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Sent by email to:

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Resolute Bay Airport Water Licence Application

On behalf of Indian and Northern Affairs Canada (INAC), I am pleased to submit the following comments on the water licence application for the Resolute Bay Airport.

1. Introduction

This submission, on the application by the Department of Community Government and Transportation (CG&T) for a water licence for the Resolute Bay Airport, is submitted on behalf of the Water Resources division of INAC.

This submission will be based on the water licence application received by the Nunavut Water Board (NWB) on December 6, 2001. The *Resolute Bay Airport Landfill 2000 Summary Report* (March 2001), the 2000 *Water Report* (March 2001), and the 2001 INAC *Inspection Report* (September 28, 2001) have also been taken into consideration.

2. Conditions Applying to Water Use

The airport currently receives water from Strip Lake. The water was piped from the lake, but the pipe broke in 1996. Since then, the intake facility at Strip Lake has served as a direct truck fill station. The water is chlorinated before distribution. According to the 2000 *Water Report*, 444 m³ of water was used in the year 2000. There was a maximum of 16 people on the system during that year. The population is expected to remain stable at approximately 15 people for the next five years.

Assuming a 5 year water licence (2003 to 2008), INAC recommends that the annual volume of water pumped from Strip Lake should not exceed 600 m³/year for the term of the licence.

SNP station 1 should be designated as “raw water supply from Strip Lake”, to be measured at the truck fill point. It should be used to measure the monthly quantity of water pumped from Strip Lake.

INAC also recommends the installation of warning signs along Strip Lake indicating that the lake is the source of the airport’s drinking water.

3. Conditions Applying to Waste Disposal

According to 2001 *Inspection Report*, there is a lack of retention time and capacity with the current sewage disposal facility. The water licence application also mentions signs of minor erosion requiring yearly repairs as well as freeboard issues with the lagoon. There is indication that there will be an internal assessment of the lagoon by CG&T engineers, and that changes will be made to the lagoon according to the conclusions of the assessment.

INAC recommends that the report on the internal assessment of the sewage lagoon be submitted to the NWB. The appropriate actions required to fix the sewage disposal facility, if any, should then be undertaken by the licensee within an adequate time frame.

INAC also recommends that SNP station 2 be designated as “raw sewage from the pumpout truck.” Station 2 should be used for the monthly measurement of all sewage disposed of in the sewage lagoon, whether generated by the airport or by the Municipality of Resolute Bay which is added to the airport’s sewage treatment facilities.

Also, SNP station 3 should read as “runoff just below the sewage disposal area.” This should include sampling of the sewage effluent in the area of greatest flow. The sewage effluent at SNP station 3 should be sampled monthly during periods of flow for the following parameters and limitations:

| | |
|-------------------------------|-------------------|
| Total Suspended Solids | 180 mg/L |
| BOD | 120 mg/L |
| Fecal Coliform | 10,000 CFU/100 mL |
| pH | 6 to 9 |
| Oil and Grease | no visible sheen |
| Ammonia | monitor only |

With respect to solid waste disposal, the solid waste is disposed of in the landfill of the Municipality of Resolute Bay. There is therefore no need for conditions regarding solid waste disposal in the water licence, except perhaps to specify that all solid waste must go to an approved solid waste disposal facility (such as an approved municipal facility).

4. Conditions Applying to Abandonment and Restoration

The proponent does not plan to abandon any of their current waste treatment facilities. Should the Municipality plan on abandoning any facility in the future, an Abandonment and Restoration Plan should be submitted to the NWB prior to abandoning any of the facilities.

5. Conditions Applying to Operation and Maintenance

INAC recommends a requirement for an Operation and Maintenance (O&M) Plan for the sewage disposal facility be submitted to the NWB for approval within 6 months of the issuance of the licence.

6. Recommended Terms of Licence

The application form does not include any proposed term of licence for the Resolute Bay Airport. INAC recommends a 5 year term to allow enough time for the airport to establish a consistent compliance record.

Finally, INAC recommends allowing all interested parties to review and comment on the draft licence prior to it being issued. This will allow CG&T to express any reservations they may have at this point. Hopefully, any reservations can be resolved early in the process and minimize any non-compliance issues in the future.

If you have any concerns or questions, please feel free to contact me.

Sincerely,

Original Signed By: Michael Roy

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