



Your file - Votre référence
3BM-GRI09113

April 2, 2015

Our file - Notre référence
IQALUIT-#906783

Phyllis Beaulieu
Manager of Licensing
Nunavut Water Board
Gjoa Haven, NU, X0E 1J0

**Re: Aboriginal Affairs and Northern Development Canada's Review of the
Hamlet of Grise Fiord's Application to Renew Water Licence #3BM-GRI0911**

Dear Ms. Beaulieu:

Thank you for your email on March 2, 2015, concerning the above mentioned water licence Type 'B' application. A memorandum is provided for the Board's consideration. Comments and recommendations have been provided pursuant to Aboriginal Affairs and Northern Development Canada's mandated responsibilities under the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and the *Department of Indian Affairs and Northern Development Act*.

Please do not hesitate to contact me by telephone at (867) 975-4555 or email at David.Abernethy@aandc-aandc.gc.ca if you have any comments or questions.

Sincerely,

David Abernethy
Water Resources Regional Coordinator

Encl.

c.c.: Karen Costello, Director, Resource Management, AANDC Nunavut
Erik Allain, Manager of Field Operations, AANDC, Nunavut
Robert Savard, Water Resource Officer, AANDC Nunavut
Lisa Bachellier, Water Resource Technician, AANDC Nunavut

Technical Review Memorandum

Date: April 2, 2015

To: David Abernethy, Water Resources Regional Coordinator, Aboriginal Affairs and Northern Development Canada

From: Lisa Bachellier, Water Resources Technician, Aboriginal Affairs and Northern Development Canada

Rob Savard, Water Resource Officer, Aboriginal Affairs and Northern Development Canada

Re: 3BM-GRI0911 – Type ‘B’ Licence Renewal Application – Hamlet of Grise Fiord – Qikiqtani Region

BACKGROUND

On March 2, 2015 the Nunavut Water Board (NWB) provided notification of the Hamlet of Grise Fiord's application to renew its Type 'B' Municipal Water Licence, #3BM-GRI0911. The Hamlet is asking for a five year licence renewal.

REVIEW FINDINGS

1. Term of Licence

Comment / Recommendation

Aboriginal Affairs and Northern Development Canada (AANDC) supports the Hamlet's request for a 5 year water licence renewal and would not oppose the NWB if they wished to extend the request further to provide a 15-25 year licence term. AANDC recognizes that periodic amendments may occur to reflect changes to infrastructure as well as the possibility that the Licensee may require an additional application to move to a Type 'A' water licence.

Furthermore, AANDC supports the move to 15-25 year water licence terms to address capacity building that may have been an issue within the communities and the Government of Nunavut (GN) in the past and may have lead to the number of water licences that have expired and remain expired. A staggered approach for the length of the water licences may also prevent a bottleneck of municipal water licences requiring renewal all within one or two years.

AANDC makes these recommendations for longer water licences recognizing that the communities and the GN are collaboratively working towards water licence compliance. Enforcement and compliance of a municipal water licence by AANDC can only be effective through administering water licence conditions for a valid water licence. A longer water licence term may help to ensure that licences are valid and reduce the risk of expiration while also reducing the administrative work required by the GN and the municipalities of renewing a water licence every 2-5 years for recognizing that communities can be viewed as permanent establishments requiring water licences in perpetuity.

If the NWB considers compliance history when determining the length of a water licence, the renewal of a water licence, or the decision to issue a water licence, AANDC would request to be included in this discussion and be able to provide comments weighted to reflect the responsibilities of the Inspectors.

AANDC believes a collaborative approach would help to promote the overall compliance of the Act. This would also help to ensure consistency and prevent applicants from being caught in a perceived 'catch 22' of being out of compliance with the Act for failing to have a valid water licence but not receiving a renewed water licence because they are out of compliance with the Act, namely terms and conditions of water licence.

2. Hazardous Material Spill identified in 2013 Annual Report

Comment

The 2013 annual report indicates that a spill of 1,000 Litres occurred on May 29, 2013 near the refuelling station. However, there is no indication that this spill was cleaned up.

