



P.O. Box 119
Gjoa Haven, NU X0B 1J0
Tel: (867) 360-6338
Fax: (867) 360-6369

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NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI
OFFICE DES EAUX DU NUNAVUT

File No.: 8BW-CLY0810/Amend No. 1

August 16, 2010

Mr. Harry Flaherty, Project Director
Qikiqtaaluk Corporation
P.O. Box 1228
Iqaluit, NU
X0A 0H0

RE: NWB Licence No. 8BW-CLY0810 Amendment No. 1

Dear Mr. Flaherty:

Please find attached Amendment No. 1 to Licence No. 8BW-CLY0810 Type "B" issued to the Qikiqtaaluk Corporation by the Nunavut Water Board (NWB), (Motion 2010-13-L12) pursuant to its authority under Article 13 of the *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada*. The terms and conditions of the original Licence related to water use and waste disposal remain an integral part of this approval.

The NWB strongly recommends that the Licensee consult the comments received from interested persons on issues identified. This information is attached for your consideration.

Sincerely,

Thomas Kabloona
Nunavut Water Board, Chair

TK/tla/kt/pb

Enclosure: Licence No. 8BW-CLY0810 Amendment No.1
Comments: INAC, GN-DoE, EC ¹

cc: Qikiqtani Distribution List

¹ Indian and Northern Affairs Canada (INAC) dated November 16, 2009; Government of Nunavut Department of Environment (GN-DoE) dated November 9, 2009; Environment Canada (EC) dated November 9, 2009.

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REASONS FOR DECISION

I. BACKGROUND

Water License 8BW-CLY0810 (Licence) was issued to the Qikiqtaaluk Corporation on March 3, 2009 to allow for the repair of a sixteen (16) km abandoned road between the Hamlet of Clyde River and the former Long Range Navigation (LORAN) Station at Cape Christian. The repair included one (1) bridge crossing over the Clyde River and eight (8) culvert installations in unnamed creeks. The bridge crossing and four of the culvert installations were identified by the Department of Fisheries and Oceans (DFO) as fish habitat (crossing nos. 2, 3, 5 and 8).

Road repair works were conducted by Qikiqtaaluk Logistics from June to September 2009. A permanent steel free standing bridge was constructed over the Clyde River and culverts were installed at the water crossings. Several fish habitat compensation measures were also implemented. However, due to unsatisfactory ground conditions, a portion of the road could not be stabilized and was therefore re-routed. The re-routed portion of the road and the alternate water crossings were constructed in the absence of NWB approval.

An amendment to the existing License has been requested to authorize the re-routed portion of the road including the addition of three (3) new culverts installations at creek crossings (2a, 3a, and 7a) and the removal of five (5) culvert installations (1,2,3,7 and 8) at creek crossings granted through the existing Licence, which are no longer required.

II. PROCEDURAL HISTORY

On March 3, 2009 the Nunavut Water Board (NWB) issued water licence 8BW-CLY0810 (Licence) to the Qikiqtaaluk Corporation (Licensee) to allow for the disposal of waste during road construction and watercourse crossing activities at the Clyde River Road Construction Project located in the Qikiqtani Region of Nunavut.

On August 24, 2009, the Qikiqtaaluk Corporation (Applicant) applied to the NWB for an amendment to their Licence to allow for re-routing of the road including the addition of three (3) new water crossings (2a, 3a, and 7a) and the removal of five (5) previously approved water crossings (1,2,3,7 and 8) (Application).

On August 26, 2009, the NWB acknowledged receipt of the amendment Application and requested additional information to complete the Application. On August 31, 2009, the additional information requested was received by the NWB.

