

P.O. Box 119 Gjoa Haven, NU X0B 1J0 Tel: (867) 360-6338 Fax: (867) 360-6369 בּבְּי בּבְרְי בּבְי בּבּי בּבְי בּבְייבּי בּבּיי בּביי בּבּיי בּבּייבי בּבּיי בּבּיי בּבּיי בּביי בּבּיי בּבּיי בּבּיי בּבּיי בּבּיי בּבּיי בּבּיי בּבּיי בּבּיי

File No.: 3BM-KIM0911

March 19, 2010

Mr. Akeego Ikkidluak Acting Senior Administrative Officer Hamlet of Kimmirut Box 120 Kimmirut, NU X0A 0N0

E-mail: saokim@qiniq.com

RE: Hamlet of Kimmirut Application to Amend Type "B"

Water Licence 3BM-KIM0911

#### Dear Mr. Ikkidluak:

Please find attached the decision of the Nunavut Water Board (NWB or Board) to not amend the Hamlet of Kimmirut's water licence 3BM-KIM0911 (Licence) as requested in an application for amendment received by the Board on June 8, 2009, as well as the associated reasons for decision. This decision is made pursuant to the NWB's authority under Article 12 of the *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada* (Nunavut Land Claims Agreement or NLCA) and the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (NWNSRTA). As set out in the reasons for decision, based on the application, submissions by all parties and applicable legislation, the Board is not satisfied that the requirements of s. 57<sup>1</sup> of the NWNSRTA have been met, and accordingly cannot amend the Licence as requested in the application.

The Board notes that the Hamlet's Licence expires on January 29, 2011. It is the Licensee's responsibility to apply to the NWB for a renewal prior to the expiry of the Licence. Note that if

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<sup>&</sup>lt;sup>1</sup> NWNSRTA s.57. The Board may not issue a licence unless the applicant satisfies the Board that (a) any waste produced by the appurtenant undertaking will be treated and disposed of in a manner that is appropriate for the maintenance of the water quality standards and effluent standards that are prescribed by the regulations or, in the absence of such regulations, that the Board considers acceptable; and (b) the financial responsibility of the applicant, taking into account the applicant's past performance, is adequate for (i) the completion of the appurtenant undertaking, (ii) such measures as may be required in mitigation of any adverse impact, and (iii) the satisfactory maintenance and restoration of the site in the event of any future closing or abandonment of that undertaking.

the Licence expires before the NWB issues a new one, then water use and waste disposal must cease, or the Licensee may be in contravention of the NLCA and the NWNSRTA. However, the expiry or cancellation of a licence does not relieve the holder from any obligations imposed by the licence. The Board recommends that renewal of the Licence be filed at <u>least three (3) months prior</u> to the Licence expiry date. As with all renewal applications, the past performance of the Licensee, new documentation and information, and issues raised during a public hearing, if the Board decides to hold one, may be considered when deciding upon an application.

As set out in the reasons for decision, the Board anticipates that an application for amendment will be required to authorize the construction of the proposed new solid waste disposal facility. The Licensee may wish to prepare a new application for amendment to the Licence. In that case, the NWB will consider, as with all amendment applications, whether it is in the public interest to hold a public hearing. The Board's determination that a public hearing was not required in respect of this amendment application does not limit their decision in respect of a future amendment application.

The Licensee should submit applications for amendment as soon as possible to give the NWB sufficient time to go through the amendment process. The process and timing may vary depending on the scope of the amendment, however a minimum of sixty (60) days is required from time of acceptance by the NWB. It is the responsibility of the Licensee to ensure that all application materials have been received and acknowledged by the Manager of Licensing.

The NWB strongly recommends that the Licensee review and consider the comments received from interested persons on the specific issues identified in response to this amendment application and the NWB's reasons for decision. This information is attached for your consideration.

Sincerely,

Thomas Kabloona

Nunavut Water Board, Chair

TK/tla/kt

Enclosure: Comments from EC, INAC and GN-DOE

cc: Qikiqtani Distribution List



P.O. Box 119 Gjoa Haven, NU X0B 1J0 Tel: (867) 360-6338 Fax: (867) 360-6369 בּבְּי בּבְרְי בּבְי בּבּי בּבְי בּבְייבּי בּבּיי בּביי בּבּיי בּבּייבי בּבּיי בּבּיי בּבּיי בּביי בּבּיי בּבּיי בּבּיי בּבּיי בּבּיי בּבּיי בּבּיי בּבּיי בּבּיי

### **DECISION**

**LICENCE NUMBER: 3BM-KIM0911** 

This is the decision of the Nunavut Water Board (NWB) with respect to an application for an amendment to Water Licence 3BM-KIM0911 (Licence) received June 8, 2009, by the Licensee:

#### HAMLET OF KIMMIRUT

to allow for the use of water and disposal of waste for the Hamlet of Kimmirut, located within the Qikiqtani region of Nunavut. With respect to this application, the NWB gave notice to the public that the Hamlet had filed an application for a water licence amendment.

