

COPY

Reasons For Decision
Water Use Licence MN02-044
Government of Yukon - Ross River

The Yukon Water Board has concluded deliberations pertaining to application MN02-044, which is an application for a Type A licence for municipal undertaking. In June, 2002, Government of Yukon submitted an application to continue to use the existing water supply system, to construct and use a new infiltration pit ("Phase 1") and to construct and use a secondary sewage treatment lagoon ("Phase 2").

Notice of public hearing was provided in accordance with the requirements of the *Yukon Waters Act*. In response, the Board received interventions from

Indian Affairs and Northern Development Canada ("DIAND") and Government of Yukon, Environmental Health Services ("GY").

No requests for a public hearing were received and the Board determined that a hearing would not be held.

On December 13, 2002, the Board received notice from the Applicant that it wished to only proceed with licensing Phase I of the project.

These reasons address only those areas where the licence differs from the application and/or the recommendations of the interveners, or where the Board has determined that further elaboration will be helpful.

Canadian Environmental Assessment Act

Prior to making the licencing decisions, a review of the application pursuant to the requirements of the Canadian Environmental Assessment Act ("CEAA") was undertaken by DIAND, which reached a section 20(1)(a) determination, which is:

"... taking into account the implementation of any mitigation measures that the responsible authority considers appropriate, the project is not likely to cause significant adverse effects. The responsible authority may exercise any power or perform any duty or function that would permit the project to be carried out and shall ensure that any mitigation measures that the responsible authority considers appropriate are implemented."

Term of Licence

The Applicant requested a 15 year licence term. In its intervention, DIAND recommended a 10 year term because of uncertainty relating to Phase II of the project. As Phase II was withdrawn by the Applicant, the Board determined that a 15 year term was appropriate.

Project Schedule

The Applicant did not provide a schedule for the work proposed in the application, and no intervener recommended a schedule, although DIAND recommended that the existing infiltration pit be decommissioned by November 2005. The Board determined that local concerns regarding the existing infiltration suggested that the new infiltration pit should be constructed and commissioned reasonably expeditiously. The Board has set July 30, 2005 as the date by which the new pit is to be put into use. This will provide the Licensee with at least two construction seasons in which to carry out the work.

Decommissioning the Existing Infiltration Pit

The Applicant did not provide details regarding the decommissioning of the existing infiltration pit. A factor in determining the timing of the decommissioning relates to concerns that have been expressed regarding the potential for objectionable odours from the new facility. In its intervention, DIAND recommended that the decommissioning of the existing pit should not occur until at least two years after the start of use of the new pit in order to allow sufficient time to assess the odour issue through a monitoring and assessment program. The mitigation required through the CEAA screening was a delay of one year and the implementation of a monitoring program including documentation of public annoyance. No party provided details of how such a monitoring and assessment program might be carried out. In the licence, the Board has included a requirement for the Licensee to submit the results of a study of the odour issue that includes establishment of baseline conditions prior to the commissioning of the new infiltration pit and assessment of impacts of odours from the pit under various climatic conditions. The study must also include a mechanism for public comment. Decommissioning of the existing pit is not to occur until the Board has received the results of the study and has directed the Licensee to carry out the decommissioning. In addition, the Licensee is required to submit a site reclamation plan as part of the decommissioning and to implement the plan when directed to do so by the Board.

Buffer

In its intervention, DIAND recommended that a buffer of 400 metres be maintained between the new infiltration pit and the nearest residence. DIAND attributed the recommendation to Yukon Health and Social Services, Environmental Health Services; however, the Board received no information from Environmental Health Services to this effect. DIAND also made reference to the publication *Sewage Lagoons in Cold Climates, Environment Canada, 1985*. In its submission, the Applicant referred to a Board practice of requiring separations of 350 metres. The Board has no specific practice in this regard, although buffers in the order of 300 metres to

350 metres have typically been required in similar licences. In reviewing the Application, the Board determined that the available buffer, if both phases of the project were constructed, would be 300 metres. Although the licence only authorizes Phase I, the Board determined that the buffer required by the licence should be consistent with the available space and that it would be reasonable to expect that an amendment to build Phase II might be submitted at some point in the future.

Site Investigation

In its intervention, DIAND expressed concern regarding the limited available information regarding soil and groundwater conditions at the site of the new infiltration pit. The CEAA screening report identified the same issue. The Board concurred with these submissions and has included a requirement for the Licensee to submit details of an investigation to further define soil and groundwater conditions at and around the site of the new infiltration pit and near the Pelly River, and details of groundwater monitoring wells and compliance well(s) proposed to be installed. The Licensee is not to begin the investigation until notified by the Board to do so.

Detailed Design

The Licensee is required to submit to the Board final detailed design construction drawings, specifications, quality assurance/quality control procedures and/or operating procedures for the construction of facilities authorized by the licence. The Board expects that the submissions will address the design features required as mitigation in the CEAA screening report.

Effluent Quality Standards and Monitoring

The Board concurred with the recommendation of DIAND regarding the quality standards that should apply to effluent captured in compliance monitoring well(s). The Applicant objected to the standards for phosphorous and nitrate-nitrite, pointing out that no justification had been provided for the proposed limits. However, the Board considered the limits to be reasonable. With regard to the monitoring schedule, the Board determined that semi-annual monitoring should occur in all of the groundwater monitoring wells and that annual monitoring in July should take place in the wetland area to the west of the new infiltration pit. The water surface elevation in the infiltration pit is required to be measured monthly. The Board concurred with the Applicant that monitoring oil and grease in the groundwater monitoring wells was unreasonable as there is no reason to believe that oil and grease will be able to pass through the soil column to reach the wells. The Board also concurred with the Applicant that testing for metals was unlikely to provide information of value as the dominantly domestic nature of the sewage generated in the community is unlikely to have a significant metals component.

Drinking Water Quality Monitoring

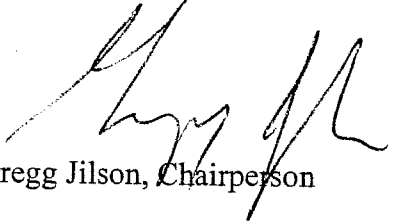
The license contains the Board's standard requirement to comply with the requirements of the *Yukon Regulations Respecting Public Health*, pursuant to the *Public Health and Safety Act*, including, but not limited to any orders issued by the Medical Officer of Health for drinking water quality and drinking water sampling and analysis.

Annual Inspection

In its intervention, DIAND recommended that the berms of the infiltration pit be kept free of shrubs and trees. In lieu of this, the Board included a requirement for an annual inspection and reporting to be carried out by a Professional Engineer.

Existing Infiltration Pit

The Board has authorized use of the existing pit until the new Phase I pit is available. Although the Applicant did not specifically request authorization of the existing pit, it is apparent that it will be used in the interim.


Gregg Jilson, Chairperson

May 7, 2003