The amendment Application included the following documentation:

- Document prepared by S. Therrien, Biome Environnement; prepared for Qikiqtaaluk Environmental, entitled Road Access to Cape Christian, Fish Habitat Compensation and Monitoring Plan Municipality of Clyde River, dated April 2009.
- Document prepared by S. Fleury, Impact Faune Inc.; prepared for Qikiqtaaluk Environmental Inc., entitled Road Access to Cape Christian Fish and Fish Habitat Assessment at Stream Crossings Report Municipality of Clyde River, dated August 2008.
- Email from P. Simon, Qikiqtaaluk Environmental Inc., to P. Beaulieu, Nunavut Water Board, Re: NWB file 8BW-CLY0810, dated August 24, 2009.
- Figure entitled Old and New Road Paths.
- Letter to A. Keim, Indian and Northern Affairs Canada Water Resources Officer, from P. Simon, Qikiqtaaluk Environmental Inc., Re: Mitigation Plan to Restore All Impacted Grounds and Waters on the “Old Roadway” – Road between Clyde River and Cape Christian, dated August 31, 2009.
- Document prepared by Qikiqtaaluk Environmental, presented to the Nunavut Water Board, entitled Annual Report to March 31, 2009 Licence No. 8BW-CLY0810 Clyde River Road Construction Project, dated August 2009.
- Document entitled Application for Water Licence Amendment Description of undertaking.
- Document prepared by Qikiqtaaluk Corporation, prepared for Nunavut Impact Review Board and Nunavut Water Board, entitled Spill Contingency Plan Road Repair and Span Free Bridge Construction Clyde River vs Cape Christian – revision 3, dated August 2009.
- Document entitled Application for Water Licence Amendment (Water Licence 8BW-CLY0810) Executive Summary.
- Executive summary translated into Inuktitut.
- Figure prepared by Qikiqtaaluk Logistics Inc., entitled Road Between Cape Christian and Clyde River Location of Culvert Installed, dated August 31, 2009.
- Figure prepared by Qikiqtaaluk Logistics Inc., entitled Road Between Cape Christian and Clyde River Location of Impacted Areas, dated August 31, 2009
- Document entitled Application for Water Licence Amendment Supplemental Technical Information for Water Crossings (Water Licence 8BW-CLY0810).
- Completed Water Licence Application Form.

On September 30, 2009 the Nunavut Impact Review Board (NIRB) issued its screening decision to the Minister of Fisheries and Oceans Canada for the Clyde River Road and Bridge Project amendment in accordance with Article 12 of the *Nunavut Land Claims Agreement* (NLCA). Subsequently, on October 1, 2009, the Department of Fisheries and Oceans (DFO) issued a *Fisheries Act* Authorization Amendment to Qikiqtaaluk Logistics Inc for the Clyde River Road.

On October 26, 2009 the Nunavut Planning Commission (NPC) confirmed that the amendment Application would not require a land use plan conformity determination in accordance with

Article 11 of the NLCA. The NPC further noted that all of the terms to which the Applicant agreed to in its conformity review dated October 28, 2008 must be included in any new authorization issued.

On October 9, 2009, following a preliminary internal review of the Application, the NWB concluded that the Application met the requirements of section 48(1) of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (NWNSRTA or Act) and forwarded notice of the Application to regulators, council of the municipality most affected by the project and other interested parties. Parties were invited to make representations to the NWB within thirty (30) days.

By November 16, 2009 the NWB was in receipt of comments regarding the Application from Indian and Northern Affairs Canada (INAC), Environment Canada (EC), and the Government of Nunavut Department of Environment (GN-DOE). No public concerns were expressed during the review, therefore the NWB waived the requirements to hold a public hearing.

Based upon the results of the detailed assessment of the amendment Application, including consideration of any potential accidents, malfunctions, or impacts to water that the overall project might have in the area, the Board has approved the Application and amended Licence 8BW-CLY0810.

