



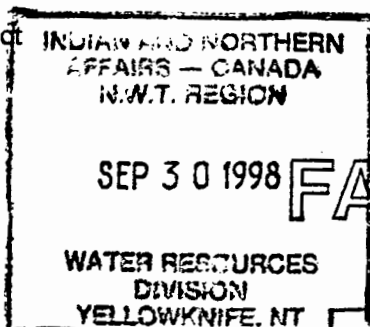
Waters

DIAND Nunavut District
Box 100
Iqaluit, NT
XOA OHO

September 21, 1998

Mr. Ed Collins
Environment Canada
Environmental Protection Branch
Yellowknife, NT

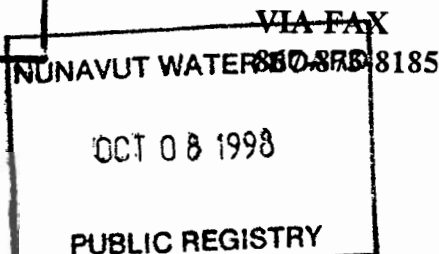
Dear Mr. Collins,



COPY

Your file Votre référence

Our file Notre référence
B9545-5-N6L4-0779



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NWB

Discharge of Raw Sewage to Ocean - Rankin Inlet.

A situation has come to light that I believe Environment Canada should be made aware of as it may relate to a violation of the *Fisheries Act*.

During the Rankin Inlet water licence inspection last week (September 18, 1998), I had a tour of the water supply/sewage treatment system with Dennis Althouse, manager of this system for DPW&S (GNWT).

There is a history of operational problems with the sewage treatment plant in Rankin, but a series of recent events warranted this letter to Environment Canada.

Background

The sewage treatment system consists of a screening plant. Raw sewage enters the plant, accumulates in a tank until it is full and then is processed through a rotating screen which filters out all particles greater than 1 mm in diameter. Processed sewage is then discharged into Prairie Bay via a deep water discharge pipe.

This screen was recently replaced. Prior to the current screen, one with a mesh size of 0.4mm was used. This screen had a tendency to clog and cause the system to back up and flood the treatment plant. When this happened, the system would automatically go into a by-pass mode and discharge raw sewage into Prairie Bay.

Current Situation

There are two issues that came to light:

1. About 4 weeks ago, work was being done on the main door of the plant (where screened material is loaded into trailers for transport to the landfill). The door was further damaged and resulted in it becoming inoperative for a period of 2 weeks. During that time, because screened material could not be collected, the system was manually set to by-pass. Raw sewage was discharged into Prairie Bay for this entire period. No spill report was made. Because Rankin is on a utilidor service the amount of sewage discharged on a daily basis would approach 1,000m³.

Canada

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2. High pressure water is used to clean the rotating screen. This water is stored in the plant (ca. 2,000 gal tank). The Hamlet does not deliver water on Wednesdays and this means that every Wednesday, the treatment plant runs out of water and the system is by-passed until the tank is filled again on Thursdays.

There are two feeds into the plant (from 2 sub-divisions). The treatment system was not designed (with 0.4 mm screen) to handle feed from both sub-divisions at the same time (because it was never supposed to happen). Of course it did happen and the plant would flood and by-pass. Since the screen has been replaced, the plant can handle simultaneous feed.

Water Licence

The water licence is issued to the Hamlet, but the Hamlet does not have any direct involvement with the water supply or treatment system on a daily basis - the GNWT is the owner and operator of the system. The Hamlet (and copied to DPW) was directed, in the last inspection report cover letter (April 9, 1998), to report all by-passes. DPW has failed to do this.

The sewage treatment system is able to meet the discharge requirements of the licence (BOD, 120 mg/L, Oil and Grease 5 mg/L, and Suspended Solids 180 mg/L) when flow is consistent.

Future

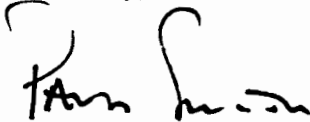
MACA has indicated that there will be capital funds made available (at some point) to further upgrade the system. However, this may be a number of years from now and until this happens, the current system is of marginal capability and continues to suffer from some on-going operational problems.

The Department of Public Works has failed to report these releases of raw sewage into the ocean and has once again been verbally advised that they are to do so. A written follow-up will be made to this respect.

I believe that the precedent has been set with the Iqaluit court case of 1991 in which the GNWT (DPW&S) was found guilty of depositing a deleterious substance in fish bearing waters.

I will be out of the office until October 5, 1998 should you wish to further discuss this matter, however, this office stands ready to provide whatever assistance it can.

Sincerely,



Paul Smith
Water Resources Officer
Nunavut District