DRDC Atlantic 3741-15ej (PM NWTDP)

26 March 2009

Mr. Brian O'Mara Land Administration Office Indian and Northern Affairs Canada P.O. Box 2200 Iqaluit, NU XOA 0H0

Dear Mr. O'Mara

DRDC Atlantic 2009 Annual Report for Operations At Gascoyne Inlet Camp, Devon Island, Nunavut

References: A. 2009 Scientific Research License 0203809R-M

B. Land Use Permit N2008N0027

C. Field Inspection report LUP N2008N0027 dated 17 September 2009

DRDC Atlantic is using a camp established in the 1960's by the Department of National Defence's Defence Research Establishment Pacific at Gascoyne Inlet on Devon Island, Nunavut. This renewed use concerns the Northern Watch Technology Demonstration Project; a multi-year project to demonstrate a surveillance capability for the Government of Canada and for the Department of National Defence.

Summary of 2009 Activities

There were two separate activities at the Gascoyne Inlet Camp in the summer of 2009. The first activity was for the refurbishment of camp facilities including repair of buildings, erection of a new bunkhouse, removal of the propane toilet system, installation of a water purification and heating system, and installation of washrooms and showers. The refurbishment activity was conducted between 25 June and 16 July 2009 and was performed by an eight person team of DRDC employees. The second activity period ran from 30 July through 4 September and included installation and testing of the underwater array system, construction of the camp bear fence, construction of a fuel berm with two spill response kits, and more building refurbishment. Installation of the underwater array was supported by CCGS TERRY FOX and her ship's boats. This second team included seven DRDC staff and two contracted employees (camp security and cook).

In May and June 2009, tenders were posted for bear watch and construction workers as well as a camp manager and a camp cook. These tenders were posted on the

PWGSC MERX in accordance with existing contracting and hiring regulations. There was no response from local people as private individuals.

Work Plan for 2010 and following years

The Northern Watch project's mandate and schedule have changed and will necessitate a revision to the Land Use Permit and Scientific Research License for 2011 through 2014. The plan for 2010 is preliminary work to support the major undertakings planned for the camp in 2012.

By way of introduction to the revised project, the Northern Watch project will demonstrate a surveillance capability of the Barrow Strait over a 365 day period between August 2012 and August 2013. The project is also planning an optional demonstration between August 2013 and August 2014. The surveillance demonstration system will be unmanned, semi-autonomous, and remotely controlled through a satellite system connection to one of the DRDC centres.

In 2010, the intention is to send a small DRDC team to open the camp and conduct maintenance in August. The main activity will involve a team of military divers who will assist DRDC staff in clearing a gravel build-up at the underwater end of the existing foreshore pipe. The divers will also install an extension to the underwater end of the pipe to mitigate annual gravel deposits from the nearby seasonal stream. The team will then pull the three existing underwater cables ashore through the pipe.

Wildlife Log

A wildlife log and a wildlife deterrence log are enclosed with this report.

Photographs of the DRDC Gascoyne Inlet camp

Nineteen pictures of the camp, camp structures, incinerator, fuel berm, and airstrip are enclosed. These photographs represent the current state of the camp. The second last photograph is view of the camp in 2007 and the final picture represents the camp in the early 1970's.

Compliance with NIRB Terms and Conditions

The DRDC Northern Watch project has endeavoured to comply with all terms and conditions required by the land use permit. At the conclusion of the 2009 DRDC deployment, the following had been accomplished:

- All buildings had been refurbished and scrap material was backhauled to Resolute Bay for disposal
- A forced air garbage incinerator was used to dispose of flammable waste and the ash was backhauled to Resolute Bay for disposal

- The previous propane toilets were removed and replaced by a bio-degradable bag system and the bags were backhauled to Resolute Bay for disposal
- All camp fuel was stored, covered, in an impermeable berm for the winter. The berm material was covered with gravel, large stones and construction brick residue. Two layers of absorbent pads were installed between the berm material and the gravel covering
- All camp building material was left neatly stacked
- The cookhouse was left unlocked and a shovel was left hung up near the door for Hunters and Trappers Association use over the winter
- Water was diverted from the nearby glacial stream, through a 2 inch PVC pipe, to a water treatment system for camp use. A water meter was put on the system
- Prefabricated building material left in the vicinity of Cape Liddon in 2008 was recovered and reused at the main camp
- DRDC staff were briefed on all of the terms and conditions including the archaeological and palaeontology requirements
- No hunting or fishing was conducted by camp staff. All food and food waste were protected from access by local wildlife

In 2010, the project hopes to correct the following deficiencies:

- All DRDC owned or controlled fuel barrels will be marked with DRDC and the land use license number
- Drip trays will be provided under all heater fuel barrels
- A larger supply of absorbent pads will be brought in and both the camp fuel berm and the airstrip fuel point will be better prepared
- DRDC will construct an airstrip fuel storage berm and a couple of fuelling points
- DRDC will collect photographic records of fuel barrels located in the vicinity of the camp but not belonging to DRDC.

Should you have any questions concerning the Northern Watch project or of the Gascoyne Inlet Camp, please contact Bruce Grychowski, DRDC Northern Watch Project Manager, (902) 426-3100 ext 227, e-mail bruce.grychowski@forces.gc.ca.

Yours truly,

N. McCoy Deputy Project Manager Northern Watch Technology Demonstration Project Defence R&D Canada - Atlantic

Enclosures: 3

Wildlife Deterrence Operations Log, 3 August – 1 September 2009 Animal Wildlife Sighting Log, 3 August – 1 September 2009 DRDC Camp Photographs

CC: Mr. R. Barry
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