#### **DECISION**

After having been satisfied that the application was exempt from the requirement for screening by the Nunavut Impact Review Board in accordance with s. 12.3.2 of the *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada* (Nunavut Land Claims Agreement or NLCA), the NWB decided that the application could proceed through the regulatory process. After reviewing the full submission of the Applicant and written comments expressed by interested parties, the NWB, having given due regard to the facts and circumstances, the merits of the submissions made to it and to the purpose, scope and intent of Article 12 of the NLCA and of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (NWNSRTA), decided to waive the requirement to hold a public hearing and determined that the NWB:

Not amend Licence Number 3BM-KIM0911, as requested in the application for amendment submitted by the Government of Nunavut Community Government Services, on behalf of the Licensee, the Hamlet of Kimmirut, received June 8, 2009 (Motion #: 2010-18 23-B1-03)

SIGNED this 16 day of March, 2010 at Gjoa Haven, NU.

Thomas Kabloona, Nunavut Water Board, Chair

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#### I. BACKGROUND

The Hamlet of Kimmirut is a small community with a population of approximately 560. The Hamlet is located on the southern tip of Baffin Island in Nunavut, at 62°50'06"N and 69°52'04"W within the Qikiqtani region of Nunavut.

The Hamlet of Kimmirut currently discharges its untreated wastewater to a ditch which drains directly to the ocean. This site is located approximately 750 m south of the community. In 2000, a new sewage lagoon was designed and partially constructed 1.5 km from the community to improve the treatment of sewage. However, due to the unsafe condition of the access road to the lagoon, the lagoon was never commissioned. In 2009, design enhancements for the sewage lagoon and construction of enhancements were approved by the NWB to upgrade and increase the capacity of the facility.

The Hamlet of Kimmirut currently disposes of its solid waste in an existing landfill site located adjacent to the existing sewage disposal site. A new solid waste disposal facility was partially constructed adjacent to the sewage lagoon but was never commissioned.

Lake Fundo is the community's primary source of potable water with a relatively large volume of 6,783,000 cubic meters compared to the 30,000 cubic meters authorized for use on an annual basis.

The community uses trucked services for both water delivery and sewage collection.

#### II. PROCEDURAL HISTORY

On June 8, 2009, the Government of Nunavut Community Government Services (GN-CGS, Applicant), on behalf of the Hamlet of Kimmirut (Licensee), submitted an application for amendment of an existing water licence 3BM-KIM0911 (Application).<sup>2</sup> The amendment application was submitted in follow-up to a letter dated January 27, 2009 from Trow Associates Inc. (Trow) acting on behalf of the GN-CGS.<sup>3</sup> And a subsequent teleconference dated February 13, 2009 discussing issues raised in that letter. The Application concerned the following areas of Water Licence 3BM-KIM0911 (Licence): 1) Sewage effluent discharge criteria; 2) Flow monitoring requirements for sewage lagoon discharge; and 3) the method of sewage disposal during construction of the Enhanced Sewage Disposal Facility.

<sup>&</sup>lt;sup>2</sup> Letter from B. Roy, GN-CGS, to P. Beaulieu, NWB, Subject: Application for the Amendment of existing Water Licence 3BM-KIM0911 for the Hamlet of Kimmirut, Baffin Region, Nunavut, dated June 8, 2009.

<sup>&</sup>lt;sup>3</sup> Letter from S. Douglas and S. Burden, Trow, to B.Roy, GN-CGS, Subject: Water Licence 3BM-KIM0911 Hamlet of Kimmirut, dated January 27, 2009.

