

NUNAVUT WATER BOARD

WATER LICENCE NO: 3AM-IQA1626 AMENDMENT NO. 5

REASONS FOR DECISION INCLUDING RECORD OF PROCEEDINGS



NUNAVUT WATER BOARD

In the Matter of:

Applicant: City of Iqaluit

Subject: Application to Amend Type "A" Water Licence No: 3AM-

IQA1626

<u>Date:</u> March 15, 2021

<u>Precedence:</u> Where there is any inconsistency or conflict between the

Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada (Nunavut Agreement) and the Nunavut Waters and Nunavut Surface Rights Tribunal Act (NWNSRTA), the Agreement prevails to the extent of the inconsistency or conflict. Where there is any inconsistency or conflict between the NWNSRTA and any other act of Parliament, except the Nunavut Agreement, the NWNSRTA prevails to the extent

of the inconsistency or conflict.



RECORD OF PROCEEDINGS

Applicant: City of Iqaluit

Address: P.O. Box 460

Iqaluit, NU X0A 0H0

Purpose: Application to Amend Type "A" Water

Licence No: 3AM-IQA1626

Application

Received on:

April 9, 2020

Application

Received from:

City of Iqaluit

Dates of Written

Public Hearing:

January 11 to 19, 2021

Public Hearing

January 25, 2021

Record Closed:



PARTICIPANTS DURING THE BOARD'S REVIEW OF THE APPLICATION

NWB

Representatives:

Nunavut Water **Board Panel** Members (Panel P6):

Chairman Member Member

L. Toomasie S. Sowdlooapik R. Mrazek

Nunavut Water **Board Staff:**

Executive Director

S. Autut

Director Technical Services

Director of Board Administration and Communication

B. Kogvik

K. Kharatyan

Director of Licensing

Technical Advisor

R. Dwyer D. Donald

Legal Counsel (Meadows Law)

T. Meadows

Applicant:

City of Iqaluit

Chief Administrative Officer

A. Elgersma

Lead Consultant, Colliers Project

Leaders Inc.

A. Rustom

Interveners:

Crown-Indigenous Relations and Northern Affairs (CIRNA)

Manager of Water Resources Water Resources Coordinator

G. Okonkwo

B. Campbell

Environment and Climate Change

Regional Director

A. McLandress

Canada (ECCC)

Team Lead, Water Quality

A. Wilson

Environmental Assessment Coordinator

E. Walker

Written Record of

Submissions:

Available from the Board's public registry using the following link: ftp://ftp.nwb-oen.ca/registry/3%20MUNICIPAL/3A/3AM%20-

%20Municipality/3AM-

 $IQA162\underline{6/2\%20ADMIN/3\%20SUBMISSIONS/2020\%20Amendment/}$

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ABBREVIATIONS

Short Form	Full Name
CIRNA	Crown-Indigenous Relations and Northern Affairs Canada
ECCC	(formerly INAC and AANDC) Environment and Climate Change Canada (formerly
	Environment Canada)
NIRB	Nunavut Impact Review Board
Nunavut Agreement	Agreement Between the Inuit of the Nunavut Settlement Area
	and Her Majesty the Queen in Right of Canada
NPC	Nunavut Planning Commission
NuPPAA	Nunavut Planning and Project Assessment Act, S.C. 2013, c. 14, s. 2
NWNSRTA	Nunavut Waters and Nunavut Surface Rights Tribunal Act, S.C. 2002, c. 10
NWB	Nunavut Water Board
PHC	Pre-Hearing Conference
PH	Public Hearing
TM	Technical Meeting

REASONS FOR DECISION

Executive Summary

This decision is in relation to an application before the Nunavut Water Board (NWB or Board), filed by the City of Iqaluit (the City, Licensee, or Applicant), seeking to amend the Type "A" Water Licence No: 3AM-IQA1626 (Amendment No. 5), for a municipal undertaking, for the remaining term of the Licence (2019-2026), and submitted by the Applicant on April 9, 2020 (the Application).

The City of Iqaluit is located in the southern region of Baffin Island, in the Qikiqtani Region of Nunavut, with a rapidly growing population of approximately 8000 (7,082 individuals in the 2016 Census). The City operates a potable water treatment and supply facility (including the Lake Geraldine Reservoir), a wastewater treatment facility, and a solid waste management facility (the West 40 Landfill). The City's solid waste management facility is currently operating near its maximum capacity and is at the point where replacement is warranted to ensure the long-term sustainability of waste management practices. The City is planning a new waste

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¹ Nunavut Waters Regulations, SOR/2013-69, municipal defined as "a waste disposal or water system for a municipality."

² Statistics Canada. 2017. *Iqaluit [Population centre], Nunavut and Baffin, REG [Census division], Nunavut* (table). *Census Profile*. 2016 Census. Statistics Canada Catalogue no. 98-316-X2016001. Ottawa. Released November 29, 2017.

 $https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E\ (accessed\ August\ 14,\ 2019).$



compaction and bailing station within city limits, and an engineered landfill approximately 6 km north of the City.

Upon receiving the complete application on April 9, 2020, the NWB commenced technical review of the Application, including conducting a completeness check, an Information Request (IR stage), and seeking technical review and filing of comment submissions by interveners. On September 17 and 23, 2020, a teleconference technical meeting and subsequent pre-hearing conference (TM/PHC) were held by the NWB to identify outstanding technical issues and to discuss the readiness, timing and process for the Application to proceed to a Public Hearing. Teleconference and interpretation facilities were available in the City office during the TM/PHC meetings to enable interested members of the community to participate in the meetings.

In the Pre-Hearing Conference Decision Report, it was outlined that a written Public Hearing would be the most appropriate format to support the Board's decision-making in respect of the Application, "reflecting the discussions at the Pre-Hearing Conference," and the following factors considered by the Panel:

- the narrow scope of the Application before the Board;
- the limited public participation during the Board's previous in-person Public Hearings during the renewal and amendment of the Water Licence in 2016 and 2019; and
- the public health restrictions in place to prevent transmission of the novel coronavirus (COVID-19), such as gathering limits on in-person public meetings and travel restrictions for parties outside Nunavut.

As such, the three Board Members of the Iqaluit Panel (the Panel or Panel P6), duly appointed by the NWB as the decision-makers for the file, determined that a written Public Hearing was appropriate for the Application. Reflecting the procedural guidance in the Board's Pre-Hearing Conference Decision Report, final written submissions were provided by Interveners on January 11, 2021. On January 29, 2021, the City provided their response and final written submission to the NWB. Consequently, the Application was remitted to the Panel for decision-making, and the Board closed the Public Hearing Record on January 25, 2021.

In the decision-making associated with the Application, the Board considered the following:

• the information provided with the Application by the City of Iqaluit;

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- technical review of the Application by the Board, Interveners and the public;
- the Applicant's commitments and responses to information requests from the parties during the technical review of the Application;
- comment submissions received throughout the Board's consideration of the Application;
- the final written submissions filed with the Board prior to the close of the Public Hearing Record on January 25, 2021;

On this basis, the three-member panel of the Board, Panel (P6), duly appointed by the Board to consider the Application has made the following decisions. By way of Motion No. 2020-24-P6-05 on March 15, 2021, the Panel has decided the following:

- To grant, in accordance with the terms and conditions outlined in this Decision, the City's request to amend the Type "A" Water Licence No: 3AM-IQA1626 with the attached amendment (Amendment No. 5); and
- To amend the terms and conditions of the existing Type "A" Water Licence to authorize the following additional scope for the remaining term of the Licence (2021-2026):
 - 1. The construction and operation of new Solid Waste Disposal Facilities to serve the City's near and long-term (75 year) municipal solid waste disposal needs, including:
 - o A landfill located approximately 6 km north of the City; and
 - o A waste bailing and transfer station located within City limits.
 - 2. The additional water use of up to 45 cubic metres per day from a new water source (Imiqtarviviniq Lake, known commonly as Dead Dog Lake) for dust suppression within municipal boundaries.

SECTION I: FILE BACKGROUND, PROCEDURAL AND REGULATORY HISTORY

Current Application

The Application was submitted by the City of Iqaluit (Applicant, Licensee or City) on April 9, 2020, and requested that the Nunavut Water Board (NWB or Board) amend the City of Iqaluit's Type "A" Water Licence No: 3AM-IQA1626 for the remainder of the Licence term (2021-2026). Following the receipt of responses to

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the NWB's requests for various clarifications and additional information in support of the Application, on June 19, 2020, the NWB acknowledged receipt of the City's Application, and began the NWB's formal processing of the Application.