III. ISSUES

i. Compliance

As part of the review of this Application for amendment, the NWB conducted an administrative compliance assessment of the current licence 3BW-CLY0810. The results of this assessment indicate a number of compliance issues. The following issues were raised in the INAC Inspector's Direction dated August 24, 2009 following a site inspection on August 20, 2009:

1. Construction of an alternative road/water crossings not authorized by the current Water License. This is contrary to Section 12, NWNSRTA.
2. Failure to install sediment and erosion control measures that "shall be implemented prior to and maintained during the operation to prevent entry of sediment into water" contrary to **Part C Item 5** of Water License 8BWCLY0810.
3. Failure to "undertake the appropriate corrective measures to mitigate impacts on surface drainage resulting from the Licensee's operations" contrary to **Part C Item 6** of Water License 8BW-CLY0810.
4. Failure to "prepare all sites in such manner as to prevent rutting of the ground surface" contrary to **Part C Item 12** of Water License 8BW-CLY0810.
5. Allowing the use of equipment or vehicles in the course of this undertaking while the ground surface was not in a state capable of fully supporting the equipment or vehicles

- without rutting or gouging and for failing to cease said activity and travel if rutting occurs contrary to **Part C Item 15** of Water License 8BW-CLY0810.
6. Failure “to provide the Nunavut Water Board ninety percent complete plans and drawings of the bridge and culverts prior to construction and installation. These plans and drawings shall be stamped by and Engineer” contrary to **Part G Item 4** of Water License 8BW-CLY0810.
 7. Failure “to monitor all activities for signs of erosion and shall implement and maintain sediment and erosion control measures prior to the undertaking to prevent entry of sediment into any water body” contrary to **Part J Item 1** of Water License 8BW-CLY0810.

Regarding item 6 above, the NWB notes that signed and stamped drawings of the bridge and culverts were submitted on April 30, 2009. The NWB provided notice of the submission on October 27, 2009 to interested parties.

In response to the Inspector’s Direction, a Mitigation Plan to Restore All Impacted Grounds and Waters on the Old Roadway - Road between Clyde River and Cape Christian, dated August 31, 2009 (Mitigation Plan) was submitted by the Licensee. On May 31, 2010, the NWB distributed the Mitigation Plan via email to interested parties with a request for comments by June 4, 2010. By the deadline, comments on the Mitigation Plan were received from INAC. Section iii of the Board’s Decision addresses the issues with the Mitigation Plan.

In addition to the Inspector’s Direction, the Board notes the following additional compliance issues:

- The Licensee has not submitted as-built plans and drawings of the bridge and water crossings as required by Part G Item 5 of the Licence.
- The Licensee has not submitted documentation from the community of Clyde River prior to backhauling of waste as required by Part D Item 3 of the Licence.

These compliance issues are addressed in the following sections of the Board’s Decision.

ii. Extension to Expiry date of Licence

The Licence was issued on March 3, 2009 for a term of two (2) years. INAC, in its comments dated November 16, 2009, recommended that the Licence be extended for a minimum of five (5) years to December 31, 2015 and remain in effect until the project area is fully reclaimed and demonstrated to have no harmful impact to the quality of nearby water resources through post-closure monitoring. The Board acknowledges INAC’s recommendation; however, the Board does not have the authority to issue Licence extensions. Nonetheless, in order for the Licensee to comply with conditions in Part I Item 1 of the Licence, requiring the Licensee to complete all

restoration work prior to expiry of the Licence, and Part I Item 5 of the Licence, requiring the Licensee to submit an Abandonment and Restoration Plan six (6) months prior to planned decommissioning of the road, bridge or stream crossings, the Licensee will be required to apply for a renewal of the Licence. During the review of the renewal of the Licence, the Board will be in a position to consider a new licence term.

In contemplating the renewal of this Licence, the Licensee is advised that if the Licence expires before the NWB issues a new one, then water use and waste disposal must cease or the Licensee will be in contravention of the NLCA and the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (NWNSTRA). However, the expiry of the Licence does not relieve the Licensee from any obligations imposed by the Licence. The NWB recommends that an application for the renewal of the Licence be filed at three (3) months prior to the Licence expiry date.

