

Appendix D

Monitoring Program Stations No. ALT-8-9-10-11

Year: 2012

Description: Discharge from Tank Farm Secondary Containments ALT-8-9-10 & Landfarm Facility ALT-11.

Results:

The Department of National Defence (DND) intended to discharge water from the Fuel Tank Farm Secondary Containments at ALT-8 and ALT-9 in June 2012. At least 10 days notice was provided to the Inspector and Nunavut Water Board, the email chain is attached below.

Water samples from within the secondary containments of ALT-8-9-10-11 were collected and analyzed; analytical results are attached in Appendix E.

Two samples were taken at ALT-8 (sample identifications: ALT-8 and ALT-8.2) to better represent the freshet quality due to the large size of the Secondary Containment facility.

DND had no intentions to discharge any water from Fuel Tank Farm Secondary Containment at ALT-10:

Freshet in ALT-10 did not meet the Effluent Quality Limits of Part D, Item 11; the Toluene concentration (2.2 ug/L) had exceeded the 2 ug/L maximum concentration of any grab sample and the Phenols concentration (30 ug/L) had exceeded the maximum concentration of any grab sample (20 ug/L). As there was little volume of water in the secondary containment of ALT-10, DND did not discharge the water and allowed it to naturally evaporate under Alert's desert summer conditions.

DND had no intentions to discharge any water from the Landfarm Containment at ALT-11 (Biopiles):

The water located in ALT-11 is re-applied to moisten the contaminated soils contained within the Landfarm during the summer season, as part of the biological remediation treatment process.

Notes:

From: Andrew Keim [mailto:Andrew.Keim@aandc-aadnc.gc.ca]
Sent: Tuesday, 3, July, 2012 17:39 PM
To: Tam A@CFB Trenton WENV@Trenton
Cc: +Alert 8 Wing Env@ADMIN@CFSAAlert; Kovanen DL@CFB Trenton WEnv@Trenton; Craig DA@CFB Trenton WENV@Trenton; licensing@nunavutwaterboard.org
Subject: Re: 3BC-ALT1015 Alert Berm Water Discharge Notice

Acknowledged, Proceed as required.

Please ensure that any and all discharges are diffused at the final discharge location so to avoid rutting, sedimentation and damage to permafrost.

Thanks

Andrew Keim
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>>> <Andrew.Tam@forces.gc.ca> 7/3/2012 3:09 PM >>>

Good afternoon Andrew:

<<3BC-ALT1015 Certificate of Analysis 2012 ALT8,8.2,9,10,11.pdf>>

As per our earlier conversation today and as per Nunavut Water Board (NWB) Licence 3BC-ALT1015, Part D, Para. 14, the Department of National Defence (DND) would like to provide notice of our intent to discharge water from the Fuel Storage Facilities at CFS Alert, Nunavut.

DND would like to discharge water from the following secondary containment berms:

ALT-8 - Airfield Tank Farm Secondary Containment;
ALT-9 - Upper Tank Farm Secondary Containment.

Attached are the Certificate of Analysis containing the water analytical results for 3BC-ALT1015 sites: ALT-8, ALT-8.2, ALT-9, ALT-10, and ALT-11.

Please note that due to the large area of ALT-8, I have collected two samples labelled: ALT-8 from the southern portion of the Airfield Tank Farm and ALT-8.2 from the northern portion of the Airfield Tank Farm.

In addition, please note that ALT-10 (Day Tank Secondary Containment) does not require discharging, and ALT-11 (Landfarm, aka Biopile) does not require discharging as the berm water is re-used to re-hydrate the contaminated soils located within the Landfarm during summer.

For the discharge of berm water at ALT-8 (including ALT-8.2) and ALT-9, the analytical results does not exceed the limits of the Water Licence Effluent Quality Limits (Part D, Para 11).

If there are no concerns, DND will proceed with discharging water from the secondary containments in 10 days from this notice.

If you have any questions or concerns, please do not hesitate to contact me.

Finally, may I please request a confirmation of receipt for this email?

Regards,

Andrew Tam, M.Sc., Ph.D. (Candidate)
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