



March 03, 2015

Shawn A. Trépanier,
Senior Administrative Officer
Hamlet of Pangnirtung
PO BOX 253
Pangnirtung NU X0A 0R0

Dear Mr. Trépanier:

On February 25, 2015, Aboriginal Affairs and Northern Development Canada (AANDC) Water Resource Officers, Field Operations received a request from Mr. Ralph Rudiger, Director of Community Development and Mr. Bhabesh Roy, Municipal Planning Engineer, both of the Government of Nunavut, Department of Community & Government Services (CGS) to extend the sewage 'bypass' for the sewage treatment plant in the Hamlet of Pangnirtung until May 31, 2015, on your behalf due to operational issues.

A similar request was made on December 11, 2014, specifically related to the 'seeding' of the bacterial agents required to treat waste water and meet acceptable water quality discharge standards.

Background

As quoted directly from the accompanying memorandum, Project # OTT-00204430-AO/File No: 3.1, dated February 25, 2015:

"Through the start-up period, the amount of flow being treated daily was gradually increased with the remainder bypassing the plant. The current operation of the plant has the treated daily flow approaching 100%. There have been operational "glitches" that have required the plant to stop full treatment (e.g. control interconnects not working), but these are generally of short duration. The fact that they are occurring is not surprising as events similar to these can occur during the start-up period.

Currently, one of the membrane treatment trains is off-line due to a failed pump. Replacement pumps are in transit and should be at the plant in early March. The remaining treatment train is capable of treating most (if not all) of the current average daily flows, but there could be circumstances where the total daily flow could exceed the treatment train capacity. Depending on the water level in the Equalization Tank (which can provide a reasonable volume of short-term storage), there may, or may not, be a bypass event. Until the failed pump is replaced, there is the possibility that a portion of the total daily flow could bypass the plant.

Also at the plant, the influent submersible pumps and piping systems require replacement due to general wear and tear (the pumps are worn out which has reduced their pumping capacity as well as allowing them to clog more frequently and the piping has become corroded and is leaking). However, to complete the work, this section of the plant will have to be taken off-line. This will mean that no wastewater can be accepted at the plant. To reduce/minimize the complete bypassing of the plant, it may be possible to have the contractor complete the work on weekends (have no truck delivery) and work in the hours the trucks are not hauling.

Once this work is completed, the plant should be capable of treating 100% of the municipal wastewater generated within the Hamlet. With the upcoming pumping and piping changes, and due to "growing pains" in general, the Temporary Bypass condition should be extended a further three (3) months to the end of May. During



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this period, other than for the pumping and piping changes, it is not the intent to bypass the plant; however, an occasional bypass event may occur.”

Determination

It has been determined by AANDC that there is ongoing work required in the Hamlet of Pangnirtung to repair pumps and/or piping systems required to optimize the waste water treatment procedure. AANDC also recognizes the due to location of the Hamlet of Pangnirtung there may be delays in receiving the equipment required to repair any items that may have failed and also that plant optimization and/or bypasses procedure may occur up to the May 31, 2015.

The Hamlet of Pangnirtung is required to minimize any bypasses to the waste water treatment plant while repairs are conducted and if possible, *“have the contractor complete the work on weekends (have no truck delivery) and work in the hours the trucks are not hauling....[t]o reduce/minimize the complete bypassing of the plant.”*

It is also important to note that Environment Canada has again been notified about the potential of bypasses occurring in the Hamlet of Pangnirtung. Environment Canada has not provided authorization to conduct the bypass but has requested that notification be posted in the Hamlet of Pangnirtung while any bypass is being conducted.

Please be aware that the Hamlet of Pangnirtung, **exp.**, Government of Nunavut, Department of Community & Government Services and all contractors or employees involved with any bypass process in the Hamlet of Pangnirtung may be held responsible where acts or omissions that do not exercise due diligence occur. This includes but is not limited to uncontrolled spills or discharges of waste water or other substances.

This letter does not exempt those persons or parties conducting the bypass in the Hamlet of Pangnirtung, or the project in whole from following or meeting other relevant legislation and it must be understood that one or more federal or territorial agencies may stop the bypass prematurely where events occur that require early intervention.

This is the second time CGS on behalf of the Hamlet of Pangnirtung has notified AANDC of the requirement for a three (3) months bypass procedure at the waste water treatment plant. AANDC would like to encourage all parties and contractors involved in repairing and successfully operating the waste water treatment plant to expedite all work on site within this final notification for extension.

Sincerely,

Robert Savard
Water Resources Officer
Aboriginal Affairs and Northern Development Canada
Iqaluit, Nunavut.

cc. Erik Allain, Manager, Field Operations, AANDC Iqaluit.
Ralph Rudiger, Director of Community Development, CGS
Bhabesh Roy, Municipal Planning Engineer, CGS
Curtis Didham, Enforcement Officer, Environment Canada
Phyllis Beaulieu, Nunavut Water Board