Recommendation

The Hamlet of Grise Fiord should provide evidence that the spill was properly reported and cleaned up.

3. Improperly Stored Hazardous Materials identified in 2010 Inspection Report

Comment

The 2010 Aboriginal Affairs and Northern Development Canada Water Resource Officer's inspection report indicates that there are barrels of hazardous waste material (oil and other lubricants) situated adjacent to a pond. The inspection report indicates that the Hamlet of Grise Fiord has not addressed this matter (i.e., remove barrels and arrange for their disposal) despite repeated verbal and/or written instructions by the officer/inspector.

Recommendation

These barrels should be removed immediately and stored in secondary containment to prevent leakage of oil and lubricants to the environment. This is an outstanding issue from past inspection reports (2002, 2003, 2004, and 2006).

4. Improperly Stored Hazardous Materials identified in 2011 Inspection Report

Comment

During the July 22, 2011 Aboriginal Affairs and Northern Development Canada Water Resource Officer inspection several drums (quantity of drums not specified in inspection report) of unknown hazardous waste products were found within the solid waste disposal facility. These drums were turned on their sides and leaking into a stream that flows down slope toward the marine environment.

Recommendation

These drums should be removed immediately from the solid waste disposal facility and stored in secondary containment. The drums should also be marked as hazardous wastes and disposed of appropriately (i.e., sent to an approval hazardous wastes facility).

All areas affected by these unknown hazardous waste products should be remediated. Contaminated soils should either be treated in a landfarm or sent to an approved disposal facility.

5. Review of Existing Licence Conditions

Comments / RecommendationsAs part of AANDC's program review as conveyed to Mr. Hohnstein on January 30, 2015 and on March 19, 2015 through correspondence from Erik Allain, Manager of Field Operations, the Field Operations Unit is reviewing previous conditions within existing water licences to ensure enforceability within the jurisdiction of the Act and to maintain the integrity of the program delivery.

At this time AANDC is providing comments to the NWB on water licence applications where there is a clear connection between water use, waste deposit to water, or appurtenant undertakings related to water use and/or deposit of waste to water, subject to the Act and Regulations.

AANDC would like to bring to the attention of the NWB, the following conditions that were including the water licence #3BM-GRI0911 that may not be enforceable by the AANDC Field Operations Inspectors due in part that the conditions appear out of the jurisdiction of AANDC. AANDC would like to respectfully request that the NWB consider

removing these conditions from the renewed water licence issued for the Hamlet of Grise Fiord.

Licence Review Determinations

AANDC proposes changes to aid in the enforcement of the following conditions and there in case where there may not appear, or may require modifications to have a clear connection between water use, waste deposit to water, or appurtenant undertakings related to water use or and/or deposit of waste to water, subject to the Act and Regulations.

Part A, Item 3(d):

AANDC proposes modification of this condition due to recent correspondence with the Board.

Rationale for Change: As stated in Item 3 b, c, “All inspection and enforcement services regarding this Licence will be provided by Inspectors appointed under the *Act*, and “[f]or the purpose of enforcing this Licence and with respect to the use of water and deposit or discharge of waste by the Licensee, Inspectors appointed under the *Act*, hold all powers, privileges and protections that are conferred upon them by the *Act* or by other applicable law “

To avoid having contradictory requirements from the Board and an Inspector and in recognition that compliance plans are a living document that requires continual updates and amendments, AANDC would respectfully request that the Board consider the modifications provided below.

AANDC would also like to respectfully request that the Board not consider compliance issue that my no longer may be relevant due to changes of activities and conditions that no longer exist within licences. The transient nature of information from past years may no longer be available for the licensee to address administrative short comings and may prevent the licensee from reaching goals that are achievable.

Proposed Condition “The Licensee shall, in relation to any application to renew or amend the Licence, have in place a Plan for Compliance approved by the Inspector in writing to address relevant deficiencies that have been identified by the Inspector.

Part B: General Conditions

Part B, Item 7:

AANDC proposed changes to reflect the requirements to report spills.

Previous Condition: The Licensee shall immediately report to the 24-Hour Spill Report Line (867-920-8130) any spills of Waste, which are reported to, or observed by the Licensee, within the municipal boundaries or in the areas of the Water Supply or Waste Disposal Facilities.