Following an internal preliminary technical review, on June 18, 2009, the NWB requested additional information from GN-CGS via email to clarify the following three items:

- 1. The status of the quarry management plan required as a condition of Part D Item 10 of the Licence. This Plan was to be submitted to the Board for approval, sixty (60) days (March 10, 2009) following Licence issuance;
- 2. An abandonment and restoration plan, as required under Part G Item 1 of the Licence was to be submitted to the Board for approval at least 6 months prior to a) abandoning of any facilities and b) the construction of new facilities to replace existing ones. Although the NWB acknowledged that the amendment application stated that a consultant would be working on this plan, the NWB requested an estimated timeframe for the submission of the plan; and
- 3. The plan for sewage disposal during construction of the Enhanced Sewage Disposal Facility. This issue was raised in correspondence dated January 27th, 2009 from Trow Associates Inc. to GN-CGS.<sup>4</sup>

In response to the NWB's request, the GN-GCS submitted additional information to the NWB on June 19, 2009.<sup>5</sup> Following additional internal review of the Application, the NWB concluded that it met the requirements of section 48(1) of the Nunavut Waters and Nunavut Surface Waters Tribunal Act (NWNSRTA or Act) and forwarded notice of the Application to interested persons inviting written representations within 30 days.<sup>6</sup>

By July 27, 2009 comments on the Application were received from Indian and Northern Affairs Canada (INAC)<sup>7</sup>, Environment Canada (EC)<sup>8</sup>, and Government of Nunavut Department of Environment (GN-DOE)<sup>9</sup>. Following review of the submissions, on August 21, 2009, the NWB acknowledged receipt of parties' comments and provided GN-CGS with an opportunity to provide a response to the comments before making a determination on the Application. GN-CGS was asked to pay particular attention to the following issues:

- 1. The plan for sewage disposal during construction;
- 2. Plan for compliance; and

<sup>&</sup>lt;sup>4</sup> Email from D. Hohnstein, NWB, to B. Roy, GN-CGS, Subject: Kimmirut Info Requirements, dated June 18, 2009.

<sup>&</sup>lt;sup>5</sup> Letter from B. Roy, GN-CGS, to P. Beaulieu, NWB, No subject, dated June 19, 2009.

<sup>&</sup>lt;sup>6</sup> Letter from R,Dwyer, NWB, to B.Roy, GN-CGS, and A.Ikkidluak, Hamlet of Kimmirut, Subject: Amendment Application for Water Licence 3BM-KIM0911, dated June 26, 2009.

<sup>7</sup> Letter from T. Trenholm, INAC, to P. Beaulieu, NWB, Subject: 3BM-KIM0911 – Hamlet of Kimmirut –

Application for Amendment, dated July 27, 2009.

<sup>&</sup>lt;sup>8</sup> Letter from C. Spavor, EC, to R. Dwyer, NWB, Subject: Amendment Application for Water Licence 3BM-KIM0911, dated July 27, 2009.

<sup>&</sup>lt;sup>9</sup> Letter from A. Loder, GN-DOE, to P. Beaulieu, NWB, Subject: NWB File #3BM-KIM0911 – Hamlet of Kimmirut - Water Licence Amendment Application.

3. Sewage effluent discharge criteria. 10

On November 2, 2009, GN-CGS submitted a response to the NWB August 21, 2009 correspondence including the following documentation.

- > Cover letter:
- ➤ Document entitled "The Plan for Sewage Disposal During Construction";
- > Document entitled "Plan for Compliance"; and
- Letter from Trow Associates Inc. to Community Government Services Re: Effluent Criteria at the Compliance Point Kimmirut Sewage Lagoon, dated October 30, 2009. 11

On November 18, 2009, the NWB provided parties with an opportunity to review GN-CGS's submission to determine whether issues identified by parties during their initial review of the Application had been resolved. In addition, the NWB proposed to hold a technical meeting to discuss how the Board should proceed on unresolved issues. The technical meeting was held via teleconference on December 7, 2009 and on December 10, 2009, draft meeting notes were distributed via email to participants of the technical meeting for review and comment. Comments on the meeting notes were received from EC on December 15, 2009.

On December 21, 2009 GN-CGS submitted the following additional information:

- > Cover letter:
- ➤ Appendix A Letter from A. Ikkidluak, Hamlet of Kimmirut, to B. Roy, GN-CGS, dated December 19, 2009:
- ➤ Appendix B Letter from S. Douglas, Trow, and S. Burden, Trow, o B. Roy, GN-CGS, entitled "Effluent Criteria at the Compliance Point Kimmirut Sewage Lagoon" dated December 19, 2009;
- ➤ Appendix B Figure A, Drainage Location Path;
- ➤ Appendix C draft Spill Contingency Plan Municipality of Kimmirut, 2009
- Appendix D Figure 2 Proposed Landfill Site Kimmirut, Borehole Location Plan. <sup>16</sup>

<sup>&</sup>lt;sup>10</sup> Letter from D. Hohnstein, NWB, to B. Roy, GN-CGS, and A.Ikkidluak, Hamlet of Kimmirut, Subject: Amendment Application for Water Licence 3BM-KIM0911, dated August 21, 2009.

