

2015 Annual Report to the Nunavut Water Board

Licensee: Department of National Defence – RP Ops - ADM (IE)
Licence: 8AC-ALT---- Type “A”, (formerly 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 2016

Executive Summary

The 2015 annual report to the Nunavut Water Board (NWB) is a requirement under the expired 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 4th, 2010, to the Department of National Defence (DND) – 1 Canadian Air Division, 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 the new DND licensee, Real Property Operations (RP Ops) - Assistant Deputy Minister of Infrastructure & Environment (ADM(IE)). A renewal and amendment application was submitted in 2015 under 8AC-ALT---- Type “A”.

For 2015, the average daily water usage at CFS Alert was 408 m³. 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. 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 320 m³/day. This constant circulatory (return) flow of the raw water prevents freezing damages to the water pipelines. The average daily water consumption amount was 88 m³. The total annual quantity of water used in 2015 was 149,324 m³.

Hazardous wastes (glycol) were backhauled from CFS Alert in 2015 for disposal outside of Nunavut in Ontario, by external contractors. Non-hazardous domestic wastes produced from CFS Alert were directed to the designated Main Station Landfill & Millionaire’s Dump. All sewage were directed to the Sewage Terrace System.

The Inspectors from Indigenous and Northern Affairs Canada (INAC) completed a Water Licence Inspection from 29 June to 01 July 2015. A Compliance Plan in response to the inspection is submitted within this Annual Report.

The sampling requirements for the 2015 CFS Alert Surveillance Network Program were implemented from June to August. Complete runoff or ground seepage sampling could not be fully conducted in June and July and all of August due to typical summer evaporation of the polar desert climate and the poor water retention properties of

the tundra. 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 June and July. Continuous effort in timing and planning will be made to ensure a successful 2016 CFS Alert Surveillance Network Program reflecting DND's positive commitment to demonstrating compliance to the NWB Licence.