

## **Appendix B**

### **Monitoring Program Station No. ALT-2 & ALT 3**

**Year:** 2011

**Month:** August

**ALT-2 Name:** Sewage Terrace Outfall Point

**ALT-3 Name:** Sewage Terrace Final Discharge Point

**Description:** Effluent Quality Results.

#### **Notes:**

The Alert Sewage Terrace System is being monitored through a parallel research study program administered by Environment Canada in Ontario; Sir Sandford Fleming College in Ontario; and 1 Canadian Air Division in Manitoba. The Alert Sewage Terrace System is managed by 1 Canadian Air Division. Water quality samples are collected and analyzed by the Centre for Alternative Wastewater Treatment (CAWT) at Sir Sandford Fleming College (CALA member #3628) and the Wastewater Technology Centre (WTC) at Environment Canada (CALA member #1390).

#### **Summary of Results:**

**ALT-2** is located at the Sewage Terrace Outfall Point.

As per **Part J, Item 5**, ALT-3 is located at the weir box as the Sewage Terrace Final Discharge Point. In reference to **Part D, Item 9**, for ALT-3, the results are summarized:

<b>Parameter</b>	<b>Maximum [] of any Grab Sample</b>	<b>Results from ALT-3 (Weir box, Location ID# 11-B5-3)</b>
<b>(cBOD5)</b>	80 mg/L	31 mg/L
<b>Total Suspended Solids</b>	70 mg/L	<b>231 mg/L</b>
<b>Oil and Grease</b>	5 mg/L & no sheen	3.7 mg/L & No visible sheen
<b>pH</b>	Between 6 and 9	8.01

The Total Suspended Solids (TSS) exceeded the maximum allowable concentration. At the time of this Annual Report submission, Fleming College is still preparing the 2011 CFS Alert Constructed Wetland Assessment Report. This Report is expected to be delivered to 1 Canadian Air Division in Manitoba at the fiscal year end (31 March 2012). The interim draft report is included in this Appendix.

In July 2011, the Inspector issued an Inspector's Direction for the Department of National Defence to implement the outstanding sampling program requirement for ALT-3 for no less than 30 days. DND implemented the Inspector's Direction and the results of the sampling program will be contained in the 2011 CFS Alert Constructed Wetland Assessment Report mentioned above. DND (via contractors) attempted to mitigate against continued erosion and flow of sediments and raw effluent down gradient into the ocean by partially repairing the upper terraces in ALT-3 before the weather conditions had restricted physical activities.