<sup>&</sup>lt;sup>11</sup> Letter from B. Roy, GN-CGS, to P. Beaulieu, NWB, Subject: Amendment Application for Water Licence 3BM-KIM0911, dated November 2, 2009.

<sup>&</sup>lt;sup>12</sup>Letter from D. Hohnstein, NWB, to Qikiqtani Distribution List, Subject: Amendment Application for Water Licence 3BM-KIM0911, dated November 18, 2009.

<sup>&</sup>lt;sup>13</sup> Email from K. Tunaley, NWB, to participants of the technical meeting, Subject: Meeting Notes – December 7, 2009 Teleconference Kimmirut, dated December 10, 2009.

<sup>&</sup>lt;sup>14</sup> Meeting notes prepared by NWB, for technical meeting dated December 7, 2009 regarding the Kimmirut Water Licence Amendment

<sup>&</sup>lt;sup>15</sup> Email from A. Wilson, EC, to K, Tunaley, NWB, Subject: 091210-3BM-KIM-Mtg-Notes-ODTE.doc, dated December 15, 2009.

<sup>&</sup>lt;sup>16</sup> Letter from B. Roy, GN-CGS, to P. Beaulieu, NWB, No subject, dated December 21, 2009.

On January 21, 2010, the NWB distributed the additional information submitted by GN-CGS to interested parties for review and comment as well as final teleconference meeting notes. <sup>17,18</sup> By February 11, 2010 the NWB received comments from INAC<sup>19</sup> and EC<sup>20</sup>.

On February 19, 2010 the NWB provided GN-CGS with a final opportunity to respond to the comments received, as well as to address any outstanding issues, before the Board made its final determination.<sup>21</sup> The Applicant did not respond by the date set out in the Board's letter.

#### III. BOARD DECISION

Based upon the results of the detailed assessment of the Application, consideration of the comments provided by the parties, the responses of the Applicant and the Board's jurisdiction under the *Nunavut Land Claims Agreement* and the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*, the Board has not amended Licence 3BM-KIM0911, as requested in the Application for amendment, submitted by the Government of Nunavut Community Government Services, on behalf of the Licensee, the Hamlet of Kimmirut on June 8, 2009.

#### IV. ISSUES

# The Plan for Sewage Disposal during Construction of the Enhanced Sewage Disposal Facility

Part D Item 1 of the Licence requires the Licensee to direct all sewage to the Sewage Disposal Facility prior to commissioning the Enhanced Sewage Disposal Facility. The Sewage Disposal Facility is defined in the Licence as the area and engineered lagoon and decant structures designed to contain sewage, as described in the Application for Water Licence filed by the Applicant on May 17, 2001.<sup>22</sup>

<sup>&</sup>lt;sup>17</sup> Letter from R. Dwyer, NWB, to B. Roy, GN-CGS, and A. Ikkidluak, Hamlet of Kimmirut, Subject: Additional Information regarding Amendment Application for 3BM-KIM0911, dated January 21, 2010.

<sup>&</sup>lt;sup>18</sup> Revised meeting notes prepared by NWB, verified by meeting participants, for technical meeting dated December 7, 2009 regarding the Kimmirut Water Licence Amendment.

<sup>&</sup>lt;sup>19</sup> Letter from T. Trenholm, INAC, to R. Dwyer, NWB, Subject: 3BM-KIM0911 – Government of Nunavut, Community and Government Services (GN-CGS) – Hamlet of Kimmirut – Application for Amendment – Additional Information Submission, dated February 11, 2010.

<sup>&</sup>lt;sup>20</sup> Letter from C. Spavor, EC, to R. Dwyer, NWB, Subject: Additional Information regarding Amendment Application for 3BM-KIM0911, dated February 4, 2010.

<sup>&</sup>lt;sup>21</sup> Letter from D. Hohnstein, NWB to B. Roy, GN-CGS, and A. Ikkidluak, Hamlet of Kimmirut, Subject: Request for Final Response regarding Amendment Application for Water Licence 3BM-KIM0911, Hamlet of Kimmirut, dated February 19, 2010

<sup>&</sup>lt;sup>22</sup> See NWB Water Licence 3BM-KIM0911, dated January 19, 2009, page 20.

