From:	Karen Kharatyan
To:	"Carroll,Carl [NCR]"
Cc:	David Hohnstein; Phyllis Beaulieu; Andrew Keim; aglukark@nunavut.ca; Rebekah.Olson@ec.gc.ca; Andrea.Faechner@EC.gc.ca
Subject:	RE: Technical feedback requested for possible option consideration for future use of Eureka Sewage Lagoon
Date:	Monday, September 10, 2012 2:44:21 PM

Hi Carl,

The NWB understanding is that the existing sewage lagoon after being dredged from the sludge and a geotextile liner installed may be including with one of 3 possible sewage treatment technologies as a holding lagoon or holding cell. The NWB believes that there might not be an issue as it will be used for storage of treated sewage waste.

Just a reminder that Part D, Item 14 of the Licence requires un update to the Sludge Disposal Plan if the sludge is removed from the lagoon. I have also noticed that some requirements of the Licence (Part G, Item 1 and Part H, Item 1) are still outstanding.

If you would like to discuss the issue more in detail the NWB would welcome that opportunity. We would confirm the attendance when/if a timing is proposed with a couple of day notice.

Regards,

Karén Kharatyan, Ph.D
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Nunavut Water Board

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From: Carroll,Carl [NCR] [mailto:Carl.Carroll@ec.gc.ca]
Sent: Monday, September 10, 2012 9:35 AM
To: Andrew Keim; Karen Kharatyan; Brian Aglukark
Cc: Phyllis Beaulieu; Olson,Rebekah [NCR]; Faechner,Andrea [Edm]
Subject: Technical feedback requested for possible option consideration for future use of Eureka Sewage Lagoon

Good morning,

The Eureka Sewage Lagoon Recapitalization Project is nearing the end of the planning stage prior to entering the design phase. We have hired a consultant to propose a shortlist of technologies which can be implemented in Eureka in order to treat and dispose of the sewage waste while maintaining the effluent discharge limits stated in the Guidelines for Federal Establishments (see attached). All 3 technologies produce a sludge by-product that must be disposed of on a regular basis. All 3 technologies also produce a daily discharge of treated (clean) effluent. It would not be possible to implement a daily discharge outfall into the

Fjord as it is cost prohibitive, difficult to engineer, and impossible to analyse effluent on a daily basis in Eureka. Therefore, these 3 shortlisted technologies will require a holding lagoon in order to hold the daily treated (clean) effluent until it can be discharged during the summer months.

We would like to know if there is a possibility of using the current sewage lagoon as a holding lagoon for the treated effluent after the sewage is treated by one of the proposed technologies even though the existing lagoon is within 100feet of the Fjord? Prior to such a proposed use, the current sewage lagoon would be dredged of the current sludge, sludge would have to be appropriately disposed of pending analysis of sludge contents, and the lagoon would have to have a geotextile liner installed, along with any other measures deemed necessary by AANDC and NWB.

Should the option of re-using the existing lagoon (once modified as recommended) not be possible, the design would then incorporate the construction of a new single cell retention lagoon for this storage of daily effluent discharge.

Would it be possible to obtain feedback on which options are available for our design criteria from AANDC and NWB technical perspectives, prior to entering the design phase of this project? Perhaps a teleconference with all concerning and pertinent regulatory body representatives (AANDC, NWB, NPC, etc) as required would be beneficial.

Regards,

Carl

<<Summary of Effluent Quality Requirements 2012 .pdf>>

Carl Carroll, FMA/SMA

Property Management Division / Division de la gestion de l'immobilier

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