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Mr. Bhabesh Roy, M.A.Sc., P.Eng.
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Community Government Services
Baffin Region, Government of Nunavut
P.O. Box 379, Pond Inlet X0A 0S0

via facsimile:
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Response to Comments Arctic Bay Sewage Lagoon, Nunavut

Dear Mr Roy:

We have received and reviewed the comments received from the regulatory agencies on the Arctic Bay Sewage Lagoon submission and offer the following.

Comments were received from the Department of the Environment, Environment Canada and BGC Engineering Inc. The following tables summarize the comments and provide our corresponding response.

Comments from the Department of the Environment

	Comment	Response
1.	The DOE suggest the sampling frequency be once at the onset of decant, once during the decant period and once at the end of decant, totalling three sampling events.	Trow agrees with the benefit of the additional sampling and recommends the Government of Nunavut adopts a three sampling program.
2.	Page 20 of " <i>Design Brief New Sewage Lagoon for the Hamlet of Arctic Bay</i> " states that the effluent quality will guide when the lagoon needs to be desludged. The DOE requests more information on the rate of sludge accumulation and frequency desludging be provided.	<p>A calculation of the rate of sludge accumulation is attached.</p> <p>As shown the total accumulated volume of sludge will not exceed the volume of the dead zone of the lagoon, therefore it is anticipated that the lagoon will not have to be desludged during the 20 year life cycle of the lagoon.</p>

Comments from the Department of the Environment (Continued)

	Comment	Response
3.	Page 20 of the report referenced above stated that the sludge has to be tested prior to disposal. However, it is unclear disposal standard proponent intends to comply with. DOE requests more information regarding standards to be provided.	Prior to discharge the sludge should be tested against any criteria from the solid waste facility. This will probably include hydrocarbons and heavy metals to determine if the disposal may cause leachate problems.
4.	Sludge is suggested to be disposed of in a separated cell at the municipal solid waste site. More information should be provided on sludge disposal procedures, how and when (time of year) will sludge removal occur,	As indicated earlier, it is not anticipated that a desludging operation will be required during the design life of the lagoon, however guidelines will be provided as part of the O&M manual.
5.	Page 16 of the "Design Brief New Sewage Lagoon for the Hamlet of Arctic Bay" indicated decant to start mid to late August and end around mid to late September. As proposed, the sewage treatment facility relies on wetlands treatment. DOE recommends the decant start no later than mid August as there may be limited plant growth and biological treatment available in late September.	Trow concurs with the recommendation and will amend operation schedule in the O&M manual.

Trow's response to the Geotechnical Geothermal Issues summarized in Table 1 of BGC's letter is included on the attached table. To address the issues on the Geothermal Report, raised by BGC Engineering Inc., the report has been revised and reissued. A revised copy has been included in this submission. The comments relating to the Geotechnical report have been address in a separate letter issued by Trow Associates, dated October 27, 2008, a copy of which is included in this submission.

If you have any questions or require additional information please contact Steven Burden at (613) 225-9940 extension 257.

Yours truly,

Trow Associates Inc.



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