All documents filed in association with the Application, as well as all documents provided by the Applicant in support of the Application are listed in detail in APPENDIX B - List of Submissions and Correspondence that is attached to these Reasons for Decision, but a summary of the key Application materials provided by the City in support of the Application included the following:

April 9, 2020:

 3AM-IQA1626 Application for Amendment – Supporting Submission, dated April 8, 2020

May 7, 2020:

 Geotechnical Investigation Northwest Granular Deposit, Iqaluit, Nunavut, January 29, 2016

May 28, 2020:

 3AM-IQA1626 City of Iqaluit 2020 Application for Water Licence Amendment – Response to Information Requests

September 5, 2020:

 3AM-IQA1626 City of Iqaluit 2020 Application for Water Licence Amendment – Response to Technical Review Comments

September 15, 2020:

City of Iqaluit Presentation - Landfill and Waste Transfer Station

October 2, 2020:

 City of Iqaluit 2020 Application for Water Licence Amendment – Response to TM/PHC Commitments List requirements #1

December 15, 2020:

 City of Iqaluit 2020 Application for Water Licence Amendment – Response to TM/PHC Commitments List requirements #2

January 19, 2021:

City of Igaluit Final Written submission

All submissions in respect of the Application are available from the NWB's public registry at the following link:



ftp://ftp.nwb-oen.ca/registry/3%20MUNICIPAL/3A/3AM%20-%20Municipality/3AM-IQA1626/

Scope of the Application

The scope of Amendment No. 5 is an addition to the scope of activities, works, and undertakings currently included under the Licence and includes the following additional water uses and waste deposits:

- 1. The construction and operation of new Solid Waste Disposal Facilities to serve the City's near and long-term (75 year) municipal solid waste disposal needs, including:
 - A landfill located approximately 6 km north of the City; and
 - A waste bailing and transfer station located within City limits.
- 2. Additional water use of up to 45 cubic metres per day from a new water source (Imiqtarviviniq Lake, known commonly as Dead Dog Lake) for dust suppression within municipal boundaries.

Licensing History

Licences Issued to the City of Iqaluit

Both the Nunavut Water Board's predecessor, the Northwest Territories Water Board (NWTWB), and the Nunavut Water Board (NWB) have issued water licences to the City of Iqaluit in the past. A summary of the Type "A" and Type "B" Water Licences issued to the City of Iqaluit are available on the NWB's FTP site and consist of the following:

Licence No: N5L3-0087

- Issued by the Northwest Territories Water Board to the City of Iqaluit on February 23, 1996; and
- Allowed for the use of water and deposit of waste in support of a Municipal undertaking.

Licence No: NWB3IQA9900

- Issued by the Nunavut Water Board to the City of Iqaluit on December 31, 1999 and expired on December 31, 2000; and
- Allowed for the use of 1,100,000 cubic metres of water annually and the deposit of waste in support of a Municipal undertaking.

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Licence No: NWB3IQA0103

- Issued by the Nunavut Water Board on January 1, 2001 and expired on December 31, 2003; and
- Allowed for the use of 1,100,000 cubic metres of water annually and the deposit of waste in support of a Municipal undertaking.

Licence No: 3AM-IQA0611 Renumbered to 3AM-IQA0612 (when amended to extend the expiry date)

- Issued by the NWB on May 15, 2006 with the expiry date originally set for May 15, 2011;
- Allowed for the use of 1,100,000 cubic metres of water annually and the deposit of waste in support of a Municipal undertaking; and
- Prior to expiry of the licence, the City applied to the Board for an emergency amendment to extend the term of the licence. The Board granted the emergency amendment on May 13, 2011, and the Minister of Indigenous and Northern Affairs Canada (INAC as it was then) approved the amendment on June 17, 2011. This extended the expiry date of the Licence to July 15, 2012.

Licence No: 3AM-IQA1626

- Issued by the NWB on June 17, 2016, with the expiry date of June 16, 2026;
- Allowed for the use of 1,100,000 cubic metres of water annually and the deposit of waste in support of a Municipal undertaking;
- The Board granted Amendment No. 1, on an emergency basis, on August 14, 2018, to allow for the use of 500,000 cubic metres of water in 2018 from Niaqunguk River (Apex River) watershed and/or small unnamed source water lakes, and 500,000 cubic metres in 2018 (pumping from August-October) from Unnamed Lake to supplement the Geraldine Lake water storage reservoir;
- The Board granted Amendment No. 2, on an emergency basis, on July 22, 2019, to allow for the temporary withdrawal (August 2019 October 2019) of up to 500,000 cubic metres of Water from the Niaqunguk River (Apex River) to replenish Lake Geraldine Reservoir for the winter of 2019-2020; and the increase in the total amount allowed to be withdrawn from Lake Geraldine, from 1,100,000 cubic metres annually to 2,000,000 cubic metres annually. This Application was subsequently withdrawn before the Minister's approval of the amendment and was replaced with Amendment No. 3 (adding Unnamed Lake as a water source). The Application was

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withdrawn when the City of Iqaluit noted that the Niaqunguk River (Apex River) was very low and the flows within the River were likely insufficient to sustain the pumping required to fully replenish the Lake Geraldine Reservoir prior to freeze up; and

- The Board granted Amendment No. 3, on an emergency basis, on August 2, 2019, to allow for the temporary withdrawal (August 2019 October 2019) of up to 700,000 cubic metres of water from Unnamed Lake and transferring it to the Niaqunguk River (Apex River), and/or subsequently withdrawing up to 700,000 cubic metres of water from the Apex River, and transferring it to Lake Geraldine Reservoir for storage over the winter of 2019-2020; and the increase in the total amount of water allowed to be withdrawn from Lake Geraldine Reservoir, from 1,100,000 cubic metres annually to 2,000,000 cubic metres annually. The Minister approved Amendment No. 3 on August 9, 2019.
- The Board granted Amendment No. 4, on September 4, 2019 (Effective April 1, 2020), to allow for the annual withdrawal (August October) of up to 500,000 cubic metres of water annually from Niaqunguk River (Apex River), and transferring it to Lake Geraldine Reservoir for storage over the winter; and the increase in the total amount allowed to be withdrawn from Lake Geraldine Reservoir, from 1,100,000 cubic metres annually to 2,000,000 cubic metres annually. The Minister approved Amendment No. 4 on November 29, 2019.

Type B Licences issued by the NWB to the Project

In addition to the Type "A" Water Licences described above, the NWB has issued two Type "B" licences to the City of Iqaluit, which are as follows:

Licence No: 8BC-TAD0811

- Issued on April 2, 2008 and expired on March 31, 2011; and
- Allowed for the use of water and the deposit of waste in support of the construction of an access road and for quarrying activities at the Trail Area Deposit, located approximately 1.3 kilometres northwest of the Upper Base, on the outskirts of Iqaluit.

Licence No: 8BW-IGD1921

- Renewed/issued on May 8, 2019, with an expiry date of May 07, 2021.
- Originally issued on May 27, 2015, under Licence **8BW-IGD1516**; and

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Allowed for the construction of three (3) water crossings as part of a 4 kilometre long by 8.5 metres wide, access road to the proposed Northwest Iqaluit Granular Deposit and proposed new landfill site.

None of the works, activities, and undertakings captured under these Type "B" Water Licences are included in the scope of the Type "A" Water Licence that is the subject of this decision.

Regulatory and Procedural History of the Application

Pre-Licensing Regulatory History of the Application

The Nunavut Planning Commission (NPC)

With respect to this Application, the following pre-licensing requirements associated with the Nunavut Planning Commission's (NPC) land use planning conformity determination for the Application were completed:

On **December 3, 2018**, NPC issued its determination (NPC File No. 148839) for the Application,³ which indicated that:

- a. the Project is outside of an area with an applicable regional land use plan;
- b. the project proposal requires screening by the Nunavut Impact Review Board (NIRB) because it does not belong to a class of exempt works or activities set out in Schedule 12-1 of the *Nunavut Agreement*; and
- c. on this basis, the NPC forwarded the Application to the NIRB for screening under Article 12 of the *Nunavut Agreement* and Part 3 of the *NuPPAA*.

