10 April 2024

Nunavut Water Board
PO Box 119
Gjoa Haven, NU X0B 1J0

References:
*CIRNAC Permit* *N2021N0007*
*NIRB File No.* *08DN056*
*NPC File No.* *150276, 150292*

Dear Representative,

**Re: Application for approval for the use of water or deposit of waste without a licence for the DRDC Northern Watch Technology Demonstration Project**

Defence Research and Development Canada (DRDC) is requesting approval for the use of water or deposit of waste without a licence at the Gascoyne Inlet Camp site for the Northern Watch Technology Demonstration (NWTD) Project. The camp is a key element of the DRDC's arctic research capability in support of research and development needs of the Department of National Defence (DND) and the Canadian Armed Forces (CAF.)

The main research program presently supported by the Gascoyne Inlet camp is the Defence of North America program. This program is a multi-year program, part of which is focused on surveillance in maritime Arctic locations. An approval (8WLC-NWT2324; Motion # 2023-WL-009) was previously issued for the 2023 iteration of the NWTD Project on 13 June 2023. This application can therefore be considered a request for renewal if so permitted and appropriate.

The DRDC NWTD Project uses less than 1 $m^3$ per day of water, all sewage is transported off-site to an approved sewage lagoon, and greywater is screened and returned to the land via a loose gravel surface.

The DRDC NWTD Project will entail Gascoyne Inlet Camp and research activities and marine activities including the Recovery of Northern Watch Array, the Seabed Survey of Gascoyne Inlet for Long-Term Arctic Infrastructure Monitoring, the Sonobuoys Deployment, and the Oceans Network Canada Ocean Observatory Upgrade. Marine activities will be executed or supported by DRDC work boats and Canadian Coast Guard vessels as scope requires.

The DRDC also intends to set up and test a small, sailboat-style reverse-osmosis water treatment system to determine the feasibility of providing fresh water to the camp through a larger system in the future. This would include a small saltwater intake hose and a brine discharge hose near the shoreline. It is a similar system that would be used aboard ships to provide fresh water, but on a much smaller scale. The Nunavut Water Board is requested to confirm if there are specific requirements to implement the trial system.

Should you require any additional information please do not hesitate to contact me.

Sincerely,

Patrick Sangster

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Defence Research and Development Canada / Government of Canada
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