The Board also notes that during the review of the original application, the Licensee indicated that upon expiry of the Licence, maintenance of the road and water crossings could potentially be transferred to the Hamlet of Clyde River. The Board advised the Licensee in the cover letter to the Licence, that if it should choose to assign the Licence to the Hamlet or any other entity, an assignment application would be required prior to the expiry date of the Licence. To date, the Board has not received an assignment application. The NWB notes that it is likely that the road will be required at least until the completion of Cape Christian reclamation project and that the Cape Christian reclamation licence expires in 2013.

iii. Mitigation Plan to Restore All Impacted Grounds and Waters on the Old Roadway

In response to an Inspector's Direction, dated August 24, 2009, the Licensee submitted a Mitigation Plan to Restore All Impacted Grounds and Waters on the Old Roadway - Road between Clyde River and Cape Christian, dated August 31, 2009 (Mitigation Plan). On May 31, 2010, the NWB distributed the Mitigation Plan to interested parties with a request for comments by June 4, 2010. By the deadline, written comments on the Mitigation Plan were received from INAC.

In its comments, INAC noted that the Mitigation Plan satisfactorily addressed a number of the requirements of the Inspector's Direction, but did not include: (1) a weekly reporting mechanism to regulators; (2) a map or diagram that clearly identifies the alternate road, impacted sites, constructed water crossings, etc. Regarding the first item, the Board notes page 19 of the Plan entitled "Reporting Mechanism" which states that starting September 15, the Licensee will report on a weekly basis to the INAC Inspector and to the NWB by providing pictures of any remediation work achieved on the eighteen (18) areas identified in the Mitigation Plan and that this information will be provided by e-mail. To date, the Board has not received the proposed weekly reports.

Regarding the second item noted by INAC, the Board received as part of the amendment Application, a figure prepared by Qikiqtaaluk Logistics Inc., entitled Road Between Cape Christian and Clyde River Location of Impacted Areas, dated August 31, 2009 identifying the alternate road and impacted sites; however, it does not identify the water crossings.

In addition, INAC recommended submission of plans to address ponded water adjacent to the new roadway to prevent thermokarst, additional erosion, and sedimentation of proximal water sources, which occurred during the construction of the new roadway. INAC recommended that the plans be submitted prior to the 2010 field season.

In the NWB's view, the Mitigation Plan is satisfactory. As such, the Board requires the Licensee, as new conditions in Part I Item 9 and Part J Item 10 of the Licence, to implement the Mitigation Plan including the weekly reporting mechanism. In addition, the Board requires the Licensee, as a new condition in Part I Item 10, to submit an addendum to the Mitigation Plan to the NWB for review within thirty (30) days of issuance of the Licence Amendment. The revisions must address INAC's recommendations.

iv. Waste

On March 30, 2010, the NWB received the Licensee's 2009 Annual Report in accordance with Part B Item 1 of the Licence. Section 6.2 of the Annual Report, entitled "Waste Locations", indicates that all waste associated with the 2009 operations were discharged in the Hamlet of Clyde River's landfill facility. Part D Item 3 of the Licence requires the Licensee to provide to the Board, documented authorization from the community of Clyde River prior to the backhauling of any waste; however, no documented authorization has been received. The Board noted this as a compliance issue in Section i of this Decision and is requiring the Licensee as an amended condition of Part D Item 3 of the Licence, to submit the documented authorization to the Board within thirty (30) days of issuance of the Licence Amendment.

v. Spill contingency plan

As part of its amendment Application, the Licensee submitted a document prepared by Qikiqtaaluk Corporation, prepared for Nunavut Impact Review Board and NWB, entitled Spill Contingency Plan Road Repair and Free Span Bridge Construction Clyde River vs Cape Christian – revision 3, dated August 2009 (Spill Contingency Plan). INAC suggested that the Spill Contingency Plan should (1) clarify that all fuel caches will be located at least thirty (30) metres above the high mark of any water body; (2) include a diagram/ schematic that identifies all fuel caches, spill response kit storage areas and fuel transfer areas; and (3) make reference to the Nunavut Spill Report Form in the Response Action Section of the Plan. INAC further requested that the Licensee report all spills to INAC's Manager of Field Operations as well as the Nunavut Spill Report Line.