The Nunavut Impact Review Board (NIRB)

The following summarizes the outcome of the NIRB's screening of the project proposed in the Application. On September 13, 2019, the NIRB issued its Screening Decision Report⁴ (NIRB File No. 13UN034) associated with the Application, stating that a further review of the project is not required in accordance with Article 12 of the *Nunavut Agreement* and s. 92(1)(a) of the *NuPPAA*. Specifically, the NIRB noted that:

Following the Nunavut Impact Review Board's (NIRB or Board) assessment of all materials provided, the NIRB is recommending that a review of City of Iqaluit's "New Landfill and Waste Transfer Station" is not required pursuant to Article 12, Section 12.4.4(a) of the Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada (Nunavut

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³ NPC Determination; NPC File # 148839-City of Iqaluit - New Landfill, December 3, 2018.

⁴ NIRB Screening Decision Report, NIRB File No.: 13UN034, September 13, 2019.



Agreement) and s. 92(1)(a) of the Nunavut Planning and Project Assessment Act, S.C. 2013, c. 14, s. 2 (NuPPAA).

Subject to the Proponent's compliance with the terms and conditions as set out in below, the NIRB is of the view that the project proposal is not likely to cause significant public concerns, and it is unlikely to result in significant adverse environmental and social impacts. The NIRB therefore recommends that the responsible Minister accepts this Screening Decision Report.⁵

On the basis of the NPC's consideration of the project and the NIRB's screening of the project, the NWB concluded that the land use planning and environmental assessment requirements for the Application under Articles 10-13 of the *Nunavut Agreement*, Part 3 of the *NuPPAA*, and ss. 38 and 39 of *the Nunavut Waters and Nunavut Surface Rights Tribunal Act*, S.C. 2002, c. 10 (*NWNSRTA*) have been met and the Application could be considered by the NWB.

Key Steps in the NWB's Procedural History for the Application

The following listing summarizes only selected key steps in the procedural history of the NWB's processing of the Application. Complete information related to the procedural history of the Application and all information received in support of the file can be accessed from the NWB's FTP site and Public Registry using the following link:

ftp://ftp.nwb-oen.ca/registry/3%20MUNICIPAL/3A/3AM%20-%20Municipality/3AM-IQA1626/

April 9, 2020: The NWB received an application for an

amendment to Type "A" Water Licence No: 3AM-IQA1626 (Amendment No. 5) (the Application)

from the City of Iqaluit.

April 15, 2020: The NWB acknowledged receipt of the Application,

determined that the Application met the requirements for public distribution, and invited interested parties to conduct an initial completeness check and provide Information Requests (IRs).

May 5 & 6, 2020: CIRNA and ECCC provided IRs in relation to the

Application.

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⁵ NIRB Screening Decision Report, NIRB File No.: 13UN034, September 13, 2019 at p. 1.



May 28, 2020: The City of Iqaluit responded to the Interveners'

IRs, and subsequently the Application was considered by the NWB to be complete and sufficient to proceed to the full technical review

stage of the process.

June 19, 2020: The NWB provided Public Notice of the

Application and notice of the commencement of a four (4) week technical review period, and provided direction regarding the next steps in the licensing

process.

July 17, 2020: CIRNA and ECCC provided their technical review

comments regarding the Application.

September 5, 2020: The Applicant provided responses to Interveners'

comments.

September 10, 2020: The NWB issued guidance regarding next steps in

the process and circulated, for comment, a Draft Agenda for the upcoming Technical Meeting/Pre-

Hearing Conference (TM/PHC).

September 15, 2020: The NWB received confirmation of participation

and presentation documents from CIRNA and the

Applicant.

September 16, 2020: The NWB provided correspondence with the Final

Agenda for the TM/PHC.

September 17, 2020 The NWB hosted the TM via teleconference.

NOTE: to allow the Applicant sufficient time to develop a schedule for the provision of additional information after the TM, the PHC was rescheduled

for September 23, 2020.

September 23, 2020: The NWB hosted the PHC via teleconference.

October 16, 2020: The NWB distributed the PHC Decision Report to

parties, including a list of commitments for

specified parties to complete.

November 2, 2020: The NWB gave notice of the Public Hearing to be

conducted in writing and scheduled to close on January 25, 2020. The NWB also provided notice that the NWB planned to host an in-person Page 16 of 48



community information session to inform the public about the Application in the City of Iqaluit on December 3, 2020.

November 26, 2020: Due to public health restrictions on non-essential

travel and indoor public gatherings put in place by Nunavut's Chief Public Health Officer in response to the confirmation of positive cases of COVID-19 in Nunavut identified in mid-November, the NWB provided notice that the proposed community

information sessiont had to be cancelled.

December 15, 2020: The City of Iqaluit submitted additional information

in fulfillment of the PHC Decision Report

Commitment List.

January 11, 2021: CIRNA and ECCC provided their Final Written

submissions.

January 19, 2021: The City of Iqaluit provided their Final Written

submission.

January 25, 2021 The NWB provided written confirmation to parties

of the closure of the Public Hearing Record in respect of the written Public Hearing associated

with the Application.

All information pertaining to the Application, including the supporting documents, is available on the NWB's FTP site and can be accessed from the links provided above.

NWB Timeline for Processing the Application

As set out under the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*, S.C. 2002, c. 10 (*NWNSRTA*), s. 55.2, the NWB is required to process applications in relation to Type "A" Water Licences within 9 months from the receipt of a complete application. However, as expressly noted in the *NWNSRTA*, s. 55.4⁶, the 9-month time period does not commence until the Board considers the Application to be complete and provides public notice of the Application, and the time period does not

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⁶ As stated in s. 55.4:

If the Board requires an applicant or a licensee to provide information or studies, the period that, in the Board's opinion, is taken by the applicant or licensee to comply with that requirement is not included in the calculation of the time limit...



include the time periods when the Board is awaiting the submission of additional information from the Applicant.

As set out in the key procedural steps outlined above, although the City submitted the Application on April 9, 2020, following the completion of the NIRB process, there was one round of Information Requests from CIRNA and ECCC before the Application was considered to be complete and the NWB provide Public Notice of the Application on June 19, 2020, as required under the NWNSRTA. In addition, there was a period of approximately 7 weeks following the conclusion of the Pre-Hearing Conference on September 23, 2020 while the Board awaited the submission of additional information to meet the Applicant's commitments, on December 15, 2020. When these considerations are included within the timeline, the NWB's consideration of the Application and issuance of these Reasons for Decision has been completed and provided to the Minister of Northern Affairs well within the NWB's 9-month timeline for processing the Application as required under s. 55.2 of the NWNSRTA.

SECTION II: SUMMARY OF FINAL WRITTEN SUBMISSIONS OF **THE PARTIES**

In addition to participating in the technical review of the Application, the following parties provided final written submissions to the NWB in respect of the Application filed by the City of Igaluit for Amendment No. 5 to Type "A" Water Licence No: 3AM-IOA1626:

- Crown-Indigenous Relations and Northern Affairs (CIRNA) filed submissions on January 11, 2021;
- Environment and Climate Change Canada (ECCC) filed submissions on January 11, 2021; and
- the City of Iqaluit filed submissions on January 19, 2021.

Crown-Indigenous Relations and Northern Affairs (CIRNA)

Crown-Indigenous Relations and Northern Affairs' (CIRNA)⁷ participation in water licensing processes in Nunavut is informed by their mandate under the following Acts and associated regulations: Department of Crown-Indigenous Relations and Northern Affairs Act, 8 Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada, Nunavut Waters and Nunavut

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⁷ Previously known as Indigenous and Northern Affairs Canada (INAC).

⁸ R.S.C. 1985, c. I-6.



Surface Rights Tribunal Act,⁹ Territorial Lands Act,¹⁰ and the Arctic Waters Pollution Prevention Act.¹¹

CIRNA administers Crown land and resources, and enforces regulatory permits affecting land and water resources in Nunavut.

CIRNA participated fully in the review process for the Application, and identified several issues and concerns with respect to the Application and licensing requirements. While CIRNA has indicated that some of the issues and concerns identified during the technical review of the Application have been addressed, CIRNA indicated that some issues and concerns will remain to be resolved with their recommendations to amend existing terms and conditions in the Licence.