In its letter dated January 27, 2009 following issuance of the Licence, Trow noted that the Enhanced Sewage Disposal Facility encompasses the Sewage Disposal Facility and that it is impractical to construct the Enhanced Sewage Disposal Facility if the Sewage Disposal Facility is operational. Trow further noted that the intention of the design was to maintain the use of the current sewage disposal system (disposal to a ditch approximately 750 m south of the community that drains to the ocean) until such time as the Enhanced Sewage Disposal Facility could be constructed.<sup>23</sup> This plan for sewage disposal during construction was confirmed in GN-CGS's June 19, 2009 submission. This submission also indicated that funding for construction of the Enhanced Sewage Disposal Facility and the associated access roads were not confirmed.<sup>24</sup>

Both EC and INAC, in their written submissions dated July 27, 2009 advised the Board that the current method of sewage disposal is unacceptable. Furthermore, both parties expressed concern regarding the schedule for construction of the Enhanced Sewage Disposal Facility due to unsecured funding and recommended that immediate steps be taken to address the issue in a Plan for Compliance. <sup>25, 26</sup>

The Board agrees with INAC and EC that discharge of raw sewage to the environment during construction of the Enhanced Sewage Disposal Facility is unacceptable. On this basis, the Board is not satisfied that the waste produced by the appurtenant undertaking will be treated and disposed of in a manner that the Board considers acceptable. Therefore, in accordance with s. 57(a) of the NWNSRTA the Board is unable to grant the amendment.<sup>27</sup> To proceed with an amendment in future, the Licensee must provide additional information regarding acceptable alternative methods of sewage disposal during construction of the Enhanced Sewage Disposal Facility.

## **Effluent Quality Criteria**

The current effluent quality criteria imposed under the Licence condition in Part D Item 2 requires all effluent discharged from the Enhanced Sewage Disposal Facility at Monitoring

<sup>25</sup> See letter from T. Trenholm, INAC, to P. Beaulieu, NWB, Subject: 3BM-KIM0911 – Hamlet of Kimmirut – Application for Amendment, dated July 27, 2009, pages 3 and 4.

<sup>&</sup>lt;sup>23</sup> See letter from S. Douglas and S. Burden (Trow) to B. Roy, GN-CGS, Re: Water Licence 3BM-KIM0911 Hamlet of Kimmirut, dated January 27, 2009, page 2.

<sup>&</sup>lt;sup>24</sup> See GN-CGS June 8, 2009 submission, page 11.

<sup>&</sup>lt;sup>26</sup> See letter from C. Spavor, EC, to R. Dwyer, NWB, Subject: Amendment Application for Water Licence 3BM-KIM0911, dated July 27, 2009, page 3.

NWNSRTA s.57. The Board may not issue a licence unless the applicant satisfies the Board that (a) any waste produced by the appurtenant undertaking will be treated and disposed of in a manner that is appropriate for the maintenance of the water quality standards and effluent standards that are prescribed by the regulations or, in the absence of such regulations, that the Board considers acceptable;

Program Stations KIM-6 (lower lagoon spillway) and KIM-7 (lower lagoon pump) to not exceed the following effluent quality limits:<sup>28</sup>

Parameter	Maximum Average Concentration
BOD5	120 mg/L
Total Suspended Solids	180 mg/L
Faecal Coliforms	1 x 10 <sup>6</sup> CFU/ 100mL
Oil and grease	No visible sheen
pH	Between 6 and 9

In its November 2, 2009 submission, GN-CGS proposed that all effluent discharged from the Enhanced Sewage Disposal Facility at Monitoring Program stations KIM-6 and KIM-7 not exceed the following effluent quality limits based on an average of samples taken throughout the discharge period:<sup>29</sup>

Parameter	Maximum Average Concentration
BOD5	150 mg/L
Total Suspended Solids	160 mg/L
Faecal Coliforms	1 x 10 <sup>6</sup> CFU/ 100mL
Oil and grease	No visible sheen
pH	Between 6 and 9