The Board agrees with INAC and has added a condition to the Licence requiring the Licensee to submit to the Board for review, within thirty (30) days of Licence issuance, an addendum to the Spill Contingency Plan to address INAC's recommendations.

vi. As-Built Drawings

In its comments on the Licensee's *Mitigation Plan to Restore All Impacted Grounds and Waters on the "Old Roadway" - Road between Clyde River and Cape Christian*, INAC recommended the submission of as-built drawings of the constructed roadway. INAC further recommended that drawings are to be signed by an Engineer approving the design and construction methodology prior to the 2010 field season.

In addition, the Board notes that stamped as-built drawings of the bridge and water crossings have not been submitted as required by Part G Item 5 of the Licence. The Board is therefore requiring the Licensee, as a new condition in Part G, Item 6 of the Licence, to submit to the Board as-built plans and drawings of the constructed roadway and constructed bridge and water crossings within sixty (60) days of issuance of the Licence Amendment.

vii. Water crossings 9, 10, and 11

In its review of the Licensee's 2009 Annual Report, the NWB noted that summaries of construction activities were provided for water crossings identified as numbers 9, 10 and 11. These crossings were not included in the scope of the original Licence are not referenced in the amendment Application.

The Board requires the Licensee, as a new condition in Part G Item 7 of the Licence, to submit as built plans and drawings of water crossings 9, 10, and 11 to the Board for review within sixty (60) days of issuance of the Licence Amendment.

viii. Monitoring Program

INAC recommended that Part J of the Licence be expanded to include ongoing monitoring of the road following construction (including erosion, sediment control, and water quality testing).

Due to the potential for post construction impacts to the quality of nearby water resources, the Board agrees with INAC and has therefore added a condition to the Licence in Part J Item 9 requiring the Licensee to submit to the Board for review and approval either sixty (60) days prior to the completion of construction or upon application for Licence renewal, whichever comes first, a Post Construction Monitoring Plan.

In addition, as discussed in Section iii of this Decision, the Board is requiring the Licensee, as a new condition in Part J Item 10 of the Licence, to submit weekly progress reports to the NWB

for review, based on the commitment made in the document entitled “Mitigation Plan to Restore all Impacted Grounds and Waters on the “Old Roadway” – Road Between Clyde River and Cape Christian”, dated August 31, 2009.

LICENCE AMENDMENT No. 1

| | |
|--|--------------------------------|
| Licensee: | Qikiqtaaluk Corporation |
| Licence No: | 8BW-CLY0810 Type "B" |
| Licence Issued: | March 03, 2009 |
| Effective Date of Amendment No.1: | August 13, 2010 |
| Licence Expiry: | October 1, 2010 |

Pursuant to its authority under Article 13 of the *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada* and the *Nunavut Waters* and the *Nunavut Surface Rights Tribunal Act*, the Nunavut Water Board hereby grants the following Licence amendment.

The Licence issued March 03, 2009 with an expiry date of October 01, 2010 shall be amended to include the following terms and conditions, with respect to the use of water and deposit of waste for the undertaking classified as miscellaneous that includes road construction and water crossing activities at the Clyde River Road Construction Project located within the Qikiqtani Region of Nunavut generally located at the triangular geographic coordinates as follows:

70° 30' N and 68° 16' W
70° 30' N and 68° 31' W
70° 28' N and 68° 22' W; and
70° 29' N and 68° 29' W (Clyde River Bridge Crossing)

New activities to be carried out include:

- Re-routing of the road as per application drawings;
- Three (3) new culvert installations at creek crossings 2a, 3a, and 7a, as described in the application for water licence amendment, dated August 31, 2009;
- Removal of five (5) culvert installations at creek crossings 1,2,3,7, and 8 as described in the application for water licence amendment, dated August 31, 2009; and
- Restoration of impacted grounds and waters along the old roadway as described in the application for water licence amendment, dated August 31, 2009.

