



December 22, 2010

Mr. Andrew Keim
Water Resources Officer
INAC Nunavut Regional Office
P.O. Box 100
Iqaluit, Nunavut X0A 0H0

**Re: Response to 2010 Annual Inspection Report – September 2, 2010
File No. N-O15746**

Dear Mr. Keim,

At the request of the Hamlet of Arviat, the following is in response to the Water Use Inspection Report issued for the Hamlet of Arviat on September 2, 2010.

The comments taken from the Inspection Report are in italics, with the Hamlet's response following each item.

Water Supply

The Government of Nunavut, Dept. of Community and Government Services provides the oversight and drinking water treatment services for the community. Staff members from the Government of Nunavut were available to provide access to the pumping station for inspection. Staff members were found to be working on the refilling of reservoir cell number 2 and the cleaning of the new filtration system. Water Samples were collected. Chlorination records were noted on site. Chlorination records show that sampling is not done daily as required and that not all trucks are tested. This is to be addressed. Trucks are also to be cleaned on a quarterly basis. As the Government of Nunavut has retained ownership of the pump house and intake facilities and employs staff to provide water treatment and distribution to the Municipality it would be prudent for the Government of Nunavut, Department of Community and Government services apply for a license for this use of Water.

The Hamlet has taken over all operations relating to the water supply facility. Community and Government Services (CGS) of the Government of Nunavut (GN), assists with funding and technical support for the pumping operation overseen by the Hamlet, however the Hamlet owns the facility and is responsible for the general

operations of the system. This topic was discussed during the Type A license consultation completed in May 2010.

The water license does not include guidelines for chlorination records as it only deals with environmental impacts and not community health. Recording procedures for chlorination and cleaning of trucks is the jurisdiction of other agencies and not part of the NWB license.

Waste Disposal: Sewage

Sewage from Lagoon seeps continually through the toe of the berm and then travels overland to the ocean. Samples were collected. Decanting of the Lagoon is not required (according to Hamlet staff) as there is never enough effluent in the lagoon to decant. An obvious flow of effluent was noted in the ditch behind the lagoon and flowing into a pond immediately adjacent to the lagoon and down gradient. The Old lagoon remains on site. An Abandonment and Restoration Plan is required to address this.

Seepage

The lagoon was designed to allow seepage to flow through an area of the berm that was filled with highly permeable rocks. The seepage occurs continuously through the year and discharges into an established wetland treatment area. Sewage lagoon as-built drawings have been submitted for the NWB for circulation.

Discharge Quality

Water samples were taken from ARV-4 which is a pond at the head of the wetland treatment area located just outside of the sewage lagoon. This sample location represents the quality of water leaving the lagoon however does not accurately reflect the quality of water discharging to the ocean at the end of the wetland treatment area. It is proposed that an additional sampling location be added at the end of the wetland treatment area to accurately reflect the final discharge water quality. Water samples taken in September 2010 showed that surface water quality at the end of the wetland treatment area was less impacted than samples taken just downstream of the lagoon at ARV-4. These sample results will be included in the 2010 Annual Report.

Abandonment and Restoration Plan

An abandonment and restoration plan for the old sewage lagoons has been completed as described in the Work Plan (July 2010) and submitted to the NWB.

Operation and Maintenance Plans

Operation and Maintenance Plans updated in May 2010 are located in the Hamlet office. These plans were reviewed by Ian Parsons of INAC during the NWB license application process.

Waste Disposal: Solid Waste

Water management from the municipal waste management area is required to address run off and ponding of contact water outside the management area. Hazardous materials were noted throughout the Bulk Waste Management Area. Hydrocarbon impacted soils are also piled at the back of this area. No liner is present for either the Hazardous materials or the impacted soils.

Based upon the findings of studies conducted and conditions of the new NWB license, the Soil Stockpiles, Bulky Metals Area, Hazardous Waste Storage Area, and Landfill Site Discharge have been addressed in reports submitted to the NWB for circulation.

Surveillance Network Program

No records of water usage, waste discharge, Operations Manuals, or required Plans.

Records of water usage are available from the Hamlet by request. Monitoring and sampling for 2010 was completed in July, August, September, and November 2010. A record of water usage for the Hamlet and results from sampling has been submitted to the NWB as part of reports required by the license and with the 2010 Annual Report. A set of Operation and Maintenance Plans updated in May 2010 for the Water Supply Facility, Sewage Treatment Facility and Solid Waste Management Facility are located in the Hamlet office. Also included with these reports are an Environmental Monitoring Program and Quality Assurance/ Quality Control Plan and an Environmental Emergency Contingency Plan.

These documents are in the keeping of the Hamlet on both hard copy and electronic copy. Copies were also provided to INAC and commented upon (Ian Parsons) during the NWB license application process.

Non-Compliance of Act or License

The Hamlet of Arviat recently had a Class A license issued. The Municipality is required to address those deficiencies identified in this and the 2009 Inspection reports. The Municipality shall also submit a Plan for Compliance outlining the steps the municipality will undertake to bring themselves into compliance with the new license. This plan is to also include a firm timetable with dates for compliance milestones.

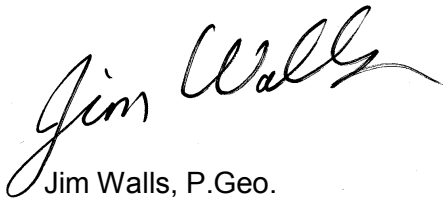
Public hearings were conducted in 2010 as part of the process for obtaining a Class A water license. Ian Parsons was the INAC representative at the public hearings. During the hearing, comments from Environment Canada, INAC, the DFO and Nunavut Water Board were brought forward. A work plan dated June 21, 2010 to address the INAC, DFO and NWB license compliance issues raised during the public hearing was submitted during the hearing. On August 23, 2010, the NWB issued the Hamlet a Class A license (3AM-ARV1015). Many of the issues brought forward during public consultation were made conditions as part of the new license. Since the new license was only received in late August, our work plan was modified to comply with the new

license as much as possible. A Plan of Compliance has been submitted to the Nunavut Water Board.

If you have any questions please feel free to contact the undersigned.

Yours truly,

Nuna Burnside Engineering and Environmental Ltd.


Jim Walls, P.Geo.



cc: Mr. Richard Dwyer, Nunavut Water Board
Mr. Balihar Antaal, Project Officer, Community and Government Services,
Government of Nunavut
Mr. Wayne Thistle, Regional Projects Manager, Community and Government
Services, Government of Nunavut
Mr. Ed Murphy, SAO Hamlet of Arviat

Attachments:

Nuna Burnside Letter Workplan Dated June 23, 2010

JW:mm

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