



Aboriginal Affairs and
Northern Development Canada

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Affaires autochtones et
Développement du Nord Canada

<http://www.aadnc-aandc.gc.ca>

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August 6, 2013

Hamlet of Tuktoyaktuk
P.O. Box 120
Tuktoyaktuk, NT X0E 1C0

Attn: Davie Krengnektak, Foreman

**RE: August 2013 EMERGENCY DECANT OF SEWAGE LAGOON
HAMLET OF TUKTOYAKTUK**

Dear Mr. Krengnektak,

As per our conversation a couple weeks ago, your email dated August 6, 2013 and our subsequent discussion this evening it is apparent there is a need for the Hamlet of Tuktoyaktuk (the 'Hamlet') to conduct an "emergency decant" of the Sewage Lagoon (the 'Lagoon'). The purpose of this decant is to lower water levels in the Lagoon, thus preventing structural failure of the berm and uncontrolled discharge as the level of the Lagoon is high and a breach of the wall is probable.

To consider this discharge Aboriginal Affairs and Northern Development Canada (AANDC) reviewed the Hamlet's Water Licence N7L3-0714 (the 'Licence') and the Lagoon water samples taken by the Hamlet during July 18 and 25, 2013 at Surveillance Network Program (SNP) station 0714-02 (Lagoon). Specifically the samples were analysed as per the Licence requirements and included pH, TSS, and BOD, Oil and Grease (Hexane Extractable Material) and Fecal Coliforms but CBOD was missing.

Review of the initial sample results dated July 18, 2013 indicated that pH was 9.51 and above the effluent quality standards of a pH between 6 – 9 as required by the Water Licence. On July 25, 2013 a subsequent sample was taken and resulted in a pH of 9.58 which was beyond the approved discharge criteria. All other parameters are not a concern and are below Maximum Average Concentrations as described in the Licence.

Given that the water level in sewage lagoon is high enough for a potential breach of the sewage lagoon berm and that historical samples have sometimes resulted in high pH levels it is not entirely likely that the pH levels might improve before there is a breach in the sewage lagoon berm. It is important to note that the other parameters are below Water Licence criteria.

In light of the above review AANDC **APPROVES** the “emergency decant” as per part D, section 5 which states: “The Licensee shall ensure that the Sewage Disposal Facilities are maintained and operated in such a manner as to prevent structural failure”.

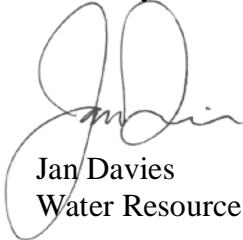
Furthermore, this emergency decant is approved under the following conditions:

1. Provide a detailed log of pump run time including pump rate and total daily discharge in cubic meters (m³);
2. If the decant has not commenced, a further sample from SNP station 0714-2 will be required by the Hamlet for review by AANDC prior to decant;
3. The Hamlet must adhere to all other applicable conditions in the Licence. Specifically, those conditions are found in Part D, Items 1 through 7 and the Surveillance Network Program (SNP) section;
4. **The Hamlet is to discharge from the Lagoon as long as needed to achieve the Freeboard limit of 1.0 metre as required by the Water Licence in Part D: Conditions Applying to Waste Disposal.**

Furthermore, as a reminder, as per the SNP, section 1, **the Hamlet is required to take samples once during discharge.** The samples are to be analysed as per the Licence requirements which includes: BOD, CBOD, TSS, pH, Fecal Coliforms, and Oil and Grease.

If you have any questions or concerns regarding the enclosed, and/or if additional information is required please contact me at (867) 777-8909.

Sincerely,



Jan Davies
Water Resource Officer

Cc: Conrad Baetz, District Manager, North Mackenzie District, Inuvik, NT