The Licence shall be amended to reflect the following:

PART D: CONDITIONS APPLYING TO WASTE DISPOSAL

Amend

- Item 3 The Licensee shall submit to the Board, written documentation from the community of Clyde River authorizing the disposal of waste in the community's landfill.

PART G: CONDITIONS APPLYING TO CONSTRUCTION AND MODIFICATIONS

Insert

Item 6 The Licensee shall submit to the Board within sixty (60) days of issuance of this Licence Amendment, as-built plans and drawings of the constructed roadway, and constructed bridge and water crossings. These plans and drawings shall be stamped and signed by an Engineer.

Insert

Item 7 The Licensee shall submit to the Board for review within sixty (60) days of issuance of the Licence Amendment, as-built plans and drawings of water crossings 9, 10, and 11, as described in the Licensee's 2009 Annual Report. These plans and drawings shall be stamped and signed by an Engineer.

PART H: CONDITIONS APPLYING TO SPILL CONTINGENCY PLANNING

Insert

Item 8 The Licensee shall submit to the Board for review within thirty (30) days of issuance of this Licence Amendment, an addendum to the document "Spill Contingency Plan – Road Between Clyde River and Cape Christian", (revision 3), dated August 2009. The addendum shall address parties' comments during the review process, including the following:

- a. Consistency between front page title and document headers;
- b. Clarification regarding the location of all fuel caches;
- c. A diagram/schematic that identifies all fuel caches, spill response kit storage areas and fuel transfer areas; and
- d. Revision to the Response Action Section of the Spill Contingency Plan as identified in comments provided by INAC.

PART I: CONDITIONS APPLYING TO ABANDONMENT AND RESTORATION OR TEMPORARY CLOSING

Insert

Item 9 The Licensee shall implement the mitigation plans outlined in the document entitled "*Mitigation Plan to Restore all Impacted Grounds and Waters on the "Old Roadway" – Road Between Clyde River and Cape Christian*", dated August 31, 2009, or subsequent revisions.

Insert

Item 10 The Licensee shall submit to the Board for review within thirty (30) days of issuance of the Licence Amendment, an addendum to the document entitled "*Mitigation Plan to Restore all Impacted Grounds and Waters on the "Old Roadway" – Road Between Clyde River and Cape Christian*", dated August 31, 2009, or subsequent revisions. The addendum shall address parties' comments during the review process including the following:

- a. Weekly reporting mechanism to regulators;
- b. Map or diagram that clearly identifies the new road route, impacted sites and constructed water crossings; and
- c. Plans to address ponded water adjacent to the roadway and new route to prevent thermokarst, erosion, and sedimentation of proximal water sources.

PART J: CONDITIONS APPLYING TO THE MONITORING PROGRAM

Insert

Item 9 The Licensee shall submit to the Board for review and approval, either sixty (60) days prior to the completion of construction or the issuance of this amendment, or, where required prior to completion of construction, upon the application to the NWB for Licence renewal, a Post Construction Monitoring Plan, that is to include monitoring of erosion prevention, sediment control mechanisms and water quality testing.

Insert

Item 10 The Licensee shall submit weekly progress reports to the Board and the Inspector including pictures of any remediation work achieved on the areas identified in the document entitled "Mitigation Plan to Restore all Impacted Grounds and Waters on the "Old Roadway" – Road Between Clyde River and Cape Christian", dated August 31, 2009, or subsequent revisions.

All terms and conditions of Licence 3BW-CLY0810 Type "B" dated March 3th, 2009 still apply.

This Licence Amendment No.1 is issued and recorded at Gjoa Haven, NU on August 13, 2010.

Approved by,



Thomas Kabloona
Nunavut Water Board
Chair