

Richard Dwyer

From: Phyllis Beaulieu
Sent: Friday, March 04, 2011 3:00 PM
To: Richard Dwyer
Subject: FW: Pond Inlet - Lagoon
Attachments: Sewage Lagoon Pond inlet.docx

-----Original Message-----

From: Andrew Keim [<mailto:Andrew.Keim@inac-ainc.gc.ca>]
Sent: Tuesday, March 01, 2011 11:32 AM
To: Wilma Pike
Cc: Bhabesh Roy; Bernie MacIsaac; Peter Kusugak; Phyllis Beaulieu
Subject: Re: Pond Inlet - Lagoon

Ms. Pike,

Thank you very much for your call yesterday and for following up with me today Via E-mail. I will do my best to provide you some answers here.

To recap,

The Municipality of Pond Inlet is currently discharging effluent to the "emergency lagoon".

The reason for this was provided as; "There is an expectation of work being done this coming year to address the leakage from the lagoon".

However, the Municipality was recently directed by Bhabesh Roy (GN) to stop this activity and to resume discharge to the Lagoon in Pond Inlet.

You have asked the Inspector, what the Municipality should do in this case and how the Municipality to proceed to remain in compliance with the License and the Act.

In answer to this question I note the following;

The current Water license issued the Municipality of Pond Inlet (3BM-PON1012) states that on March 4th, 2010 a commitment was made to undertake a geotechnical investigation in the summer of 2010 to assess the structural integrity of the sewage lagoon. This was made by the Department of Community and Government Services Government of Nunavut.

During the Inspection of 2010, with the SAO (Mike Richards), Municipal foreman and Mr. Bhabesh Roy of C&GS, Government of Nunavut, the Inspector was informed that the GN was planning to hire a consultant to come to Pond Inlet to identify the extent of the leak and put together both a report and recommendations on fixing the deficiency (in compliance with the issued License).

It was the Inspector's understanding that this work would be carried out in 2010, in compliance with the License, and at that time a decision not to issue an Inspector's Direction was made based on the information that positive steps toward addressing this issue were being made by the Municipality and the GN. It is now clear that this work has not been undertaken by the GN/ Municipality.

During our last conversation (28/2/2011) you informed me of these facts and I had asked you to follow up with Mr. Bhabesh Roy and determine what his plans were to address this issue and to provide that information to both our offices and the Nunavut Water Board.

Please also note that I was not informed that the Municipality had diverted the discharge of Municipal effluent to the Emergency lagoon.

My recommendation to the Municipality at this is as follows;

The Municipality is to ensure compliance with the issued Water license which states;

PART D: CONDITIONS APPLYING TO WASTE DISPOSAL

1. The Licensee shall direct all Sewage to the Sewage Disposal Facilities.

The Municipality should therefore return to depositing the Municipal Effluent in the 2005 lagoon.

Please note, I have attached a 2009 report submitted by CG&S staff that details what is wrong with the Lagoon and provides recommendations on repairs. This report was submitted prior to the commitment to having a consultant prepare an additional report on the issue.

I hope this answers your questions and provides you a bit more clarity on what occurred prior to your arrival in Pond Inlet. Please do not hesitate to contact our offices at any time in the future for assistance in addressing these issues.

Respectfully,

Andrew Keim
Water Resources Officer
INAC Nunavut Regional Office
P.O. Box 100
Iqaluit, Nunavut X0A 0H0
NEW Email: Andrew.Keim@inac-ainc.gc.ca
Phone: (867) 975-4289
Fax: (867) 979-6445

>>> "Wilma Pike " <hamletpond_asao@qiniq.com> 3/1/2011 9:52 AM >>>
Hi Andrew,

Just wondering if Bhabesh had gotten in contact with you and where do we stand on this issue?

Wilma

Sewage Lagoon Pond inlet.

A report arrived to our office on Wednesday from the SAO in Pond Inlet regarding the sewage lagoon leaking through the berm.

This initiate an investigation into the statement. We visited the location a half hour later and found an area on the East berm of the lagoon that water is coming to the surface in between the rock, the water colour and odour strongly suggest that we have a leak from the sewage lagoon.

Conclusion: The lagoon has started to leak because the level of the water has reached a point where the liner is not welded or overlap properly by the original contractor or the liner is not existent in that area.

Options :

The sewage lagoon need to be repaired, the time to do the work should be next spring, for now the lagoon should be decanted, it our understanding from the meeting with the SAO that INAC has given the permission to decant sometime ago. The community was waiting for some scientist to come from Yellowknife that is the information that the Municipal Engineer Bhabesh Roy has pass along to the Hamlet staff. After the lagoon is decanted the leakage should stop for the year.

During the process of decanting special attention must be given to find at what level of the lagoon the water stop flowing out, that will give an indication where the hole is on the berm. Next spring the cover on the berm will need to be removed scraping the sand until the lined is located find the area that has given out or rupture, anew piece of liner should be place and overlap to secure a containment will be achieve with the repair, then place the material previously removed back in place and add fill as necessary.

The water level by next spring should be low if not special permit will be required from the NWB to proceed with the repair.

Equipment required:

Long reach excavator, compactor. Gravel material, and a liner all existent in the community

Pictures take September 9, 2009



Fig #1

The stream of affluent been spill from the lagoon, lagoon is located across from the road on the side of the picture.



Fig #2

Close up on the stream from fig #1



Fig #3

The spill start to show on the surface from under the rock on the picture



Fig #3

This shows the level inside the lagoon and the high level water mark are evident on the different colour on the berm, this indicate that about 3" to max 6" of water has been spill thought the berm



Fig #4

Show the part of the spill accumulated on a pond adjacent to the sewage lagoon to the south side of the facility.



Fig #5

Second view of the pond to the south side this is a combination of material spill and rain water