

Territories Resources, Wildlife and Economic Development

Kugluktuk, N.T.

January 23, 1997.

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David Porter Licence Administrator Nunavut Water Board P.O Box 119, Gjoa Haven, N.T. XOE 1JO

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RE: NWB2WIN

Mr. Porter:

Thank you for the opportunity to comment on this application. I would also like to thank Dionne Filiatrault for the additional information provided regarding this application. We have reviewed the full package of related correspondence and offer these comments.

## Camp Sewage

The application mentions that latrine pits are treated with an off-the-shelf bacterial additive. We question the rationale for its use. The latrines are being dug into permafrost, in an area where abbreviated summers make decomposition a long process. In addition, most of these pits will probably be backfilled before the end of the 4 year anticipated project life, further cooling the excreta. It is unrealistic to suggest that bacterial additives will significantly contribute to site remediation.

Considering the use of the mulcher in the holding tank of the existing grey water system at Windy Lake, was there any consideration to linking the two systems? Would this treatment have less of an impact than disturbing the permafrost by digging pits? Would streaming grey water and sewage together provide for better overall decomposition without posing a health risk? The use of propane biolets could be also be considered. Whichever option is indeed chosen, a rationale by the proponent is required.

During a site inspection carried out by Departmental personnel August 8, 1996 the Windy Lake grey water treatment equipment was evaluated for its potential at creating a bear attractant from grey water surface discharge accumulations of fat and food particles. There did not seem to be any problems in that regard, however the proponent should take care to change the discharge location slightly over time to ensure that these surface accumulations are not created.

## Environmental Monitoring / Assessment and Screening

The application refers in both Section 7 and 8 to the *Doris Lake Project - Project Description Report*, in order to answer the NWB posed questions. We had an opportunity to review that report while the bulk sampling program was still being contemplated. Attached find our comments on that report, some of which may still be pertinent.

## **Cumulative Impacts**

In addition to the comments provided on cumulative impacts, we feel it necessary to reiterate our concerns as to how this is being assessed by the proponent. We question how the proponent reached the conclusion that these impacts were "N/A at this stage" (Page 21 of the Application). A definition of cumulative impacts is "the combined effects of components of a development or a series of developments and other activities occurring either simultaneously or sequentially, or in an interactive manner" (Federal Environmental Review Office - Initial Assessment Guide, 1986). In order to gauge these types of impacts and for reviewers to assess the veracity of the proponents conclusions, we suggest a more systematic approach. A table should be included that outlines the various types of impacts that may result from each section of the project. This could be followed by a discussion of how these activities may or may not interact to affect various aquatic components.

When answering the question of cumulative impacts deserves the same attention as descriptions of recent monitoring studies. The need for more background assessment information is highlighted by the relative treatment in the application of describing the potential impact of one drill mud additive. Appendix II is 8 pages long with the entire range of the LC test documented.

In providing additional information for the application, the proponent requests clarification of threshold application criteria. I believe this would be useful, and indeed, our office would like to request the same, in order to better review NWB applications.

In conclusion, we find no compelling reasons not to issue this licence, within our Departmental Mandate. We hope that some of the information gaps, and our concern regarding sewage treatment at the camps can assist in this review. If you wish to review any of our comments, do not hesitate to contact me @ 403-982-7240.

Sincerely,

Alex Buchan

Manager, Wildlife and Fisheries - Kitikmeot