During the technical review of the Application, ¹² CIRNA raised concerns related to the following issues:

- Reclamation of the West 40 landfill
- Runoff from baled waste at transfer station
- Landfill leachate treatment.
- Landfill leachate collection
- Surface water management at landfill
- Fencing
- Permafrost considerations
- Waste transfer station geotechnical report
- Landfill design drawings
- Operations

In addition to comment submissions on completeness and technical review submissions as set out in detail in <u>APPENDIX B-List of Submissions and Correspondence</u>, on January 11, 2021, the NWB received CIRNA's final written submission¹³ summarizing their comments on the Application received throughout the NWB's process. In their final written submission, CIRNA emphasized that going into the Public Hearing, they considered the majority of concerns to be resolved and providing recommendations relating to:

Runoff from Baled Waste at the Transfer Station;

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⁹ S.C. 2002, c. 10.

¹⁰ R.S.C. 1985, c. T-7.

¹¹ R.S.C. 1985, c. A-12.

¹² Crown-Indigenous Relations and Northern Affairs Canada Technical Review of the City of Iqaluit's amendment application for water licence #3AM-IQA1626 for new solid waste disposal facilities, July 17, 2020.

¹³ January 11, 2021 Regulator (Crown-Indigenous Relations and Northern Affairs Canada) Comments, City of Iqaluit Application to Amend Type A Water License 3AM-IQA1626 - Response; Final Submission to the Nunavut Water Board; January 19, 2020.



- Landfill Leachate collection; and
- Permafrost Considerations.

Runoff from Baled Waste at the Transfer Station

CIRNA considered this issue resolved, pending the NWB's inclusion of a Licence term and condition requiring all water collected from the transfer station floor, produced by baling operations or by waste storage, to be treated as leachate rather than being discharged directly to the environment. In addition, CIRNA recommended an additional Licence term and condition requiring the City to review the O&M Manual on an annual basis, and to make revisions and updates based on changes to operational practices. The NWB considered CIRNA's recommended additional terms and conditions to be reasonable in the circumstances, and has added Licence term and conditions to address these concerns.

Landfill Leachate Collection

Following the submission of the Pre-Hearing Conference commitments, CIRNA recommended that the NWB include an additional term and condition in the Licence to require the City to:

- conduct ongoing monitoring of quality and leachate levels;
- ensure that discharge events are recorded if and when they occur (volume, leachate quality);
- report these results in the Annual Report; and
- provide a status update on whether current leachate management is expected to be adequate for the future based on leachate quality trends to date as part of each Annual Report.

In addition, CIRNA recommended that a condition be added to the Licence that requires the City to monitor and report on the leachate before the ponds become full, and implement any treatment methodologies within one year of making a decision that treatment of the leachate in the ponds is needed.¹⁵

Permafrost Considerations

In their final written submission CIRNA noted that The City has committed to providing design reports, construction drawings, or construction specifications that demonstrate how the design and construction of the new facillity will minimize impacts on permafrost. CIRNA recommended that once the design reports, construction drawings, or construction specifications are submitted, that an opportunity be provided for interveners to review and comment on the plan. In

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¹⁴ Crown-Indigenous Relations and Northern Affairs Canada Final Written: Submission City of Iqaluit Application to Amend Type A Water Licence 3AM-IQA1626; January 11, 2021; p. 5-7.

¹⁵ Crown-Indigenous Relations and Northern Affairs Canada Final Written: Submission City of Iqaluit Application to Amend Type A Water Licence 3AM-IQA1626; January 11, 2021; p. 8-11.



addition, CIRNA recommended that a condition be added to the Licence to require that the City provide its plan for long-term ground temperature monitoring for the facility, and that the plan include the design locations of the thermistor string installations, the purpose of collecting round temperature data, and how the data will be used for operating the facility.

Finally, CIRNA also recommended changes be made to the Environmental Protection Plans, Facility Monitoring Plan, Operations and Maintenance Manual, and the Method Statement of Construction Report, that will ensure permafrost is considered and protected during facility construction and operation.¹⁶

Environment and Climate Change Canada (ECCC)

Environment and Climate Change Canada's (ECCC) participation in the NWB's water licensing process reflects the exercise of their jurisdiction under the Department of the Environment Act,¹⁷ the Canadian Environmental Protection Act, 1999,¹⁸ Fisheries Act,¹⁹ Migratory Birds Convention Act, 1994²⁰ and Species at Risk Act.²¹

During the technical review of the Application,²² ECCC raised concerns related to the following issues:

- Baseline monitoring
- Unbaled waste
- Acid Rock Drainage/Metal Leaching
- Leachate treatment Landfill retention ponds
- Environmental Protection Plans, Section 4.0 Mitigation measures tables
- Total Suspended Solids
- Visual monitoring
- Landfill surface monitoring
- Liner installation timing and planning
- Leachate treatment Landfill
- Groundwater
- Environmental Protection Plans, Section 5.0 Monitoring and Inspection
- Groundwater Monitoring
- Leachate Management Waste Transfer Station

¹⁶ Crown-Indigenous Relations and Northern Affairs Canada Final Written: Submission City of Iqaluit Application to Amend Type A Water Licence 3AM-IQA1626; January 11, 2021; p. 14-18.

¹⁷ R.S.C. 1985, c. E-10.

¹⁸ S.C. 1999, c. 33.

¹⁹ R.S.C. 1985, c. F-14.

²⁰ S.C. 1994, c. 22.

²¹ S.C. 2002, c. 29.

²² Environment and Climate Change Canada's Technical Review of the City of Iqaluit's amendment application for water licence 3AM-IQA1626, July 16, 2020.



New Technology/ Lessons Learned

In addition to comment submissions on completeness and technical review submissions as set out in detail in <u>APPENDIX B-List of Submissions and Correspondence</u>, on January 11, 2021, the NWB received ECCC's final written submission²³ summarizing their comments on the Application received throughout the NWB's process. In their final written submission, ECCC emphasized that going into the Public Hearing, they considered the majority of concerns to be resolved and ECCC provided recommendations relating to:

- Effluent Discharge
- Leachate Management Landfill

<u>Effluent Discharge and Leachate Management – Landfill</u>

ECCC commented that the Operations and Maintenance (O&M) Manual for Landfill and Waste Transfer Station indicates that "Discharge to the gravel level spreader downstream of the lagoons under the approval and monitoring of the NWB," but does not provide details regarding the proposed leachate management contingency. They emphasized that it is unclear whether or how such a discharge method would be protective of the receiving environment. ECCC recommended that leachate management methods should include contingency measures and should incorporate appropriate mitigations to avoid adverse effects in the receiving environment.

City of Iqaluit (the Applicant or the City)

Following the Technical Meeting/Pre-Hearing Conference (TM/PHC), the Applicant provided a list of contingency measures applying to the proposed activities, satisfying the commitments made by the City of Iqaluit during the TM/PHC and outlined in the PHC Decision Report.²⁴

In their final written submission, the Applicant responded to final comments made by intervening parties, requested applicable Licence conditions be included, and committed to the following:²⁵

²³ Environment and Climate Change Canada's Final Written Submission to the Nunavut Water Board, Respecting the City of Iqaluit's Type A Municipal Water Licence Amendment Application, January 11, 2021.

²⁴ Type "A" Water Licence No: 3AM-IQA1626; Pre-Hearing Conference Decision Regarding an Application to Amend Water Licence No: 3AM-IQA1626; October 16, 2020.

²⁵ City of Iqaluit Final Written Submission: January 11, 2021 Regulator (Crown-Indigenous Relations and Northern Affairs Canada) Comments, City of Iqaluit Application to Amend Type A Water License 3AM-IQA1626 – Response; January 18, 2021.



- Providing an updated Operations and Maintenance Manual for Landfill and Waste Transfer Station that addresses comments and recommendations made during the review of the Application.
- Providing updated drawings for LF-C03, F-C05, LFC06, LF-C22, with excavation backfill and compaction notes prior to construction of facilities in accordance with Licence terms and conditions.
- Providing applicable design reports, construction drawings, and specifications for review and comment.
- Providing applicable referenced documents to regulators with the requested updates for the following management plans: Environmental Protection Plan Operations, Closure, and Post Closure; EPP Construction Phase; Facility Monitoring Program; Operations and Maintenance Manual (O&M Manual); and Method Statement of Construction Report.
- Requesting a Licence term and condition to fulfill the City's commitment to provide its plan for long-term ground temperature monitoring for the facility (Heat Generation and Permafrost Mitigation Plan), including the design locations of the thermistor string installations, the purpose of collecting round temperature data, and how the data will be used for operating the facility.
- Providing the proposed cut methodology for mitigating permafrost degradation at least 60 days prior to work being undertaken.
- Requesting a Licence condition to fulfill the City's commitment to review the O&M Manual on an annual basis, and to make revisions to the O&M Manual based on any changes to operational practices that vary from the current iteration or version of the O&M Manual, derived from operational experience gained with the balefill.
- Including procedures for packaging, storage, and shipment of household hazardous waste in the annual review of the O&M Manual.
- Requesting a Licence condition to fulfill the City's commitment to include daily leachate head monitoring frequency for the New North Landfill leachate collection system.
- Requesting a Licence condition to fulfill the City's commitment to add additional cover at the landfill, if a nuisance occurs.