Proposed Condition: The Licensee shall immediately report all 'reportable spills' to the 24-Hour Spill Report Line (867-920-8130), which are reported to or observed by the Licensee, and which are within the municipal boundaries or in the areas of the Water Supply or Waste Disposal Facilities *subject to the Act and the Spill Contingency Planning and Reporting Regulations, 2006 (Nu) 068-93.*

Part B, Item 11

See comments provided under Part A, 3(d).

Part B, Item 12

AANDC proposes a modification to ensure the enforceability of the condition.

Previous Condition: The Licensee shall, for all Plans submitted under this Licence, include a proposed timetable for implementation. Plans submitted, cannot be undertaken without subsequent written Board approval and direction. The Board may alter or modify a Plan if necessary to achieve the legislative objectives and will notify the Licensee in writing of acceptance, rejection or alteration of the Plan.

Proposed Condition: The Licensee shall, for all Plans submitted under this Licence, include a proposed timetable for implementation. Plans submitted, cannot be undertaken without subsequent written Board approval and direction. The Board or an Inspector may alter or modify a Plan if necessary to achieve the legislative objectives and will notify the Licensee in writing of acceptance, rejection or alteration of the Plan. The Inspector will notify the Board of any alteration or modification.

Part C: Conditions Applying to Water Use

Part C, Item 3 (AANDC proposes changes to help enforceability)

Existing text:

The License shall not remove materials from below the ordinary high water mark of any water body of any water body unless otherwise approved by the Board in writing.

Proposed changes:

The Licensee shall not conduct work below the ordinary high water mark of any water body unless authorized by the Board in writing.

Part D: Conditions Applying to Waste Disposal

Part D, Item 6

AANDC proposes the removal of this condition because it may not be enforceable.

Condition not enforceable: The Licencee shall dispose of and permanently contain all Solid Waste at the Solid Waste Disposal Facility or as otherwise approved by the Board in writing.

Part D, Item 7

AANDC proposes a modification to this term because AANDC does not have jurisdiction required to classify waste as 'hazardous' ,or to ensure waste is stored and segregated within the solid Waste Disposal facility or to ensure until proper disposal arrangements are made.

Previous Condition: The Licencee shall segregate and store all hazardous waste materials and/or hazardous waste including waste oil, within the solid Waste Disposal facility in a manner as to prevent the deposit of deleterious substances into water, until such time as proper disposal arrangements are made.

Proposed Condition: Proposed Condition: The Licensee shall store all hazardous materials and/or hazardous waste in a manner to prevent the deposit of waste into any inland water.

Part D, Item 8

AANDC proposes the removal of this condition because it may not be enforceable.

Condition that may not be enforceable: The Licensee shall implement measures to control wind-blown litter at the Solid Waste Disposal Facility.

Part D, Item 9

AANDC proposes a modification to this condition because it may not be enforceable without the proposed change. AANDC proposes a modification to this term because AANDC does not have jurisdiction required to approve sources for quarry material or to prevent the use of metal leaching or acidic rock

Previous Condition: The Licencee shall use clean material for construction, operation, and maintenance activities that is obtained from an approved source and which has been demonstrated not to produce acid rock drainage and to be non-metal leaching.

Proposed Condition: The Licencee shall prevent waste from quarry activities from being deposited into inland waters. Waste deposit into waters includes acidic generation and metal leachate from quarrying material.

Part E: Conditions Applying to Modifications and Construction

Part E, Item 2

AANDC proposes a modification to ensure the enforceability of the condition.

Previous Condition: The Licensee may, without written approval from the Board, carry out modifications to the Water Supply and Waste Disposal Facilities provided that such modifications are consistent with the terms of this Licence and the following requirements are met:

- a) the Licensee has notified the Board in writing of such proposed modifications at least sixty (60) days prior to beginning the modifications;
- b) these modifications do not place the Licensee in contravention of the Licence or the Act;
- c) the Board has not, during the sixty (60) days following notification of the proposed modifications, informed the Licensee that review of the proposal will require more than sixty (60) days; and
- d) the Board has not rejected the proposed modifications.

