



8 Wing Environmental Management  
8 Wing Trenton  
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1262-1 (A/WEnvO)

16 Sept 2011

Phyllis Beaulieu  
Manager of Licensing,  
Nunavut Water Board  
P.O. Box 119  
Gjoa Haven, Nunavut X0B 1J0

Distribution List

**NOTIFICATION OF PROPOSED MODIFICATIONS TO THE CANADIAN FORCES STATION (CFS) ALERT WATER SUPPLY FACILITIES**

Ref: A. CFS Alert's Nunavut Water Board (NWB) Water Licence Number: 3BC-ALT1015.

B. AANDC Inspection Report, July 2011.

Dear Ms. Beaulieu,

8 Wing Trenton Environmental Management Office, on behalf of the Department of National Defence (DND), would like to submit for an approval by the NWB the following proposed modifications to CFS Alert's Water Supply Facilities in support of Part F Para 1 of the Ref A. The modifications are detailed in Table 1.

**Table 1 - List of Modifications to CFS Alert Water Supply Facility**

Modification	Description	Project Start Date (estimate):	Comments
Return Line Modification (Water Pipeline)	Return Line was modified so Treated/chlorinated water is no longer included in the return water line.	Already completed prior to AANDC Inspection July 2011.	To be reported to NWB. No discharge of treated /chlorinated water to Water Source. (See below)
Installation of Water Flow Meters (Water Pipeline)	As previously mentioned to the NWB in the 2010	October 2011	None

	Annual Report, the installation of flow meters on the raw water line, the return water line, and the consumption line.		
Water Treatment Process Systems (Water Plant Operation)	Installation of new micro sand filtration, UV primary disinfection, chlorine post disinfection with analyser controller	Fall/Winter 2011	None
Level Controls on the Reservoir Tanks (Water Plant Operation)	Monitor water levels in the Reservoir Tanks located at the Water Treatment Plant.	Fall/Winter 2011	None
Replacement of Pump House Piping (Water Pipeline)	Replacement of Steel to Sch. 80 PVC piping.	Fall/Winter 2011	None
Replacement of Water Pumps (Fresh Water Pump House)	Installation of pad mounted centrifugal pumps to replace current pumps.	Summer 2012	None

### **Project Start Dates**

As projects in the High Arctic are impacted by many factors (logistics, transportation, supply, weather, etc.), the project start dates are best estimates. Unforeseen circumstances may cause delays ranging from weeks to entire seasons. Given this factor, I have included the estimated project start dates (above) to these modifications.

### **Return Line Modification**

Previously, this Return Line contained warm treated potable water (with chlorination) along the water distribution pipelines to prevent the intake from freezing. Between the time of issuance of the Licence in 2010 and July 2011, a modification was completed to isolate the return line water from the treated potable water. The Return Line now carries warm raw water along the distribution system to prevent freezing damages and no longer uses any potable (chlorinated) water in the process.

Should you have any further questions or comments, please do not hesitate to contact the undersigned.

Yours truly,

A handwritten signature in blue ink, appearing to read 'Andrew Tam', with a long horizontal flourish extending to the right.

Andrew Tam, MSc, PhD (Candidate)  
Acting Wing Environmental Officer  
8 Wing Trenton Environmental Management Office

Distribution List

Major Robert Tucker, 8 Wing Alert Management Officer – DND, 8 Wing Trenton  
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