

## **2014 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,  
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### **Executive Summary**

The 2014 annual report to the Nunavut Water Board (NWB) is a requirement under Licence Number 3BC-ALT1015 Type “B”, Part B, Paragraph 1. This annual report is for Canadian Forces Station (CFS) Alert, Nunavut. The Licence was issued on August 4<sup>th</sup>, 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 is filing the annual report on behalf of 1 Cdn Air Div. As the Licence will be expiring on July 31<sup>st</sup>, 2015, a renewal application is being submitted (separate from this Annual Report).

For 2014, the average daily water usage at CFS Alert was 406 m<sup>3</sup>. This usage is above the 185 cubic meters daily water usage allowed by the NWB Licence. The daily water usage amount being reported is identical to the daily intake amount of raw water from the source at Upper Dumbell Lake. It should be noted that a large portion of this usage water is directly returned (raw and untreated) to the source concurrently to the intake process, the average return amount was 288 m<sup>3</sup>/day. This constant circulatory (return) flow of the raw water prevents freezing damages to the water pipelines. The average daily water consumption amount was 118 m<sup>3</sup>. The total annual quantity of water used in 2014 was 148,034 m<sup>3</sup>.

The Quality Assurance & Quality Control (QA/QC) Plan within the Operation and Maintenance (O&M) Plan for CFS Alert, Nunavut, was revised and has been submitted in this annual report submission. The QA/QC Plan was revised as DND had retained a new contracted service laboratory.

Hazardous wastes were backhauled from CFS Alert in 2014 for disposal outside of Nunavut in Ontario. Assorted hazardous wastes included: waste asbestos tiles, batteries, glycol, and transmission fluid. All backhauled hazardous wastes were properly disposed by external contractors arranged by DND. 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 were directed to the Sewage Terrace System.

There was one spill event in 2014 that was reported to the NT-NU Spill Report Line on December 15, 2014. The spill involved the release of 600 L of ethylene glycol from a heat recovery pipeline system that had corroded. A detailed spill report was produced to detail the event and follow up actions; this was directly submitted to the Inspector from AANDC, the Enforcement Officer (Environment Canada), and the NWB.

The sampling requirements for the 2014 CFS Alert Surveillance Network Program were implemented as the majority of monitoring program stations were sampled during runoff season (June). Subsequent runoff or ground seepage sampling could not be fully conducted in July and August due to typical summer evaporation of the polar desert climate. By late-August, winter conditions had returned earlier than anticipated, effectively ending the sampling campaign. Only one monitoring program station (runoff or ground seepage) could be sampled in July and August. Continuous effort in timing and planning will be made to ensure a successful 2015 CFS Alert Surveillance Network Program reflecting DND's positive commitment to demonstrating compliance to the NWB Licence.