Proposed Condition: The Licensee may, without written approval from the Board, carry out modifications to the Water Supply and Waste Disposal Facilities provided that such modifications are consistent with the conditions of this Licence and within the scope of the water licence application. The Licensee is required to provide a 30 day notification to the Inspector and the Board prior to the modifications.

Part F: Conditions Applying to Operations and Maintenance

Part F, Item 1

AANDC proposes a modification to ensure the enforceability of the condition and recognizing that other agencies and organizations within Nunavut may have the lead role in enforcing items that may be included in these plans.

Previous Condition: The Licensee shall submit to the Board for approval, within ninety (90) days following issuance of the Licence, an Operations and Maintenance (O&M) Manual for the Sewage Disposal Facility and Solid Waste Disposal Facility, prepared

where appropriate in accordance with the *“Guidelines for the Preparation of an Operation and Maintenance Manual for Sewage and Solid Waste Disposal Facilities in the Northwest Territories; 1996”*. The Manual shall take into consideration of the comments received during the application review process and include the following information where applicable:

- a) sewage Operation and maintenance Plan;
- b) Solid Waste Operation and Maintenance Plan;
- c) Hazardous Waste Management Plan;
- d) Sludge Management Procedure;
- e) Spill Contingency Plan, and;
- f) Monitoring Program Quality Assurance /Quality Control Plan (QA/QC Plan).

Proposed Condition: The Licensee shall submit to the Board for approval, within ninety (90) days following issuance of the Licence, an Operations and Maintenance (O&M) Manual for the Sewage Disposal Facility and Solid Waste Disposal Facility, prepared where appropriate in accordance with the *“Guidelines for the Preparation of an Operation and Maintenance Manual for Sewage and Solid Waste Disposal Facilities in the Northwest Territories; 1996”* in so far as the plans are related to water use, waste deposit to water, or appurtenant undertakings related to water use and/or deposit of waste to water, subject to the Act and Regulations.

The Manual shall take into consideration of the comments received during the application review process and include the following information where applicable:

- a) sewage Operation and maintenance Plan;
- b) Solid Waste Operation and Maintenance Plan;
- c) c Hazardous Waste Management Plan
- d) Sludge Management Procedure
- e) Spill Contingency Plan, and;
- f) Monitoring Program Quality Assurance /Quality Control Plan (QA/QC Plan).

Part F, Item 3

AANDC supports modifying the requirement of a geotechnical engineer to inspect engineered facilities. We recognize the risk associated with not having the inspection conducted annually, but also understand the significant resources needed to conduct geotechnical inspections on an annual basis in every community in Nunavut by CGS or the Hamlets.

Previous Condition: An inspection of all engineered facilities related to the management of water and waste shall be carried out annually in July or August by a Geotechnical Engineer. The engineer's report shall be submitted to the Board within sixty (60) days of

the inspection, including a covering letter from the Licensee outlining an implementation plan addressing each of the Engineer's recommendations.

Proposed Condition: An inspection of all engineered facilities related to the management of water and waste shall be carried out annually in July or August by a Geotechnical Engineer or a Municipal Engineer. The engineer's report shall be submitted to the Board within sixty (60) days of the inspection, including a covering letter from the Licensee outlining an implementation plan addressing each of the Engineer's recommendations. A geotechnical engineer will be contacted to conduct an inspection if deficiencies were noted by the Municipal Engineer. The Inspector may also request the Licensee to conduct a geotechnical inspection to address compliance with the Act or the Licence.

Part F, Item 4

AANDC proposes a modification to ensure the enforceability of the condition.

