

CFS Alert Compliance Plan - Follow Up on 2013 Inspection Report

Year: 2013

References: A. AANDC, Water Licence Inspection July 11, 2013.

B. AANDC Letter RE: DND Response to Water Use Inspection conducted at CFS Alert July 11, 2013, dated October 29, 2013.

A. Background

CFS Alert was inspected by the Aboriginal Affairs and Northern Development Canada (AANDC) Inspector on July 10 & 11, 2013. This Compliance Plan will outline how DND (8 Wing/CFB Trenton – Environmental Management) will ensure compliance deficiencies are addressed in the coming 2014 summer work season at CFS Alert.

B. Water Usage

Total water usage at CFS Alert is monitored using flow meters since September 2011. In July 2013, the Inspector determined that the daily usage was more than permitted by the licence.

In previous years, DND had considered “water use” to be the actual amount of water utilized (consumption) which excluded the amount of raw (untreated) water returned to the source based on the following calculation: Usage = Intake water – Raw Return water amounts. This ‘Raw Return’ is the quantity of raw untreated lake water that is returned to the source in a parallel water pipeline to the Intake pipeline that spans 2 km in length. The significant purpose of the Raw Return is to provide constant circular flow and pressure within the water pipeline network system, this to prevent damages from winter freezing and pressure changes.

As the usage in 2013 exceed the Licence Daily Water Use Limit, DND is submitting this Water Licence Amendment to increase the water use (intake) and return quantity limits. DND is requesting the NWB to consider increasing the water use quantity to 700 m³/day and increasing the water returned to source (return quantity) to 515 m³/day; this will maintain a potential daily consumption maximum limit of no more than 185 m³/day. For 2013, the actual (metered) average daily water intake quantity was 639 m³/day; the actual average daily water return quantity was 497 m³/day; and, the average daily water consumed was 143 m³/day.

B. Solid Waste Disposals

At the time of the July Inspection, the CFS Alert Incinerator Facility was offline due to maintenance. This work was completed and reported the Inspector and NWB on 7 August 2013.

C. Specific Compliance Work Anticipated or Completed in 2013/2014

Fuel Storage - Lead in secondary containment berm waters

Elevated Lead levels have been observed in freshet at CFS Alert fuel tank secondary berms for two years (2012 and 2013). This has resulted in DND to utilize a portable water filtration system that is capable of filtering lead. All possible sources (gravel and fuel) have been investigated as recommended by the Inspector. The results indicate that the likely source for lead may be elevated background lead presence in the shale bedrock used as construction material (gravel).

Fuel Storage - Secondary containment at refuelling points

As identified in the AANDC letter dated October 29, 2013, the Inspector has recommended the installation of secondary containment at all fuel dispensing points. DND has acquired and sent CFS Alert three (3) new portable secondary containment berms to be used during fuel transfer activities. This was completed and the Inspector was informed on 28 November 2013.

Fuel Storage - Secondary containment at ALT-8

DND - 8 Wing Construction & Engineering has been engaged to seek an assessment and, if required, a repair solution to the secondary containment at ALT-8; this work is in progress. DND will further continue with the 10-step Federal Contaminated Sites Action Plan at the location down gradient of ALT-8.

D. Continuation of Environmental Compliance Efforts

To demonstrate continuing efforts to bring CFS Alert into compliance, DND will continue to implement and maintain existing environmental stewardship, hazardous waste disposal, solid waste disposal activities, and the Surveillance Network Program, etc.

Finally, it should be noted that rectifying the issues with any solution may take more than one summer season given the logistical challenges in operating within the High Arctic, and that the construction period is dependent on weather conditions. The snow-free construction (summer) period at CFS Alert typically lasts approximately for 1-2 months. For 2013, CFS Alert had returned to winter conditions earlier than expected by mid-August.