Water Resources Division Nunavut Regional Office Iqaluit, NU X0A 0H0

March 18, 2015

Your file - Votre référence 2BE-QIL1217

Our file - Notre référence IQALUIT-#897141

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

Re: Aboriginal Affairs and Northern Development Canada's (AANDC) Review of an Application to Amend Water Licence 2BE-QIL1217 – Stornoway Diamond Corporation – Qilalugaq Project.

Dear Ms. Beaulieu,

On February 20, 2015, AANDC received notice from the Nunavut Water Board (the NWB) regarding the above mentioned application, inviting interested parties to provide comments by March 18, 2015.

AANDC reviewed the renewal application and the results of our review are provided in the enclosed memorandum for the Board's consideration. Comments have been provided pursuant to the Department's mandated responsibilities under the Nunavut Waters and Nunavut Surface Rights Tribunal Act and the Department of Indian Affairs and Northern Development Act.

Please contact Courtney Cox at 867-975-4556 or <u>courtney.cox@aandc-aadnc.gc.ca</u> for any additional information.

Regards,

Andrea Morgan, P. Eng.

A/ Manager Water Resources

c.c.: Erik Allain, Manager of Field Operations, AANDC Nunavut Karen Costello, Director Resource Management, AANDC Nunavut



Technical Review Memorandum

To: Phyllis Beaulieu - Manager of Licensing, Nunavut Water Board

From: Courtney Cox and Christine Wilson, Aboriginal Affairs and Northern

Development Canada

Date: March 18, 2015

Re: Water Licence Amendment Application, #2BE-QIL1217

Licensee:

Stornoway Diamond Corporation

Project:

Qilalugaq

Region:

Kivalliq

A. Background

On February 20, 2015, the Nunavut Water Board (NWB) distributed Stornoway Diamond Corporation's (Stornoway) application to amend water licence 2BE-QIL1217. Stornoway is proposing to amend the current water licence to include water use for advanced exploration activities. Stornoway would like to obtain water for industrial uses, including use of water for drilling purposes. The Licensee intends to source the water from two lakes within the project area.

The Qilalugaq Property is located in the Kivalliq Region, approximately 10km outside of the Hamlet of Repulse Bay. Due to the proximity of the sample area to the hamlet, camp facilities will not be required. Personnel for the program will include an 8 member field crew (4 of 8 members will be hired locally from Repulse Bay) plus 2 helicopter pilots, 1 engineer, and 1 cook/first aid attendant. The drill locations are yet to be determined. This location was identified as being on Commissioner's Land within the municipal boundary of Repulse Bay and thus requires surface access permission for fuel storage and drilling.

The water licence amendment application proposes to change water use from 0 m³ per day to 60-80 m³ per day. All waste water will be pumped into a natural depression or sump. All other waste is planned to be back hauled to Repulse Bay. Stornoway expects to store all fuel at the Hamlet of Repulse Bay, with the exception of small fuel caches which will be located beside the drill sites.



As part of AANDC's program review as conveyed to Mr. Hohnstein on January 30, 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 *Nunavut Waters and Nunavut Surface Rights Tribunal 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 the attention of the NWB the following conditions that were part of the water licence 2BE-QIL1217 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 new water licence issued for the Qilalugaq Project and from any future water licences.

Review Findings

The following conditions do not appear to have 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 or may required modifications to reflect the AANDC jurisdictional ability to enforce.

Part B

Item 1 (a) (may not be enforceable without changes)

Existing text:

A summary of waste disposal activities

Proposed changes:

A summary of waste disposal activities <u>related to water use, deposit of waste to water or appurtenant undertaking.</u>

Item 1 (d) (may not be enforceable without changes)

Existing text:

A description of progressive and/or final reclamation work undertaken, including photographic records of site conditions before, during and after completion of operations;



Proposed changes:

A description of progressive and/ or final licensed reclamation work undertaken <u>related to</u> <u>water use, deposit of waste to water or appurtenant undertaking, including photographic records of site conditions before, during and after completion.</u>

Item 1 (f) (may not be enforceable)

Summary of public consultations carried out in affected communities

Item 3 (AANDC proposes changes to help enforceability.)

Existing text:

3. 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 objective and will notify the Licensee in writing of acceptance, or rejection or alterations of the Plan.

Proposed changes:

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 <u>or an Inspector</u> 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. <u>The Inspector will notify the Board of any alteration or modification</u>.

Conditions and clauses within all plans manuals will be enforced 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.

Part C

Item 2 (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 unless authorized.



Proposed changes:

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

Part D

Item 2 (may not be enforceable without changes)

Existing text:

The Licensee shall not practice on-site land filling of domestic waste, unless otherwise approved by the Board in writing.

Proposed changes:

The Licensee shall not practice on-site land filling of domestic waste that will impact groundwater, unless otherwise approved by the Board in writing.