Previous Condition: If, during the period of this Licence, an unauthorized discharge of waste occurs, or if such a discharge is foreseeable, the Licensee shall:

Proposed Condition: If, during the period of this Licence an unauthorized discharge of waste occurs or if such a discharge is foreseeable, subject to the Act and the *Spill Contingency Planning and Reporting Regulations, 2006 (Nu) 068-93*, the Licensee shall:

Part G: Conditions Applying to Abandonment and Restoration

Part G, Item 1

AANDC proposes the removal of this condition Part G, Item 1(c)(d)(g)(i)(j)(k) because they may not be enforceable under the Act or the requirement for the actions within the plans are not enforceable where there is no clear connection between the plans as they related to water use, waste deposit to water, or appurtenant undertakings related to water use and/or deposit of waste to water, subject to the act and regulations,

AANDC proposes a modification to condition, Part G, Item 1 to ensure the enforceability of the condition while recognizing that other agencies and organizations within Nunavut may have the lead role in enforcing items that may be included in these plans.

Proposed Change: The Licensee shall submit to the Board for approval an *Abandonment and Restoration Plan* at least six (6) months prior to abandoning any facilities or upon submission of the final design drawings for the construction of new facilities to replace existing ones. Where applicable, the Plan shall include information on the following:

- a) solid waste leachate
- b) water intake facility
- c) the waste disposal sites where there will be leachate
- d) –delete-
- e) any site affected by waste spills where there is a risk that waste will be deposited to waters
- f) leachate prevention
- g) an implementation schedule
- h) maps delineating site facilities where there is a risk of waste will be deposited to waters;
- i) consideration of altered drainage patterns;
- j) delete-
- k) -delete-
- l) -delete-
- m) a proposal identifying measures by which restoration costs will be financed by the Licensee upon abandonment related to water use, waste deposit to water, or appurtenant undertakings related to water use and/or deposit of waste to water, subject to the act and regulations.

Part G, Item 2

AANDC proposes the removal of these conditions, Part G, Item 2(a)(f)(g) because they are not enforceable under the Act.

AANDC proposes a modification to condition, Part G, Item 2(d)(h), to ensure the enforceability of the condition.

Proposed Change: The Licensee shall submit to the Board for approval within sixty (60) days of issuance of this Licence, an Abandonment and Restoration Plan for the Decommissioned Sewage Disposal Facilities prepared in accordance with applicable sections of the "Guidelines for Abandonment and Restoration Planning for Mines in the Northwest Territories (1990)" related to water use, waste deposit to water, or appurtenant undertakings related to water use and/or deposit of waste to water, subject to the act and regulations. In addition, the Plan is to include the following:

- a) leachate prevention;
- b) an implementation schedule;
- c) maps delineating site facilities;
- d) consideration of altered drainage patterns;
- e) a proposal identifying measures by which restoration costs will be financed by the Licensee upon abandonment related to water use, waste deposit to water, or appurtenant undertakings related to water use and/or deposit of waste to water, subject to the act and regulations.

Part H: Conditions Applying to a Monitoring Program

Part H, Item 8

AANDC wishes to modify Part H, Item 8 to better capture the intent and remove any possible confusion that may lead to non-compliance. AANDC would also like to propose changes so the licensee is not limited by techniques for water sampling that may be requested from an accredited lab and following a specific methodology.

Previous Condition: All sampling, sample preservation and analyses shall be conducted in accordance with methods prescribed in the current edition of *Standard Methods for the Examination of Water and Wastewater*, or by such other methods approved by the Board.

Proposed Condition: All sampling, sample preservation and analyses shall be conducted in accordance with methods prescribed in the current edition of *Standard Methods for the Examination of Water and Wastewater*, or by such other methods approved by a laboratory certified by the Canadian Association of Environmental Analytical Laboratories (CAEAL).

Part H, Item 10

AANDC proposes that the Board modify this condition to allow a more flexible assessment of monitoring sites and programs for the licensee, recognizing that the Inspector may require the monitoring program revisions based on results submitted.

Previous condition: Modifications to the Monitoring Program may be made only upon written approval from the Board. Requests for the changes to the Monitoring Program should be forwarded to the NWB in writing, and should be included with the justification and appropriate evidence to support the change.

Proposed Condition: Modifications to the Monitoring Program may be made only upon written approval from the Board or an Inspector. Requests for the changes to the Monitoring Program should be forwarded to the NWB or the Inspector in writing, and should be included with the justification and appropriate evidence to support the change. Where the Inspector approves the changes to the monitoring program, the justification and appropriate evidence to support the change shall be provided to the NWB.