



Technical Review Memorandum

TO Richard Dwyer
Licensing Administrator
Nunavut Water Board

File: 9545-2-1.3BM.TALA
CIDMS: 245251

FROM David Abernethy
Regional Coordinator
Water Resources Division
Nunavut Regional Office

August 25, 2008

SUBJECT Water License #3BM-TAL----, Hamlet of Taloyoak, Kitikmeot
Region, New Water License Application

DESCRIPTION

On May 30, 2008, the Government of Nunavut, Department of Community and Government Services, submitted a new water license application to the Nunavut Water Board (NWB) on behalf of the Hamlet of Taloyoak (presently, the Hamlet does not hold a water license). The NWB subsequently distributed this application for review to the public and agencies on July 17, 2008.

Documentation made available for review include

- cover letter;
- water license application form; and,
- Pre-design Report for Water System Upgrades prepared by Dillon Consulting Ltd.

COMMENTS / RECOMMENDATIONS

As a result of the review of these documents the following comments / recommendations are provided to the NWB for consideration.

A. Incomplete License Application

- The submitted application does not contain the required information related to water use and waste disposal. No information is provided on the treatment of wastewater, management of solid waste materials, management of hazardous waste materials, and spill contingency planning. The application presents information that pertains only to the proposed design of a water intake and treatment plant at Canso Lake and states that no upgrades to sewage or solid waste sites are planned at this time.

- Therefore, the proponent should submit a completed Water License Application Supplementary Questionnaire for Municipalities (and plans typically required by water licenses). This should include Operations and Maintenance Plans for the wastewater treatment and solid waste disposal facilities. These plans should describe facility design, operational procedures, and performance monitoring practices. Process diagrams, schematics, photos, etc. should be included in the plans.

B. 2007 Site Inspection Findings

- Indian and Northern Affairs Canada conducted a water license inspection for the Hamlet of Taloyoak on September 11, 2007, and subsequently filed a summary report on January 11, 2008. This report noted that waste materials were not being appropriately segregated and managed in the solid waste landfill and metal dump facilities, that ammonia-nitrate levels in the lagoon's first point of discharge were elevated (i.e., ammonia-nitrate readings of 5.08 mg/L when the 2003 CCME Guidelines for Drinking Water and Protection of Aquatic Life are 0.019 mg/L), and that standing water was observed within the bermed waste /contaminated soil storage area. The Hamlet of Taloyoak should address these inspection findings in a revised water license application.

C. Potable Water Treatment

- INAC is not opposed to the proposed upgrades to the potable water treatment system. However, the Hamlet should discuss the proposed water system upgrades with the Government of Nunavut's Department of Health and Social Services to ensure that appropriate measures are being taken to provide a safe drinking water supply to the residents of Taloyoak. A final design plan and as-built drawings for the proposed raw water intake and treatment system should be provided to the NWB for information purposes.

Should you have any questions regarding this please feel free to contact me at 867-975-4555 or at AbernethyD@inac-ainc.gc.ca

Regards,

David W. Abernethy

Cc. Kevin Buck, Manager of Water Resources
Bernie MacIsaac, Manager of Field Operations