During the December 7, 2009 technical meeting, EC requested information regarding the fish bearing nature of the pond immediately downstream of the wetland area, draining to the large Soper Lake. GN-CGS agreed to discuss the issue with the Hamlet of Kimmirut and provide documentation regarding the fish bearing nature of the water body to the NWB and reviewers. <sup>30</sup> As part of it December 21, 2009 submission the GN-CGS provided a letter from the Hamlet of Kimmirut indicating that the residents of the community fish in Soper Lake. <sup>31</sup> Following review of GN-CGS's submission, EC, in its comments dated February 4, 2010, encouraged the GN-CGS in cooperation with the Hamlet to conduct additional sampling to determine if there are fish in the wetland area or the small pond upstream of Soper Lake. <sup>32</sup>

<sup>29</sup> See letter from S. Douglas and S. Burden (Trow) to B. Roy, GN-CGS, Re: Effluent Criteria at the Compliance Point Kimmirut Sewage Lagoon, dated October 30, 2009, page 6.

<sup>&</sup>lt;sup>28</sup> See NWB Water Licence 3BM-KIM0911, dated January 19, 2009, page 20.

<sup>&</sup>lt;sup>30</sup> See meeting notes prepared by NWB, verified by meeting participants, for technical meeting dated December 7, 2009 regarding the Kimmirut Water Licence Amendment, page 2.

<sup>&</sup>lt;sup>31</sup> See letter from A. Ikkidluak (Hamlet of Kimmirut) to R. Roy, GN-CGS, No subject, dated December 16, 2009.

<sup>&</sup>lt;sup>32</sup> See letter from C. Spavor, EC, to R. Dwyer, NWB, Subject: Additional Information regarding Amendment Application for 3BM-KIM0911, dated February 4, 2010.

For the Board to determine the appropriate effluent quality criteria under the Licence, the Board must have sufficient information to assess whether regulations made under section 36(5) of the *Fisheries Act* apply to the waters governed by the Licence., <sup>33</sup> Accordingly, the Board agrees with EC that information regarding the presence of fish in the wetland area is required before effluent quality criteria can be decided.

Also, following its review of GN-CGS's December 21, 2009 submission, INAC, in its comments dated February 11, 2010, noted concerns regarding the effectiveness of the wetland treatment and recommended that additional information was required prior to approval of the amendment. Specifically, INAC recommended that the Applicant submit a more detailed topographic map covering the entire sewage effluent treatment train including definitive flow patterns, discharge location into wetlands, predicted flow course through the wetlands, discharge into small ponds, and finally discharge into Soper Lake. INAC also recommended that the Applicant undertake a site specific wetland study to ensure that the end of wetlands effluent quality criteria of 45 mg/L BOD<sub>5</sub> and 45 mg/L TSS are achievable.  $^{34}$ 

Based on the submission of GN-CGS, the Board accepts that the wetland area is a significant component of the sewage treatment facility<sup>35</sup> and agrees with INAC that it needs to be technically verified prior to an amendment of the Licence.

For the reasons stated above, the Board cannot amend the effluent quality criteria required as a condition of Part D Item 2 of the Licence, until the following additional information is provided and considered by the Board:

- 1. Results of sampling to determine if there are fish in the wetland area or the small pond upstream of Soper Lake;
- 2. A more detailed topographic map covering the entire sewage effluent treatment train including definitive flow patterns, discharge location into wetlands, predicted flow course through the wetlands, discharge into small ponds, and finally discharge into Soper Lake; and
- 3. Site specific wetland study.

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<sup>&</sup>lt;sup>33</sup> NWNSRTA s.73. Where the Board issues a licence in respect of any waters to which regulations made under subsection 36(5) of the Fisheries Act apply, any conditions in the licence relating to the deposit of waste in those waters shall be at least as stringent as the conditions prescribed by those regulations.

<sup>&</sup>lt;sup>34</sup> See letter from T. Trenholm, INAC, to R. Dwyer, NWB, Subject: 3BM-KIM0911 – Government of Nunavut, Community and Government Services (GN-CGS) – Hamlet of Kimmirut – Application for Amendment – Additional Information Submission, dated February 11, 2010, pages 2-3.

<sup>&</sup>lt;sup>35</sup> See Design Brief Rehabilitation and Expansion of Existing Sewage Lagoon for the Hamlet of Kimmirut, prepared for the Government of Nunavut Community Government Services by Trow Associates Inc, OTCD00018881A, dated January 2008.

