2011 Annual Report to the Nunavut Water Board

Licensee: Department of National Defence – 1 Canadian Air Division

Licence: 3BC-ALT1015 Type "B"

Location: Canadian Forces Station Alert, Ellesmere Island,

Qikiqtani Region, Nunavut.

Report submitted by: Department of National Defence –

8 Wing/Canadian Forces Base Trenton – 8 Wing Environmental Management,

31 March 2012

Executive Summary

The 2011 Annual Report to the Nunavut Water Board (NWB) is a requirement under Licence Number 3BC-ALT1015 Type "B", Part B, paragraph 1. This is the second Annual Report to be submitted for Canadian Forces Station (CFS) Alert, Nunavut. The Licence was issued on August 4th, 2010, to the Department of National Defence (DND) – 1 Canadian Air Division (1 Cdn Air Div), Winnipeg, Manitoba. As 8 Wing – Canadian Forces Base (CFB) Trenton, Ontario, oversees CFS Alert, 8 Wing Trenton will be filing the Annual Report on behalf of 1 Cdn Air Div.

For 2011, the daily water usage at CFS Alert was 155 cubic meters. This usage is below the 185 cubic meters daily water usage allowed by the NWB Licence. The total annual quantity of water usage was 56,486 cubic meters.

The revised Operation and Maintenance (O&M) Manual for CFS Alert was approved by the NWB (Motion No. 2011-11-26) on September 26th, 2011. Revisions to the O&M were not required at the time of this Annual Report submission.

Hazardous waste was backhauled from CFS Alert in 2011 for disposal outside of the Territory of Nunavut in the Province of Ontario. Direct Line Environmental Services Corporation, Pickering, Ontario, was contracted by the Department of National Defence to dispose of assorted hazardous wastes containing: waste batteries, battery ashes, battery acid, asbestos, waste fire retardant foam, and waste mercury containing items. Non-hazardous domestic wastes produced from CFS Alert were directed to the designated landfills (Main Station Landfill & Millionaire's Dump). All sewage and waste water was directed to the Sewage Terrace System.

A spill event of 260 Litres of Ultra-Low Sulphur Diesel (ULSD) occurred on April 13th, 2011, at CFS Alert. The Spill Contingency Plan was immediately employed by Alert staff and the spill was reported by 8 Wing Environmental Management to the Northwest Territory-Nunavut (NWT-NU) Spill Report Line; Nunavut Water Board (Aboriginal Affairs and Northern Development Canada, AANDC) Inspectors, Mr. P. Kusugak and Mr. A. Keim; and, an Environment Canada (EC) Enforcement Officer, Mr.

C. Didham, on that same day. During site clean up, 49 cubic meters of fuel contaminated gravel (at 790 ppm concentrations) was excavated and placed into the Landfarm Treatment Facility for biological remediation treatment.

CFS Alert was inspected by the Inspector from Aboriginal Affairs and Northern Development Canada (Mr. A. Keim) and the Environment Canada Enforcement Officer (Mr. C. Didham) on July 20th and 21st, 2011. Summaries of corrective actions taken by DND in regards to the Inspector's Directions are contained in this Annual Report.

The sampling requirements for the 2011 CFS Alert Monitoring Program were fully implemented as all monitoring program stations were sampled during runoff season (June). Subsequent runoff or ground seepage sampling could not be conducted in July due to summer evaporation and the inherent polar desert climate. During the August sampling campaign, the short summer seasonality was quickly returning to winter conditions, only two sampling stations had produced sufficient water volumes for sampling and analysis. Winter conditions had returned to Alert by September, the weather conditions had ended practical sampling at the monitoring stations. Continuous effort in timing and planning is being made to ensure a successful 2012 CFS Alert Monitoring Program to reflect DND's positive commitment to demonstrating compliance to the NWB Licence.