

File: 804-

February 09, 1998

Nunavut Water Board P.O. Box 119 Gjoa Haven, NT X0E 1J0 Att'n. Dionne Filiatrault, E.I.T. Technical Advisor Fax# (867) 360-6369

Dear Dionne,

RE: Planning Study for Proposed Sewage Lagoon Pangnirtung, NWT

I am submitting to you six copies of the Planning Study report for a sewage treatment facility for the Hamlet of Pangnirtung. If we obtain your approval to proceed with the Project, tenders will be called and awarded early in our next Fiscal Year (commencing April 1st 1998).

The topography of Pangnirtung presents considerable difficulties for locating a sewage lagoon; on one side there is the fiord and on the other side there are the mountain ridges. Since a lagoon requires a fairly large area, few locations are available that are satisfactory. A site which had been selected and approved in 1996, had to be abandoned, due to the potential for wind borne contamination of the water reservoir. The new proposed location is sufficiently far from the reservoir that there is no possibility for contamination by wind borne effluent.

In order to obtain the required area for the proposed lagoon, it is necessary to construct a portion of the granular berm on the tidal flats. One corner of the berm would be connected to an existing rock outcrop that juts up above highwater mark, which would give added structural stability to the structure. Discharge would be released through a gate control valve and a heat traced pipe located on the southern land side of the lagoon. From the release point, it would travel along a rock lined drainage ditch until it is clear of the lagoon, then it would be discharged into the ocean. The intent is to discharge the effluent from the lagoon once a year.

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Access to the lagoon would be by road, which would be constructed following the shoreline for a distance of about 0.6 km., with a nearly level grade and a height of 2 metres above high water mark. The sea side would be heavily reinforced with armour rock to resist wave action and ice pressures. This route essentially follows the location that is used each year to construct the winter haul "ice highway", that is used to access the Community granular pit. Sufficient quality granular material of varying gradation is available at the site, to construct the road and the lagoon.

Meetings have been held with the Hamlet and they are satisfied with the proposed location for the lagoon and road. Should you require additional information or wish to discuss any aspects of the planning Study Report, please contact me at (867) 979-5020 or Fax# (867) 979-4779.

Yours truly,

Tanya Smith

Capital Programs Officer

Municipal and Community Affairs

cc Mike Ferris