These commitments, requests for Licence conditions, and additional information provided the Interveners and the Board with reassurance that the City is committed to the consideration and optimization of solid waste management practices and environmental protection, for the City of Iqaluit beyond the 2026 term of the amended Licence.



SECTION III: SUBMISSIONS BY OTHER INTERVENING PARTIES OR MEMBERS OF THE PUBLIC

There were no written submissions provided to the NWB by any other intervening party or members of the public. As noted above in the discussion of the procedural history, the NWB had originally scheduled a Community Information Session for December 3, 2020, however due to limits on non-essential travel and in-person gatherings designed to limit the spread of COVID-19 when the first cases of COVID-19 were confirmed in Nunavut in November, the Board had to cancel this session. Although the teleconference line for the TM/PHC was posted publicly in with the final Agenda of those meetings and interested members of the public would have been able to call into those meetings or attend the meetings at the designated area within the City premises, there were no members of the public or other intervening parties that called into the meetings. The Notice of Public Hearing also invited any interested members of the public to provide written comments to the NWB for their consideration. By the close of the written Public Hearing, no specific questions were posed on the record, nor were any concerns raised by the members of the public with respect to the Application.

SECTION IV: JURISDICTION OF THE NWB

Under Division 2 of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*²⁶ (*NWNSRTA*) the NWB has jurisdiction to issue a licence,²⁷ amend a licence,²⁸ or in certain circumstances, cancel a licence.²⁹ In exercising the Board's statutory functions under the *Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada (<i>Nunavut Agreement*) and the statutory regime governing the Board (the *NWNSRTA* and the *Nunavut Waters Regulations*), the NWB must be guided by the following objects:

... to provide for the conservation and utilization of waters in Nunavut, except in a national park, in a manner that will provide the optimum benefit from those waters for the residents of Nunavut in particular and Canadians in general.³⁰

In setting the terms and conditions of a licence or amending the terms and conditions of an existing licence, the NWB is guided by these objects and the NWB's statutory

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²⁶ Sections 42-81 of the *NWNSRTA*.

²⁷ See ss. 42, 48, 55, 56, and 70 of the *NWNSRTA*.

²⁸ See s. 43(1)(b) of the *NWNSRTA*.

²⁹ See s. 43(1)(c) of the *NWNSRTA*.

³⁰ See s. 35 of the *NWNSRTA*.



duty to make *all* reasonable efforts to minimize *any* adverse effects on aquatic ecosystems. Reading several of the Articles of the *Nunavut Agreement* together,³¹ the NWB relies on the broad definition of "ecosystemic" found in Article 12, Section 12.1.1. of the *Nunavut Agreement*, requiring not only the Nunavut Impact Review Board (NIRB) but also the NWB to ensure that all components of the ecosystem, such as fish and fish habitat, are protected within the parameters of s. 71 of the *NWNSRTA*.

In accordance with Article 13, Section 13.3.6 of the *Nunavut Agreement* and s. 29 of the *NWNSRTA*,³² the Board has delegated its power to dispose of all matters related to the Application to amend the Type "A" Water Licence No: 3AM-IQA1626, including the conduct of the Public Hearing, to a Panel of the Board (which is referred to as Panel P6 or the City of Iqaluit Panel).

As with any applications considered by the NWB, the burden of proof for the proposed amendment rested with the Applicant, the City of Iqaluit, to demonstrate that the City's request for Amendment No. 5 to Type "A" Water Licence No: 3AM-IQA1626 should be granted. In addition, the NWB Rules of Practice state: "[a]ny party offering evidence before the NWB shall have the burden of introducing sufficient and appropriate evidence to support its position." 33

SECTION V: REQUIREMENTS OF THE NWNSRTA, THE NUNAVUT AGREEMENT AND NUPPAA

Objects of the NWB and its Relationship to other Bodies

As established under the Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada (the Nunavut Agreement) and Part 3 of the Nunavut Planning and Project Assessment Act, S.C. 2013, c. 14, s. 2 (NuPPAA), prior to the NWB's consideration of the Application, the Applicant must meet the pre-licensing requirements of the Nunavut Planning Commission (land use planning) and the Nunavut Impact Review Board (impact assessment).

Land Use Planning

As noted in the previous sections of these Reasons for Decision providing the regulatory and procedural history of the Application, on **December 3, 2018**, the Nunavut Planning Commission (NPC) issued its determination (NPC File No.

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³¹ This approach is consistent with the direction provided in Article 2, section 2.9.1 of the *Nunavut Agreement*.

³² S.C. 2002, c. 10

³³ Section 23.1 of the Nunavut Water Board "Rules of Practice and Procedure for Public Hearing" (May 11, 2005).



148839)³⁴ in respect of the activities included within the scope of the Application, and the NPC's determination resulted in the referral of the Application to the Nunavut Impact Review Board (NIRB) to conduct a screening level assessment. The NPC referred the project to the NIRB for screening on the basis that the activities do not belong to a class of exempt works or activities set out in Schedule 12-1 of the *Nunavut Agreement*.

Impact Assessment

Upon receiving the NPC's referral of the Application to the Nunavut Impact Review Board (NIRB), the NIRB conducted a screening level assessment of the proposed amendments, including allowing a period for public and intervener comment. On **September 13, 2019**, the NIRB issued its Screening Decision Report³⁵ (NIRB File No. 13UN034) associated with the Application, stating that a further review of the project was not required in accordance with Article 12 of the *Nunavut Agreement* and s. 92(1)(a) of the *NuPPAA*. Specifically, the NIRB noted that:

Following the Nunavut Impact Review Board's (NIRB or Board) assessment of all materials provided, the NIRB is recommending that a review of City of Iqaluit's "New Landfill and Waste Transfer Station" is not required pursuant to Article 12, Section 12.4.4(a) of the Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada (Nunavut Agreement) and s. 92(1)(a) of the Nunavut Planning and Project Assessment Act, S.C. 2013, c. 14, s. 2 (NuPPAA).

Subject to the Proponent's compliance with the terms and conditions as set out in below, the NIRB is of the view that the project proposal is not likely to cause significant public concerns, and it is unlikely to result in significant adverse environmental and social impacts. The NIRB therefore recommends that the responsible Minister accepts this Screening Decision Report.³⁶

The following NIRB Screening Decision terms and conditions are considered to be relevant to the NWB's consideration of the proposed amendments to the Water Licence, and, as set out in s. 136 of the *NuPPAA* and s. 70 of the *NWNSRTA*, the NWB has considered these terms and conditions in the NWB's decision-making for the Application:

Water Use

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³⁴ Nunavut Planning Commission (NPC) Conformity Determination; RE: NPC File # 148839 [City of Igaluit - New Landfill]; December 3, 2018.

³⁵ NIRB Screening Decision Report, NIRB File No.: 13UN034, September 13, 2019.

³⁶ NIRB Screening Decision Report, NIRB File No.: 13UN034, September 13, 2019, at p. 1.



- 5. The Proponent shall not extract water from any fishbearing waterbody unless the water intake hose is equipped with a screen of appropriate mesh size to ensure that there is no entrapment of fish. Small lakes or streams should not be used for water withdrawal unless approved by the Nunavut Water Board.
- 6. The Proponent shall not use water, including constructing or disturbing any stream, lakebed or the banks of any definable water course unless approved by the Nunavut Water Board.