The Licensee shall not allow deposition of waste materials from combustion and/or leachate from contaminated ash residual, from impacting any surrounding waters, unless otherwise approved by Board in writing.

Item 3 (may not be enforceable without changes)

Proposed changes:

The Licensee shall not allow deposition of waste materials from combustion and/or leachate from contaminated ash residual, from impacting any surrounding waters, unless otherwise approved by Board in writing.

Item 4 (may not be enforceable without changes)

Existing text:

The Licensee shall not open burn plastics, wood treated with preservatives, electric wire, Styrofoam, asbestos or painted wood to prevent the deposition of waste materials of incomplete combustion and/or leachate from contaminated ask residual, from impacting any surrounding waters, unless otherwise approved by the Board in writing.

Proposed changes:

The Licensee shall not allow deposition of waste materials from combustion and/or leachate from contaminated ash residual, from impacting any surrounding waters, unless otherwise approved by Board in writing.



Item 5 (may not be enforceable)

Item 6 (may not be enforceable)

Item 7 (may not be enforceable)

Item 8 (may not be enforceable)

Part E

Item 1 (may not be enforceable without changes)

Existing text:

No camp activities are authorized under the provisions of this Licence.

Proposed change:

No camp activities are authorized under the provisions of the Licence that use of water or deposit waste to water.

Item 2 (may not be enforceable)

Item 4 (may not be enforceable without changes)

Existing text:

With respect to access road, pad construction or other earthworks, the deposition of debris or sediment into or onto any water body is prohibited. These materials shall be disposed at a distance of at least thirty one (31) metres from the ordinary high water mark in such a fashion that they do not enter the water.

Proposed changes:

Sediment and erosion measures must be used to mitigate the deposition of debris and sediment into or onto any water body during the construction and operation. These materials shall be disposed at a distance of at least 31 metres from the ordinary high water mark in such a fashion that they do not enter water.

Part F

Item 3 (may not be enforceable, hard to understand)

Item 4 (may not be enforceable without changes)



Existing text:

The Licensee shall dispose of all bulk sampling waste rock in a properly constructed sump or an appropriate natural depression located at a distance of at least thirty one (31) from the ordinary high water mark of any adjacent water body, where direct flow into a water body is not possible and no additional impacts are created.

Proposed changes:

The Licensee shall dispose of all bulk sampling waste rock at a distance of at least 31 metres from the ordinary high water mark of any adjacent water body, where direct flow into a water body is not possible and no additional impacts are created.

Item 5 (similar to item 6)*

Item 6 (may not be enforceable without changes)*

Existing text:

The Licensee shall stockpile all over burden/topsoil generated during trenching using proper erosion prevention measures. Upon completion of operation, the Proponent shall back fill, reclaim/re-contour and re-vegetate all disturbed areas.

Proposed changes:

* The Licensee shall install and maintain erosion mitigation measures during trenching.

Part G

Item 1 (may not be enforceable without changes)

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

Existing text:

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 changes:

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 H

Item 4 (may already be by covered in item 3)

Part I

Item 2 (may not be enforceable without changes)

Existing text:

The Licensee shall complete all restoration work prior to the expiry of the License.

Proposed changes:

The Licensee shall complete all restoration work related to use of water, deposit of waste and appurtenant undertaking subject to the Act and its Regulations.

Item 3 (may not be enforceable without changes, proposed change)

Existing text:

The License shall carry out progressive reclamation of any components of the project no longer required for the Licensee's operations.

Proposed changes:

The License shall carry out progressive reclamation of any licensed components of the project no longer required for the Licensee's operations related to water use, deposition of waste to water and/or appurtenant undertakings, subject to the Act and Regulations.





Item 4 (may not be enforceable, land use conditions)

Item 5 (may not be enforceable, land use conditions)

Item 6 (may not be enforceable without changes)

Existing text:

All roads and airstrips, if any, shall be re-graded to match natural contours to reduce erosion.

Proposed changes:

All roads and airstrips, if any, shall be re-graded to reduce erosions and sedimentation to water.

Item 8 (may not be enforceable)

Item 9 (may not be enforceable)

Item 10 (may not be enforceable)

Item 11 (may not be enforceable without changes)

Existing text:

The Licensee shall restore all trenches prior to the closure of seasonal exploration programs and removal of equipment from site. Trenches are to be in-filled and covered with stockpiled over burden materials and re-contoured to the natural terrain, providing drainage away from nearby watercourses.

Proposed changes:

Trenches are to be re-contoured to provide drainage away from nearby water courses.

Part J (may not be enforceable without changes)

Item 3 & 4 AANDC proposes changes to modify <u>Part J, Item 3 & 4</u> 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.

Existing text:

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 in writing.



Proposed changes:

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).

