The project will stay within the specified research plan outlined in our Nunavut Archaeologist Permit Application. Only those areas and sites approved for investigation by the Department of Culture, Language, Elders, and Youth will be examined.

#### 2. Schedule of activities including both operations and shutdown.

The proposed project is scheduled to start June 29, 2007 (weather permitting). All crewmembers will depart from Iqaluit and stay in the field until July 30, 2007. I expect to spend the entire field season excavating the LdFa-1 and LdFa-12 sites, which are located on the northwest shore of Mingo Lake. These sites were tested by Milne in 2004 and radiocarbon dates confirm they were occupied by both the Pre-Dorset and later

Dorset cultures. Once excavation of these sites is complete, the crew will return to Igaluit.

## 3. Provide a preliminary plan showing the location of the lands proposed to be used in the exercise of the Right.

The work for this project will principally focus on two archaeological sites: LdFa-1 and LdFa-12 (see attached maps and aerial photo). The sites are located roughly 1 km apart from one another on the north western shore of Mingo Lake. Total area covered by the sites, our campsite, and the area required for landing a Twin Otter plane is estimated to be approximately 5 hectares. Because the area that will be used is concentrated along a narrow strip of shoreline, it is difficult to precisely estimate in hectares.

Currently, there are no permanent buildings, campsites, trails, lines, air landing strips, fuel or supply storage sites, waste disposal sites, ponds, reservoirs, or other works and places in the area proposed for use, and there are no plans to construct any of the above for the purpose of this project. This project is very small in overall scale and will be restricted to setting up a single base camp from which excavation activities at the site will be organized.

Dr. Douglas Stenton worked in this region throughout the 1980s and early 1990s and has recorded all topographic features and archaeological sites in the areas of use proposed for this project. The activities to be conducted for this project will not interfere with any areas of biological interest such as calving grounds, nesting areas, and so forth.

#### 4. Provide a list of structures that will be erected.

Structures to be erected for this project are limited to personal camping tents (maximum of 10), an equipment tent, and a main cook tent. These structures will be secured using ropes, rocks, and tent pegs.

#### 5. Equipment to be used.

No motorized vehicles or pumps will be used for this project. Excavations will be conducted using trowels, and shovels on rare occasions. The crew will be screening all of the excavated soil to ensure that small sized cultural materials are recovered. The only mechanized equipment will be a single 1000 watt Honda generator used for recharging computing and surveying equipment, and a satellite phone.

#### 6. Fuels to be used.

Propane will be used for cooking and heat. Approximately 8 cylinders will be brought in for use. Two five-gallon jerry cans of gasoline will be used to power the generator. Because our camp is not scheduled to be moved during the field season, we will establish an in-site cache to securely store the fuel. This cache will be away from day-to-day activities so that the cylinders and jerry cans are not disturbed or displaced.

#### 7. Fuel spill contingency plan.

All fuel containers will be stored away from any bodies of water. Likewise, transfer activities will be undertaken away from lakeshores, creeks, or rivers. The kind of

fuel being used evaporates very quickly and should not pose an immediate threat to the surrounding area in the unlikely event of a spill or leak. Propane will be used by attaching connection hoses from the tanks to the stoves. Similarly, gasoline will be transferred from the jerry cans to the generator using an appropriate funnel. Because of the small quantities of fuel being used and the restricted nature of transfer activities (i.e. from container to stove via fuel line), the potential for a large-scale spill is precluded.

### 8. Proposed disposal methods for garbage, sewage, hazardous wastes and other projects.

All garbage produced by the crew during the project that is combustible will be burned, and that which cannot be burned will be transported out of the field for disposal in Iqaluit. Latrines will be dug into the ground at the base camp to contain human waste and will be buried when no longer in use. Grey water will be deposited on the ground surface near the latrines. No hazardous wastes will be produced by this project.

### 9. Methods of transportation.

The crew will be flown into the area via a twin otter charter. Once on the ground, we will be hiking for the duration of the project. We will also make use of a small fibreglass canoe. No motorized vehicles will be used.

#### 10. Components of the environment close to the project.

The project will be in close proximity to the northwest shore of Mingo Lake. There are caribou, waterfowl, foxes, wolves, and char in this area. In 2004, we also encountered two polar bears. To the best of my knowledge, none of the areas proposed for use in this project are immediately adjacent to calving grounds, nesting areas, or spawning grounds.

There are glacial moraine features in the area as indicated on Stenton's maps, and the NTS maps. There are no permanent communities present nearby. Extensive surveying conducted by Stenton in the late 1980s and early 1990s documented the existence of archaeological and historical sites in the area. This project will also document additional archaeological sites should they be found.

# 11. Summary of potential environmental, wildlife, and resource impacts, and the mitigation measures to be used.

The impact to the local environment, wildlife, and resources will be minimal to non-existent given the nature and small scale of this project. We will not be hunting while on the land for the duration of the project. Biodegradable soaps will be used in restricted quantities and all efforts will be made to set up our camp well away from archaeological/historical sites to prevent any chance of unintentional disturbance.

#### 12. Reclamation costs for advanced exploration activities.

There will be no advanced exploration activities in the area of use for this project. Therefore, reclamation costs for such work are not applicable in this instance.

#### 13. Proposed reclamation plans for the project.

All structures, garbage, and other items brought in for use during this project will be removed upon completion of the proposed work. In accordance with standard archaeological procedures in the North, all excavated sites and test areas will be backfilled and re-sodded once excavations are complete in order to return the surface of the site as close to its original condition as possible. This includes replacing the soil, grading the area back to its natural contours, and replacing any surface vegetation.