Fuel and Chemical Storage

- 7. (updated) Unless otherwise permitted, the Proponent shall locate all fuel and hazardous materials a minimum of thirty-one (31) metres away from the high water mark of any water body and in such a manner as to prevent their release into the environment unless authorized by the Nunayut Water Board.
- 8. (updated) The Proponent shall ensure that re-fuelling of all equipment occurs a minimum of thirty-one (31) metres away from the high water mark of any water body unless authorized by the Nunavut Water Board.
- 9. The Proponent shall store all fuel and chemicals in such a manner that they are inaccessible to wildlife.
- 10. The Proponent shall use adequate secondary containment or a surface liner (e.g., self-supporting instaberms and fold-a-tanks) when storing barreled fuel and chemicals at all locations and at all refueling stations. Appropriate spill response equipment and clean-up materials (e.g., shovels, pumps, barrels, drip pans, and absorbents) must be readily available during any transfer of fuel or hazardous substances, as well as at vehiclemaintenance areas and at drill sites.
- 11. The Proponent shall remove and treat hydrocarbon contaminated soils on site or transport them to an approved disposal site for treatment.
- 12. The Proponent shall ensure that all personnel are properly trained in fuel and hazardous waste handling procedures, as well as spill response procedures. All spills of fuel or other deleterious materials of any amount must be reported immediately to the 24 hour Spill Line at (867) 920-8130.

Landfill Operations

13. The Proponent shall dispose of non-hazardous materials only at the landfill and shall limit this disposal to those materials listed as acceptable for disposal. Hazardous materials, materials listed as unacceptable for disposal at the landfill, or materials that contain asbestos, fluorescent tubes or ozone depleting substances are not to



- be disposed of in the landfill and must be disposed of at an authorized facility, unless otherwise permitted.
- 14. The Proponent shall ensure that the site is kept free of debris through the use of fencing and other measures to limit wind dispersal of waste materials off-site.
- 15. The Proponent shall take appropriate dust suppression measures when conducting soil topping of landfill materials, or landfill capping activities.
- 16. All operations personnel shall be adequately trained prior to commencement of landfill operations, and shall be made aware of all operational guidelines and Proponent commitments relating to the Project.
- 17. The Proponent shall clearly stake all boundaries so they remain visible to other land users.
- 18. The Proponent shall ensure there is no obstruction of natural drainage, flooding or channel diversion from access or other structures or facilities.
- 19. The Proponent shall ensure that silt fences/curtains are installed down gradient of any construction activities.
- 20. The Proponent shall maintain an undisturbed buffer zone between the periphery of the landfill sites and the high water mark of any water body that is of an adequate distance to ensure erosion control.
- 21. The Proponent shall stockpile all overburden/topsoil generated during construction using proper erosion prevention measures. Upon completion of operation, the Proponent shall back fill, reclaim/re-contour and revegetate all disturbed areas.

All-Weather Road and Ground Disturbance

- 28. The Proponent shall not move any equipment or vehicles unless the ground surface is in a state capable of fully supporting the equipment or vehicles without rutting or gouging. Overland travel of equipment or vehicles must be suspended if rutting occurs.
- 29. The Proponent shall implement suitable erosion and sediment suppression measures on disturbed areas before, during and after construction in order to prevent sediment from entering any water body.
- 30. The Proponent shall ensure that all project vehicles are fitted with standard and well-maintained noise suppression devices, and that engine idling is also minimized.
- 31. The Proponent should consider the potential for public traffic to utilize project roads, and in its design features and consideration of public safety, ensure adequate posting of signage indicating speed limit(s) along the road and within project site(s).

Restoration of Disturbed Areas



- 32. The Proponent shall ensure that all disturbed areas are restored to a stable or pre-disturbed state to the extent possible upon reclamation and closure of project activities.
- 33. The Proponent shall remove all fuel and equipment upon abandonment and ensure that the landfill continued to be monitored as necessary to ensure long-term structural integrity until fully remediated.

Other

- 34. The Proponent should, to the extent possible, hire local people and consult with local residents regarding their activities in the region.
- 35. Any activity related to this application, and outside the original scope of the project as described in the application and considered within this decision, will be considered a new project and should be submitted to the NIRB for Screening.

Project-Specific Terms and Conditions Waste Disposal/Incineration

- 37. The Proponent shall keep all garbage and debris inaccessible to wildlife at all times.
- 38. The Proponent shall incinerate all combustible wastes daily and remove the ash from incineration activities and non-combustible wastes from the project site to an approved facility for disposal.
- 39. The Proponent shall ensure that the incineration of combustible wastes comply with the Canadian Wide Standards for Dioxins and Furans, and the Canadian Wide Standards for Mercury.
- 40. The Proponent shall ensure that no waste oil/grease is incinerated on site.

Landfill Operations

41. The Proponent shall ensure that it meets the standards and/or limits as set out in the Nunavut Water Board Water Licence and any other permits as required for this project.

Monitoring and Reporting Requirements Environmental Management Plan

1. Prior to the start of project activities, the Proponent shall submit an updated finalized Environmental Management Plan including finalized Environmental Protection Plan and Emergency Response Plans to the Nunavut Impact Review Board, Government of Nunavut Department of Environment and Environment and Climate Change Canada (ECCC). The Proponent is encouraged to consult with the Government of Nunavut's Regional Biologists as well as ECCC, regarding project schedule



and timelines so as to ensure adequate mitigation of potential wildlife impacts.

Closure and Decommissioning Plan

2. The Proponent shall submit a finalized Closure and Decommissioning Plan for the current landfill to the Nunavut Impact Review Board, Crown-Indigenous Relations and Northern Affairs Canada and Government of Nunavut- Department of Environment and Nunavut Water Board prior to undertaking activities in the area. The revised Plan should include procedures for using native plant species for re-vegetation in order to eliminate risk of introducing invasive species to the area pursuant to the Wildlife Act.

Other NIRB Concerns and Recommendations Change in Project Scope

1. Responsible authorities or Proponent shall notify the Nunavut Planning Commission and the NIRB of any changes in operating plans or conditions, including phase advancement, associated with this project prior to any such change.

Incineration of Wastes

9. The Proponent review Environment and Climate Change Canada's "Technical Document for Batch Waste Incineration", available at the following link: http://www.ec.gc.ca/gdd-

<u>mw/default.asp?lang=En&n=F53EDE13-1</u>. The technical document provides information on appropriate incineration technologies, best management and operational practices, monitoring and reporting.

Transport of Dangerous Goods and Waste Management

- 10. Environment and Climate Change Canada recommends that all hazardous wastes, including waste oil, receive proper treatment and disposal at an approved facility.
- 11. The Proponent shall ensure that proper shipping documents (waste manifests, transportation of dangerous goods, etc.) accompany all movements of dangerous goods. Further, the Proponent shall ensure that the shipment of all dangerous goods is registered with the Government of Nunavut Department of Environment, Department of Environment Manager. Contact the Manager (867) 975-7748 to obtain a manifest if dangerous goods including hazardous wastes will be transported.

Nunavut Water Board

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12. The Nunavut Water Board impose mitigation measures, conditions and monitoring requirements pursuant to the Water Licence, which require the Proponent to respect the sensitivities and importance of water in the area. These mitigation measures, conditions and monitoring requirements should be in regard to use of water, snow and ice; waste disposal; access infrastructure and operation for camps; drilling operations; spill contingency planning; abandonment and restoration planning; and monitoring programs.³⁷

SECTION VI: DECISION TO ISSUE

On the basis of the Application, the written materials filed with the Board, and submissions of the parties provided to the Panel during the written Public Hearing, the Board has decided to issue Amendment No. 5 to Type "A" Water Licence No: 3AM-IQA1626 (Amendment No. 5) subject to the terms and conditions set out below. Amendment No. 5 authorizes the City of Iqaluit to:

- 1. Construct and operate new Solid Waste Disposal Facilities to serve the City's near and long-term (75 year) municipal solid waste disposal needs, including:
 - A landfill located approximately 6 km north of the City; and
 - A waste bailing and transfer station located within City limits.
- 2. The additional Water use of up to 45 cubic metres per day from a new water source (Imiqtarviviniq Lake, known commonly as Dead Dog Lake) for dust suppression within municipal boundaries.

These activities continue to be associated with the Municipal Undertaking as defined under Schedule 1 of the *Nunavut Waters Regulations*, ³⁸ and the recommended amendments also contain additional terms and conditions as recommended by the Applicant and Intervenors and considered by the NWB to be necessary to protect the environment, conserve freshwater resources, and provide appropriate safeguards in respect of the uses of water and deposit of wastes included within the scope of the amendments proposed in the Application.

