

שפינ נפרני אתנ סתינאבתה

Nunaliit Iluani Kavamat, Ingilrajuliqijillu Havakviat
Department of Community Government, and Transportation
Ministère des Collectivités et du Transport

By Facsimile: 867-360-6369

July 25, 2001

Phillipe di Pizzo Executive Director Nunavut Water Board P.O. Box 119 Gjoa Haven, Nunavut X0B 1J0

Dear Mr. di Pizzo:

Nunavut Water Board JUL 25 2001 Public Registry



As you may be aware, the Government of Nunavut (GN) and the Hamlet of Pond Inlet received an Inspector's Direction from Environment Canada concerning what Environment Canada referred to as an imminent release of a deleterious substance (sewage seeping from the north berm of the lagoon) into fish bearing waters (Eclipse Sound).

As a result of the Inspector's Direction, a series of intercept ditches and berms were constructed on the downstream side of the lagoon to intercept any possible seepage from the lagoon. Liquid collected could not enter fish bearing waters and had to be pumped back into the lagoon. Unfortunately, the intercept ditches also intercepted all runoff (snow melt, rainfall and melt water from the active layer) from the drainage area. Therefore, the lagoon is approaching capacity (in fact, the 1 meter freeboard stipulation of the licence is likely not present).

Furthermore, the significant hydraulic head behind the lagoon berms is causing a phenomenon known as "piping" where liquid behind the lagoon berm is actually being pushed directly through the lagoon berms in certain locations. As this occurs, fine particles within the lagoon berms are being washed away, leading to degradation of lagoon berm integrity.

The Hamlet wishes to decant the lagoon to ensure the continued integrity of the berms thus preventing a catastrophic failure and to facilitate dredging, inspection and remediation. The problem is that the decant structure is also located on the north berm and all flow from the north berm is being intercepted by the ditches. Therefore, decant must involve

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pumping from the lagoon via a series of pumps (one 4 inch and two 2 inch pumps are locally available) onto the tundra (additional overland treatment) and eventually into Eclipse Sound. Local terrain and available materials will dictate the exact location of the decant. In addition, the use of nozzles will be investigated to examine the possibility of obtaining additional treatment through aeration.

Given that the community still requires the use of a sewage lagoon, the Department of Community Government and Transportation (CGT) has sought and obtained the approval of the Department of Health and Social Services for the interim use of the old abandoned lagoon. Prior to interim use of this lagoon, an investigation as to its' capacity and integrity will be undertaken.

These works have been undertaken in urgent response to Environment Canada's Inspector's Direction ordering the prevention of deposit of a deleterious substance into fish bearing waters. A part of the scope of work of our consultant is to include testing of the liquid collected by the intercept ditches (and by extension this would be the liquid entering Eclipse Sound) to determine compliance with the water licence effluent criteria. It is expected that these criteria are being met. In addition, a test to determine if the liquid is a "deleterious substance" will also be undertaken. As the GN agency responsible for funding municipal sewage treatment infrastructure, it is unsettling to know that the possibility exists to be in compliance with the water licence, yet still be discharging a "deleterious substance" and thus be subject to prosecution under the Fisheries Act.

An investigation as to the cause of the problem is ongoing and preliminary conclusions for remediation include the installation of a liner in the north berm (and a portion of the east berm if possible). A report detailing the issues and preliminary plan for remediation will be available on or about August 10, 2001. This report will be distributed to all stakeholders as required.

In conclusion, on behalf of the Hamlet of Pond Inlet and related to being in compliance with the Environment Canada Inspector's Direction, permission to decant the lagoon is urgently requested (operation to begin July 25, 2001). We have had several telephone conversations with your staff (Dionne Filiatrault), Indian and Northern Affairs staff (Phillipe Lavallee and Paul Smith) and the Environment Canada Inspector (Wade Comin) concerning the issues. Initial reaction from Indian and Northern Affairs (Paul Smith) was that the proposed decant would actually be classified as

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Please contact me as soon as possible (867-975-5341) should you require any additional information.

Sincerely

From-CGT

Douglas R. Sitland, P.Eng. Manager, Capital Programs

cc: Rhoda Katsak, Hamlet of Pond Inlet (899-8940)
Wade Comin, Environment Canada (975-4645)
Phillipe Lavallee, Indian and Northern Affairs (975-4560)
Jordan DeGroot, Fisheries and Oceans (975-8039)
Robert Eno, Sustainable Development, GN (975-5980)
Bruce Trotter, Health and Social Services, GN (975-5705)
Doug Garson, Justice, GN (975-6349)