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Water Resources Division
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Iqaluit, Nunavut
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February 11, 2002

Rita Becker
Licence Administrator
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NT X0E 1J0

Your file - Votre référence

NWB3CAM

Our file - Notre référence

Dear Ms. Becker:

RE: Water Licence Application, Cambridge Bay

The Water Resources Division has reviewed the water licence application for the above-mentioned undertaking. Although the Hamlet has provided some additional flow data, the application is not considered to be complete at this stage. The Department of Indian Affairs and Northern Development will be coordinating the Environmental Assessment (EA) Screening for this application and a complete application will help to avoid delays in the EA process.

I have reviewed the comments submitted by Greg Cook in March 2001 and have noted that very few of the deficiencies were addressed by the submission of flow data. The Hamlet should be able to provide some wastewater analysis to give additional information on the environmental impact of the sewage lagoon. The DIAND Water Inspector has taken samples in the past and perhaps the Hamlet or Government of Nunavut has taken additional samples for routine analysis.

Several sections of the Supplementary Questionnaire are inadequately completed. For example, there is no information on water use and distribution such as the population of the community on piped or trucked services, or average consumption rates. Trends in past water use and population will help to forecast future demands. The Hamlet sets water use at 57,000 cubic metres/year; however, this has been exceeded in the past. In 1997/1998, the water obtained from all sources was 67,507 cubic metres, future demands should be carefully considered and forecasted with the greatest possible certainty.

It is also questionable that there are no changes required in terms of the water supply despite the fact that water quality is described as being poor in the spring and fair in the

...2

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- 2 -

summer. One would think that the residents of Cambridge Bay would prefer to have excellent water quality throughout all seasons. The Hamlet does not present any options to improve this situation nor do they explain why such options are lacking in the application.

There is also a general lack of explanatory detail pertaining to the sewage lagoon and the solid waste disposal site. The application states that these sites are to be relocated to accommodate the growth of the town; however, no details are provided as to the time frame for the relocation. The CG&T 5-Year Capital Plan allocates the following funds to Cambridge Bay:

	2002/03	2003/04	2004/05	2005/06
<i>Sewage Lagoon</i>	-	\$40,000	\$450,000	\$1,150,000
<i>Solid Waste Site</i>	\$50,000	\$250,000	\$250,000	\$5,000

The values indicate plans for major projects in the next few years and further detail on planned upgrades should be provided. In addition, the Nunavut Water Board should be made aware of such changes well in advance of construction activities at the sites.

As previously mentioned, the maps accompanying this application are unclear and it is very difficult to delineate the specific areas for waste disposal. This information is required to assess the location of the waste disposal sites and water intake. Clear copies should be submitted to the NWB for placement on their FTP internet site.

In many cases, the Hamlet can address deficiencies in the application by ensuring that each section is completed and explained as thoroughly as possible. Where information simply does not exist, this should be stated, in some cases the Hamlet should state if and when that information might be available. A review of past comments should be made to ensure that these issues are resolved by the revised application. Again, a complete application will save time in the EA process and benefit all parties involved in the review.

Should you have any questions or comments, please do not hesitate to contact me at (867) 975-4548 or by e-mail at johnsonmi@inac.gc.ca.

Sincerely,



Michelle Johnson
Kitikmeot/Kivalliq Regional Coordinator

Attach: DIAND Comments, March 2001

Greg Cook, DIAND

Summary of comments on the Cambridge Bay municipal licence renewal**1. Application**

Item 7: Here the Hamlet sets water use at 57,000k m3 per year, while further on (Suppl. Quest're. p19) it is detailed as 68,000 m3 (186 m3 per day). The current licence allows for 70,000 m3 per year. As Annual Reports and/or water consumption logs have not been submitted since 1996, commenting on this crucial aspect of the water licence is quite difficult.

Item 11: (notes N/A)- The Inspector noted that waste oil and hazardous materials (i.e. batteries, etc.) are currently handled by a contractor. If this is not the case, or if a current practice is planned to change, then all entries concerning waste oil and hazardous materials should be entered.

2. Supplementary Questionnaire:

Water Treatment, Item 1 (p.4): Spring water quality is labeled as fair/poor. Does the Hamlet have (or plan) a means of improving the situation?

Water use and distribution, Item 1: If possible, 1997-99 annual reports (including water consumption logs) should be submitted as part of the renewal documentation. As such, comments, and the renewed licence itself, would be more relevant if applied to the current state of the water use and waste disposal facilities.

Water Supply -Modifications, Item 2 (p.5): Are all Hamlet residents satisfied with the springtime fair/poor water quality?