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³⁷ NIRB Screening Decision Report, NIRB File No.: 13UN034, September 13, 2019; pp. 15-21.

³⁸ SOR/2013-69, which defines "Municipal undertaking" as: "A waste disposal or water system for a municipality."



The Board anticipates that if the City of Iqaluit is able to meet the projected timeline of construction of the proposed facilities provided in the Application, construction would commence in 2021, with facility commissioning occurring sometime in 2022.

The Board would like to remind the City that for future amendment (or renewal) applications, the NWB expects submission of a completed application at least 12 months prior to the proposed change (or expiry of the existing Licence, for a licence renewal application) in order to allow sufficient time for the NWB to process the application and to allow for up to 90 days for the Minister to consider the NWB's recommended disposition of the application, and if applicable, terms and conditions in a renewed/amended licence.

Conditions for Issuance of the Amendment to the Licence

Section 57 of the *NWNSRTA* provides several key legislative requirements that must be satisfied before the NWB may issue a licence or amendment to a licence.

Compensation of Existing or Other Users

The *NWNSRTA* requires that the NWB be satisfied that compensation of existing or other water users affected by the Application has been or will be paid.³⁹ To ensure that all parties with the potential to bring a water compensation claim have been notified of their rights under the *NWNSRTA*, the NWB provided, in the Notice of Application, an invitation to parties with water user compensation issues to advise the NWB regarding such issues. The Notice of the Application was issued by the Board on June 19, 2020, and in the Notice of Public Hearing, published by the Board on November 2, 2020, advised anyone having a water user compensation claim to inform the Board of their interests in accordance with s. 55 of the *NWNSRTA*. The NWB confirms that no representations regarding a claim of compensation were made to the NWB in respect of this Application.

Issuance of an Amended Licence

As stated above, and pursuant to s. 42(1) of the *NWNSRTA*, the NWB has decided to issue Water Licence 3AM-IQA1626, Amendment No. 5, subject to the terms and conditions set out in these Reasons for Decision and the attached amended Licence. In issuing Amendment No. 5, the NWB is satisfied that the Application contained the required information and was in the proper form having regard to the requirements of the *NWNSRTA*⁴⁰ and associated Regulations.⁴¹ The amendments to

³⁹ See ss. 58-60 of the NWNSRTA.

⁴⁰ See s. 48 of the *NWNSRTA*.

⁴¹ Nunavut Waters Regulations, SOR/2013-69.



the Licence do not take effect until the Minister has approved, or has been deemed to approve the amendments. 42

Application in Relation to the Licence

Overall, the NWB is satisfied that the requirements of s. 48 of the *NWNSRTA* were met by the Applicant. The City of Iqaluit filed an Application which complied with the NWB's Rules, and was accompanied by the fees required by regulation, including the application fee. Further, the City has also provided the necessary application and supplementary information required to evaluate whether an amendment to the Licence should be granted and also to assess whether the amendments to the Licence requested by the Applicant are reasonable and consistent with the objects of the Board as established under the *Nunavut Agreement* and the *NWNSRTA*.

Application to Amend or Application for Future Modifications

In relation to future applications to undertake significant modifications to the activities included within the scope of the Type "A" Water Licence 3AM-IQA1626, the NWB reminds the City of Iqaluit that it must comply with all requirements of the *Nunavut Agreement*, ⁴³ the *NuPPAA*, ⁴⁴ and the *NWNSRTA*. ⁴⁵ In particular, the Board notes that the scope of the authorized water use is as provided by the City in the Application and as set out in Part A of the attached Licence, and any requested changes to that scope may require an amendment to the Licence. In addition, any significant modifications to the undertaking are required to be submitted to the Nunavut Planning Commission (NPC) and may subsequently be referred to the Nunavut Impact Review Board (NIRB) prior to the NWB's consideration of any associated amendment to the Licence.

Cancellation or Expiry of the Licence

As identified above, the NWB reminds the City that the provisions of s. 46 of the NWNSRTA state: "[t]he expiry or cancellation of a licence does not relieve the holder from any obligations imposed by the licence."

The Applicant is also reminded that pursuant to the NWB's authority under s. 43(1)(c)(iii) of the NWNSRTA, the NWB may, on application by a licensee, or on its

⁴² As set out under s. 56 of the *NWNSRTA*.

⁴³ See Article 12, Clause 12.4.3 (b) of the *Nunavut Agreement*.

⁴⁴ Nunavut Planning and Project Assessment Act S.C. 2013, c. 14 (NuPPAA).

⁴⁵ See s. 43 of the *NWNSRTA*.



own motion, cancel a licence at any time that the NWB considers the cancellation to be in the public interest.

Term of Licence

Under s. 45 of the *NWNSRTA* the NWB is required to ensure that the term of a licence shall not exceed the longer of twenty-five years or the "anticipated duration" of the undertaking. The Applicant requested that Amendment No. 5 apply for the remaining term of the Licence (2020-2026). The Applicant noted that this would allow time for the investigation, assessment and implementation of an additional long-term water source prior the the next renewal.

SECTION VII: WATER LICENCE 3AM-IQA1626 AMENDED TERMS AND CONDITIONS

As noted above, the amendments to the Licence issued by the Board as Amendment No. 5 do not take effect until approval of the Minister is given or deemed to have been given pursuant to s. 56 of the *NWNSRTA*.⁴⁶ As indicated in Section VI, the Panel has decided to issue the amendment to the Licence requested by the Applicant, subject to the amended terms and conditions contained herein.

To provide context and clarity, the NWB has provided the discussion and comments about the Board's amendments to specific terms and conditions that follow.

Part A: Scope, Definitions and Enforcement

<u>Scope</u>

Amendment No. 5 adds to the scope of activities, works, and undertakings included under the Licence to include the following additional water uses and waste deposit:

- The construction and operation of new Solid Waste Disposal Facilities to serve the City's near and long-term (75 year) municipal solid waste disposal needs, including:
 - A landfill located approximately 6 km north of the City; and

.

The issuance, amendment, renewal and cancellation of a type A licence, and if a public hearing is held, a Type B licence are subject to the approval of the Minister.

Under s. 56(2.2) if the Minister does not issue a decision within 45 days of receiving the amended Licence from the Board, (or within 90 days if the Minister has extended the decision-making period by an additional 45 days) the Minister is deemed to have approved the amendments to the Licence.

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⁴⁶ Section 56 of the NWNSRTA states:



- A waste bailing and transfer station located within City limits.
- 2. The additional water use of up to 45 cubic metres per day from a new water source (Imiqtarviviniq Lake, known commonly as Dead Dog Lake) for dust suppression within municipal boundaries.

Definitions

Definitions were added relating to new Solid Waste Disposal Facilities and associated program activities as specifically outlined in the Application and added to the scope of the Municipal undertaking in Amendment No. 5.

Part B: Amendment to Conditions Applying to the Use of Waters and Water Management Plans

The NWB has amended Part D of the Licence to authorize the additional withdrawal of up to 2,500 cubic metres of water annually from Imiqtarviviniq (Dead Dog Lake) for dust suppression and general municipal purposes. The Board and intervening parties reviewed this request and considered this withdrawal to be reasonable and beneficial in reducing water demands on the City's drinking water which is stored in the Lake Geraldine Reservoir.

Part E: Conditions Applying to the Deposit of Waste and Waste Management Plans

The NWB has amended Part E of the Licence to authorize the construction and operation of new Solid Water Disposal Facilities and has included additional terms and conditions associated with management plans and general waste management. With the issuance of Amendment No. 5 to the Licence, the Board has approved the management plan entitled *City of Iqaluit Operations and Maintenance Manual Landfill and Waste Transfer Station*, and dated October, 2020. However, the Licensee shall submit to the Board for review, sixty (60) days following the approval of Amendment No. 5, an update of this plan that addresses interveners' comments and commitments made during the review of the Application. The Board has also included a condition requiring the Licensee to develop a *Leachate Characterization and Management Plan* at least six (6) months prior to commissioning of the New North Landfill or within one (1) year of approval of the Amendment No. 5, whichever comes first, to ensure, "that leachate management methods, including



contingency measures, should incorporate appropriate mitigations to avoid adverse effects in the receiving environment."⁴⁷

Part C: Conditions Applying to Construction

The Scope of Amendment No. 5 includes the construction and operation of the Waste Transfer Station and the New North Landfill. In addition, with the approval of Amendment No. 5, the Board has also approved the City of Iqaluit Environmental Protection Plan Construction Phase, Landfill and Waste Transfer Station, dated December, 2020, City of Iqaluit Environmental Protection Plan - Operations, Closure and Post-Closure Phases, Landfill and Waste Transfer Station, dated October, 2020, and City of Iqaluit Erosion and Sediment Control Plan, Landfill and Waste Transfer Station, dated October, 2020. However updates to these plans will be required within sixty (60) days of approval of Licence Amendment No. 5. In addition, the Board has included a Licence condition requiring the Licensee to submit to the Board for review, six (6) months prior to commencing construction of the New North Landfill facility, a Heat Generation and Permafrost Mitigation Plan that address comments and recommendations provided during the review of the Application.