#### **Plan for Compliance**

Part B, Item 11 of the Licence requires the Licensee to submit to the Board for approval, within ninety (90) days of Licence issuance or upon the filing of any application in relation to the Licence within that time, a Plan for Compliance that clearly demonstrates the measures the Licensee will undertake, including an implementation schedule, to achieve full compliance with the conditions of the Licence, including the issues raised in the Inspector's Reports. <sup>36</sup>

The GN-CGS submitted a Plan for Compliance (Plan)<sup>37</sup> with the Application. The Plan was reviewed as part of the Application, including additional information submitted on November 2, 2009 and December 21, 2009, in response to reviewers' comments.

EC, in its written submission dated July 27, 2009, advised the Board that the Plan does not fully demonstrate how the Hamlet will come into compliance with the Licence, noting concern that the construction of the Enhanced Sewage Disposal Facility had been postponed.<sup>38</sup> INAC, in its submission of the same date, also identified concerns with the plan for compliance for sewage disposal and recommended that the Licensee immediately resubmit a plan for compliance, including firm timetables for construction and implementation, which addresses the issue of raw sewage disposal.<sup>39</sup> The current practice of sewage disposal was discussed during the December 7, 2009 technical meeting in which no alternatives were forwarded.<sup>40</sup>

INAC, in its comments dated February 11, 2010, noted issues with the Plan including the solid waste disposal plan for compliance, and the plan for compliance to address abandonment and restoration plans. <sup>41</sup> INAC recommended that the Plan should be a stand alone document that addresses the compliance related concerns noted in the December 7, 2009 teleconference meeting notes. <sup>42</sup> These concerns include:

- ➤ Implementation schedule;
- > Operations and Maintenance Manual for existing facilities:

<sup>38</sup> See letter from C. Spavor, EC, to R. Dwyer, NWB, Subject: Amendment Application for Water Licence 3BM-KIM0911, dated July 27, 2009, page 3.

<sup>&</sup>lt;sup>36</sup> See NWB Water Licence 3BM-KIM0911, dated January 19, 2009, page 19.

<sup>&</sup>lt;sup>37</sup> See GN-CGS June 8, 2009 submission page 10-11.

<sup>&</sup>lt;sup>39</sup> See letter from T. Trenholm, INAC, to P. Beaulieu, NWB, Subject: 3BM-KIM0911 – Hamlet of Kimmirut – Application for Amendment, dated July 27, 2009, page 4.

<sup>&</sup>lt;sup>40</sup> See meeting notes prepared by NWB, verified by meeting participants, for technical meeting dated December 7, 2009 regarding the Kimmirut Water Licence Amendment, page 1.

<sup>&</sup>lt;sup>41</sup> See letter from T. Trenholm, INAC, to R. Dwyer, NWB, Subject: 3BM-KIM0911 – Government of Nunavut, Community and Government Services (GN-CGS) – Hamlet of Kimmirut – Application for Amendment - Additional Information Submission, dated February 11, 2010.

<sup>&</sup>lt;sup>42</sup> See letter from T. Trenholm, INAC, to R. Dwyer, NWB, Subject: 3BM-KIM0911 – Government of Nunavut, Community and Government Services (GN-CGS) – Hamlet of Kimmirut – Application for Amendment - Additional Information Submission, dated February 11, 2010, page 4.

- Quarry Management Plan;
- > Solid waste disposal;
- > Geotechnical engineer's inspection report; and
- ➤ Abandonment and Restoration Plan.<sup>4</sup>

Regarding the solid waste disposal plan for compliance, INAC noted that GN-CGS had not provided information pertaining to when funding is anticipated or a proposed schedule of activities. As such, it remains unclear as to when GN-CGS plans to undertake the construction of facilities and also the development of the appropriate Abandonment and Restoration Plans. The Board understands that the delay in construction of the Enhanced Sewage Disposal Facility and the absence of firm implementation schedules in the Plan for Compliance, as required by Part B Item 11 of the Licence, is due to unsecured funding to carry out the proposed measures. However, the Board agrees with the reviewers' comments and recommendations, and has decided not to approve the Plan for Compliance.

The deficiencies in the Plan for Compliance are substantive, and the Board has concluded that the Plan for Compliance does not ensure that sewage and solid waste will be treated in a manner that is acceptable to the Board. In addition, reflecting uncertainty over the timing and security of the Applicant's funding, the Board is not satisfied that the Applicant is able to meet financial responsibilities in relation to construction, implementation of the required compliance and mitigation measures, maintenance and restoration of sites and facilities under the Licence. In accordance with section 57 of the NWNSRTA<sup>47</sup>, for the reasons set out above, the NWB is

<sup>&</sup>lt;sup>43</sup> See meeting notes prepared by NWB, verified by meeting participants, for technical meeting dated December 7, 2009 regarding the Kimmirut Water Licence Amendment, pages 2-3.

