

## **Executive Summary for the Water Licence Amendment Application**

**Licensee:** Department of National Defence – 1 Canadian Air Division  
**Licence:** 3BC-ALT1015 Type “B”  
**Location:** Canadian Forces Station (CFS) Alert, Ellesmere Island,  
Qikiqtani Region, Nunavut.  
**Submitted:** Department of National Defence – 31 March 2014

An amendment application for the Nunavut Water Board (NWB) licence number 3BC-ALT1015 at CFS Alert from the Department of National Defence (DND) is enclosed. This application contains a completed Supplemental Information Guideline for Landfarms with other supporting documents.

Two amendments are proposed within this application because:

1. a modification to the Waste Disposal System was completed in 2013 that included the construction of a new Land Farm Treatment Facility at ALT-10; and
2. water use monitoring at ALT-1 has revealed a higher actual water usage amount than permitted by the licence.

### **Amendment #1 – New Landfarm Facility (ALT-10)**

A new landfarm treatment facility was constructed during the summer of 2013 at the Day Tank Fuel Farm (Lat: N 82°29'58.0"; Long: W 62°21'16.0"). The landfarm dimensions are 13 m by 29.5 m with a capacity of 500 m<sup>3</sup>. The intended purpose of the landfarm is to remediate hydrocarbon impacted soils. The final record drawings, stamped by a Professional Engineer, are attached in this application. DND would like to request NWB recognition and addition of this landfarm facility as “ALT-10 Landfarm” for the Surveillance Network Program (SNP). The effluent discharge criteria and conditions proposed are identical to those of the existing Landfarm Facility at ALT-11 (3BC-ALT1015 Part D, Items 11, 12, 13, and 14; Part J, Items 7, 8, and 9).

### **Amendment #2 – Water Use**

As identified in the Water Use Inspection visit on July 10<sup>th</sup> 2013 by Aboriginal Affairs and Northern Affairs Canada (AANDC), the water usage amount at CFS Alert is above the licence limit of 185 m<sup>3</sup>/day. The actual average metered usage amount is 639 m<sup>3</sup>/day, which includes the actual average return flow amount of 497 m<sup>3</sup>/day. The actual average consumption amount by CFS Alert is 143 m<sup>3</sup>/day. These values are actual observations based on flow meter results. In previous years, DND calculated usage as the difference between intake and return amounts, as rationalized in the formula: Usage = Intake amount at source – Return amount at source. DND would like to propose increasing the following amounts to maintain a maximum potential Station consumption of 185 m<sup>3</sup>/day:

- a. Increase the water use limit to 700 m<sup>3</sup>/day;
- b. Increase the return water amount to 515 m<sup>3</sup>/day.