From:	Carroll,Carl [NCR]
To:	Andrew Keim; k.kharatyan@nunavutwaterboard.org; 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
Date:	Monday, September 10, 2012 9:35:37 AM
Attachments:	Summary of Effluent Quality Requirements 2012 .pdf

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

Corporate Services Branch / Direction général des services ministériels

Environment Canada / Environnement Canada

335 River Road, RM 190

Ottawa, Ontario K1A 0H3

Tel: (613) 990-8376

Fax/Telecopieur: (613) 949-9017

Cell: (613) 282-6618