<sup>&</sup>lt;sup>44</sup> See letter from T. Trenholm, INAC, to R. Dwyer, NWB, Subject: 3BM-KIM0911 – Government of Nunavut, Community and Government Services (GN-CGS) – Hamlet of Kimmirut – Application for Amendment - Additional Information Submission, dated February 11, 2010, pages 3-4.

<sup>&</sup>lt;sup>45</sup> See GN-CGS's November 2, 2009 submission, page 3 which states:

<sup>&</sup>quot;Unfortunately, the construction of the proposed wastewater treatment facility including rehabilitation of the access road towards the facility may be delayed due to insufficient funding. Additional funding has been requested to proceed with construction just after completion of the granular access road."

<sup>&</sup>lt;sup>46</sup> See GN-CGS's December 21, 2009 submission, page 1 which states:

<sup>&</sup>quot;This facility [solid waste disposal facility] was built next to the proposed sewage lagoon and intended to commission in 2000, but was never completed nor commissioned. Additional funding has been requested to upgrade this facility to make it best fit for the community and to satisfy the requirements of the NWB. The Location map of the proposed landfill site is attached in Appendix-D. The existing facility which is being used will be decommissioned once the new facility is commissioned. Funding has been requested to complete this project."

<sup>&</sup>lt;sup>47</sup> NWNSRTA s.**57.** The Board may not issue a licence unless the applicant satisfies the Board that (*a*) any waste produced by the appurtenant undertaking will be treated and disposed of in a manner that is appropriate for the maintenance of the water quality standards and effluent standards that are prescribed by the

requesting that a revised Plan for Compliance be submitted by the Licensee that addresses these issues, to be approved by the Board in writing.

#### V. SUMMARY

In summary, the Board has decided not to amend the Licence, as requested in the Application submitted by Applicant. The specific amendments requested by the Applicant were as follows:

1) Sewage effluent discharge criteria; 2) Flow monitoring requirements for sewage lagoon discharge; and 3) the method of sewage disposal during construction of the Enhanced Sewage Disposal Facility.

Based on its review of the Application, parties' submissions to the Board and the applicable legislation, the Board has determined that:

- 1. the proposed method for sewage disposal during construction is unacceptable
- 2. there is a lack of information regarding whether regulations made under section 36(5) of the *Fisheries Act* apply to the waters governed by the Application
- 3. the effectiveness of the wetland component of the treatment facility needs to be verified;
- 4. the proposed treatment and disposal of waste, as outlined in the Plan for Compliance, is unacceptable; and
- 5. the financial responsibility of the Applicant is inadequate to ensure the construction, implementation of compliance, mitigation measures and satisfactory maintenance and restoration of the site and facilities is carried out.

As a result, the Board is not satisfied that the requirements of s. 57 of the NWNSRTA have been met and accordingly cannot amend the Licence as requested.

In future, the Board anticipates that an application for amendment will be required to authorize the construction of the proposed new solid waste disposal facility and that the Licensee will prepare a new application for amendment to the Licence. In the case of a new amendment application, the Board will consider whether it is in the public interest to hold a public hearing in respect of that application. The Board's determination that a public hearing was not required in respect of this amendment application does not limit their decision in this regard for future amendment applications.

regulations or, in the absence of such regulations, that the Board considers acceptable; and

<sup>(</sup>b) the financial responsibility of the applicant, taking into account the applicant's past performance, is adequate for (i) the completion of the appurtenant undertaking, (ii) such measures as may be required in mitigation of any adverse impact, and (iii) the satisfactory maintenance and restoration of the site in the event of any future closing or abandonment of that undertaking.

In the preparation of any future amendment application, the NWB strongly recommends that the Licensee review and consider the comments received from parties on the specific issues identified in response to this amendment application. In particular, the Board expects any future application for amendment to include, at a minimum, the following:

- 1. Acceptable, alternative methods for sewage disposal during construction;
- 2. Results of sampling to determine if there are fish in the wetland area or the small pond upstream of Soper Lake;
- 3. A more detailed topographic map covering the entire sewage effluent treatment train including definitive flow patterns, discharge location into wetlands, predicted flow course through the wetlands, discharge into small ponds, and finally discharge into Soper Lake;
- 4. A site-specific wetland study; and
- 5. A Plan for Compliance that addresses the Board's requirements and the parties' concerns.