

Nunalingni Kavamatkunillu Pivikhaqautikkut Department of Community Government Services

Ministère des Services communautaires et gouvernementaux

Colin Saunders Acting SAO, Hamlet of Pond Inlet Box 180, X0A 0S0, Baffin Region, Nunavut.

November 09, 2012

Subject: Sewage Lagoon: Dye Test

Dear Mr. Saunders,

I am writing you to inform the status of the Sewage Lagoon and the results of the investigations:

The surface water flow always runs towards the lower elevation which is normal. The surface runoff easily drains at the northern side towards the sea. Unfortunately the surface runoff accumulates in a ditch at the toe of the southern berm of the lagoon and forms a water pool each summer. It was suspected that this pool water exfiltrates through the berms during each summer.

We have received numerous complaints from the Hamlet and also from the AAANDC (INAC) inspector that the Sewage Lagoon is leaking in summer. Since 2007, water samples were tested from the inside of the sewage lagoon and outside water pool of this lagoon in the accredited lab in Ottawa. Those test results do not support that the lagoon is leaking.

An engineering consulting firm, exp. services Inc., was hired in 2011 for physical inspection of this facility and their inspection reports are not in favour for leakage.

However, another engineering consulting firm, Arktis Piusitippaa Inc., was hired to conduct a DYE test this summer 2012 and again the test did not show any indication of leakage.

The slope of the northern berm of the lagoon was settled last year, which needs to get repaired to bring back the full integrity of the lagoon berm structure. Hamlet is suggested to take care of it.

From all the investigations conducted so far on the sewage lagoon, it is concluded that the lagoon is working fine with sound structural integrity without any kind of seepage or leakage through the berms.



בתרה לכל שלה אריך להיהלי Nunalingni Kavamatkunillu Pivikhaqautikkut Department of Community Government Services Ministère des Services communautaires et gouvernementaux

It is observed that a narrow and shallow drain has been developed from the summer water pool located adjacent to the toe of the southern berm of the sewage lagoon towards the natural Tundra which receives raw sewage during decanting of the lagoon in the summer. It is recommended to deeper this existing drain using a Hydraulic excavator sloping towards natural Tundra so that surface runoff cannot stand anymore and accumulate to form a water pool at the toe of the southern berm of the lagoon.

The following documents are attached:

Appendix A: Plan showing recommended surface drain

Appendix B: Lab test results from 2007 to 2011

Appendix-C: exp's technical report on slope stability, July 18, 2011 Appendix-D: exp's Review on Wastewater Facility, January 21, 2011

Appendix-E: ARKTIS's Dye Test Report, November 02, 2012

Appendix-F: INAC inspection report July 26, 2011

I am recommending sending this letter along with the above documents to NWB and copy to AAANDC (INAC) inspector requesting to close the statement on the Lagoon Leakage in his inspection report dated July 26, 2011.

If you have questions or concerns, please contact me at any time.

Sincerely,

Bhabesh Roy, M.A.Sc., P.Eng.

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