Section 5: Solid Waste Disposal: Item1 (p.9)

-No information is given on the method of disposal for waste oil, used paint, or other hazardous wastes. In addition it was indicated that the municipality had considered a waste reduction or recycling program, but no further information was provided. Information for these two areas should be included in the questionnaire. How is hazardous waste being handled in the community solid waste site? Is contamination from the runoff at the site occurring as a result of improper storage etc?

Solid Waste Disposal - General condition of the solid waste disposal area, Item 1 (p.10): The Hamlet's "Unsatisfactory" entry requires an explanation. Also, it should be noted that the Hamlet has failed to produce, over the entire duration of water licence N4L3-1532, an O&M plan for the waste disposal facilities.

Solid Waste Disposal - Modifications, Items 1-2 (p.11): Again, project descriptions are required.

Solid Waste Disposal-Abandonment and Restoration, Item 1: Nothing is noted, however, in its Cambridge Bay Orphan Waste Site Clean-up Project proposal to EcoAction 2000, the Hamlet

-2-

identified two abandoned waste disposal sites within municipal boundaries.

Inspection and monitoring, Item 1: Nothing is indicated, however, a municipal water licence inspection was carried out on 2000/07/18. The resulting report was provided to the Hamlet, and is included within the NWB's public registry.

Inspection and monitoring, Item 4 (p.12): No is indicated, but Spill report # 98-107 relates to a 4L hydraulic fluid spill (broken line on a water truck) at the water intake building.

Monitoring program, Item 1a: daily should be replaced for monthly.

Monitoring program, Item 1b: SNP Part B, Item 1 of water licence N4L3-1532 indicates that runoff from the waste disposal facilities (SNP station 1532-2) is to be sampled once/year during June. As annual reports have not recently been submitted, it is uncertain whether the Hamlet has undertaken sampling or not.

Sewage disposal: (p.21)

-no information was given as to the amount of freeboard remaining for the sewage lagoon. All that is written here is that it is a natural lake. However the existing licence (Part D.3) states that a freeboard limit of 1.0 metre shall be maintained at all times or as recommended by a qualified geo technical engineer, and as approved by the Board. Hence, the amount of freeboard should be known for lagoon maintenance purposes. If this freeboard is not maintained, spring flooding may result in loss of containment of sewage lagoon contents, and contamination of nearby water bodies.

Item 10 (p.21): This contradicts the comments given further on in the Solid Waste Disposal section

Solid Waste Disposal, Item 7 (p.23): The Briefing notes and capital plan alluded to, ought to be included in the renewal documentation since community growth over/near waste disposal sites imposes, for health considerations, many constraints on the A&R of the sites. Moreover, other than the desire to relocate them, no significant concerns have been noted in regards to any of those facilities.

In general , although the licence is relatively new, the Board should ensure that all clauses are updated if necessary to reflect the most recent or acceptable wordings.

**I N T E R
O F F I C E****MEMO**

To: Greg Cook
Environmental Assessment Coordinator
Water Resources Division

From: Bart Blais

Subject: Municipal Licence Renewal for Cambridge Bay
(File: N4L3-1532)

Date: March 9, 2001

Greg,

INDIAN AND NORTHERN
AFFAIRS CANADA
DIVISION

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SOURCES
DIVISION
OWEN Sound, NT

As the Aquatic Quality Specialist in the Water Management and Planning Section of Water Resources, I have reviewed the material provided as required under the NWT Waters Act Section 11 and/or the Mackenzie Valley Resource Management Act Section 124 and/or the Canadian Environmental Assessment Act Sections 12(3) and 16. I have no objection to my comments being placed on a public registry.

I have reviewed this document and have the following comments:

1. Under section 5 (solid waste disposal) of the Supplementary Questionnaire no information is given on the method of disposal of waste oil, used paint, or other hazardous waste. In addition, it was indicated the municipality had considered a waste reduction or recycling program, but no further information was provided. Information in these two areas need to be included in the questionnaire. How is the hazardous waste being handled in the community solid waste disposal site? Is contamination of the runoff at the site occurring, as a result of improper storage?
2. Under the section labelled Sewage Disposal, page 21, no information was given on the amount of freeboard remaining for the sewage lagoon. All that is written is that it is a lake. Under part D, section 3, the terms of the old licence states: "A freeboard limit of 1.0 metre shall be maintained at all times or as recommended by a qualified geotechnical engineer and as approved by the board.." The amount of freeboard should be known for the purpose of maintenance of the Lagoon. If this freeboard is not maintained, flooding in spring may result in loss of containment of the sewage lagoon, and contamination of nearby lakes and streams.

Any questions please give me a call.

Bart Blais

Bart Blais
Aquatic Quality Specialist
669-2663

c.c Bob Reid, Head, Water Management and Planning