Part I: Conditions Applying to Monitoring

In relation to water use, the Board has amended the Monitoring Program prescribed under Part I and described in detail under Schedule I of the Licence to include standard water volume monitoring for water uptake from Imiqtarviviniq (Dead Dog Lake). Regarding waste deposit, the Board has amended the Monitoring Program to include monitoring stations for Runoff and/or leachate discharged from the Waste Transfer Station and the New North landfill, as per the *Facility Monitoring Plan*, *Landfill and Waste Transfer Station*, dated January 2020.

Schedules A, B and I

Schedules A, B, and I have been updated to reflect the additional activities and water uses authorized under Amendment No. 5, and to provide additional context, details and guidance with respect to the specific requirements of Parts A, B and I as amended.

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⁴⁷ Environment and Climate Change Canada's Final Written Submission to the Nunavut Water Board, Respecting the City of Iqaluit's Type A Municipal Water Licence Amendment Application; January 11, 2021.



Schedule A

Amendment No. 5 to the Licence provides the additional definitions in relation to the new Solid Waste Disposal Facilities and additional water source Imiqtarviviniq (Dead Dog Lake). The rationale for including the additional definitions is to support consistent interpretation and application of this program for the remainder of the Licence term.

Schedule B

Schedule B applies to general and specific annual reporting requirements for the undertaking. The requirements under Schedule B, which are linked to Part B, Item 1 of the Licence, have been amended to stipulate that the Annual Report will include details on the volume of water collected from Imiqtarviviniq (Dead Dog Lake), as well as quantities and general types of Wastes brought up to the Waste Transfer Station and further disposed of at the New North Landfill. The Annual Report will continue to be required to be submitted to the Board for review prior to the 31st of March, annually. The Board provides public access to the information provided in Annual Reports submitted under Licences through its ftp site as well as upon requests from interested parties.

Schedule I

As noted above, this Schedule is linked to Part I of the Licence and the Conditions Applying to Monitoring. This amendment to the Licence includes updates to Schedule I, to include one active monitoring site for water volume uptake from the Imiqtarviviniq (Dead Dog Lake) for dust suppression and general municipal activities. Similarly, monitoring sites have been included for Runoff/Leachate discharge from the Waste Transfer Station and the New North Landfill.

Management Plans, Manuals and Reports

Throughout the review of the Application, Interveners, the Board, and the Applicant have considered and commented, to various extents, on the following management plans, which were received with the Application:

- 1. City of Iqaluit Operations and Maintenance Manual Landfill and Waste Transfer Station, dated October, 2020;
- 2. City of Iqaluit Environmental Protection Plan Construction Phase, Landfill and Waste Transfer Station, dated December, 2020;
- 3. City of Iqaluit Environmental Protection Plan Operations, Closure and Post-Closure Phases, Landfill and Waste Transfer Station, dated October, 2020;



- 4. City of Iqaluit Erosion and Sediment Control Plan, Landfill and Waste Transfer Station, dated October, 2020;
- 5. Facility Monitoring Plan, Landfill and Waste Transfer Station, dated December 2020.

During the review of the Application, the City updated these plans to include information requested by parties. However, additional updates are required to these plans as outlined in Part E, Part F, and Part I of the Licence, and as committed to by the Licensee.⁴⁸

The Licensee should be aware that the Board may alter or modify a plan for the purpose of achieving legislative objectives, and that the plans approved by the Board are considered to be a part of the Licence.

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⁴⁸ City of Iqaluit Final Written Submission: January 11, 2021 Regulator (Crown-Indigenous Relations and Northern Affairs Canada) Comments, City of Iqaluit Application to Amend Type A Water License 3AM-IQA1626 – Response; January 18, 2021.



APPENDIX A - List of Acronyms

CIRNA	Crown-Indigenous Relations and Northern Affairs Canada (formerly INAC, Formerly AANDC)	ᠯ᠘᠕ᢋᢛᢁᠳ <i>᠙᠙</i> ᠕᠆᠘ᢣ᠘᠙ᠳ᠙ ᠘᠘ᠺ᠘᠘᠙᠘᠙᠘᠙᠘ ᠘ᠳ᠘᠘᠘᠘᠘᠙᠘ ᠘ᠳ᠘᠘᠘᠘
DFO	Fisheries and Oceans Canada	ᢡᠲᢅᢖᡄᠬᢣ ^ᡕ ᠘ᡰ᠘ ᢗᠬ᠌᠌᠌᠌᠘᠘᠘᠘
ECCC	Environment and Climate Change Canada (former EC)	EC-qc) 4/c}#<-4/-4/- (Cpq4/14/-c) 6-4c)
GN	Government of Nunavut	ᠴᡆᢀ ^ᡕ ᠮᢀᠮ᠕
INAC	Indigenous and Northern Affairs Canada	₽₽СĹ ₻₱₽₽₽ ₽₽СĹ ₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽
NIRB	Nunavut Impact Review Board	ᠴᡆ᠌ᢩᢀᠮ᠂ᢦ᠋ᢀ᠘᠆ᠮ᠈ _ᠻ ᠘ᡕ
NPC	Nunavut Planning Commission	$\neg \sigma \gg_{r} L <_{c} \sigma \nabla_{\dot{\gamma}} c$
Nunavut Agreement	The Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada	ρσ σεμγορία ςεσ αγηία διε⊃ε σσφςρρίοι ςεασία Δε ΓΟεσ αγρος ςεασία Δοδι
NuPPAA	Nunavut Planning and Project Assessment Act, S.C. 2013, c. 14, s. 2	ው የ < נα δ ው ያ ላ
NWNSRTA	Nunavut Waters and Nunavut Surface Rights Tribunal Act, S.C. 2002, c. 10	ው የ
NWB	Nunavut Water Board	ᠴᡆᢀᠮ᠘᠘᠆ᠬᡃᠶ᠘᠐᠘ᠰ᠘ᡕ
NWR or Regulations	Nunavut Waters Regulations, SOR/2013-69	_οσ≫ς <u></u> ΔΓ∇ς Γ⊂Γ∇ς
PH	Public Hearing	Δ ው $^{\circ}$ σ $^{\circ}$ $<$ Δ \wedge $^{\circ}$ \wedge Δ σ $^{\circ}$
PHC	Pre-Hearing Conference	Ճ൧ՐᲥᲖᲘᲧᲐᲥՃ൧ᲒᲬ ᲮᲘᲡᲘ⊂⊳ᲫᲥᲐᲬᲥᲖᲬᲮᲘᲡᲫᲖ
TM	Technical Meeting	᠕᠄ᠳᡳ᠆᠂ᡆᢕᠴ ^ᡕ



APPENDIX B - List of Submissions and Correspondence

Application:

 Cover letter and initial submission of water licence amendment for the construction and operation of new Solid Waste Management facilities to serve the City's near and long-term (75 years) municipal solid waste (MSW) disposal needs. April 09. 2020.

<u>Initial Submission & Correspondence:</u>

- Cover E-mail to: Richard Dwyer, Nunavut Water Board (NWB), RE: 3AM-IQA1626 City of Iqaluit Water License Amendment, from Erik Marko, Colliers Project Leaders (CPL consultant for City of Iqaluit), dated April 9, 2020.
- 3. Submitted **April 09, 2020**, by City of Iqaluit, Block 5 Iqaluit Topographic Map.
- 4. Submitted **April 09, 2020** by City of Iqaluit, Block 7, Letter to Natasha Lear, Nunavut Impact Review Board (NIRB) Karen Kharatyan, NWB, Matthew Hamp City of Iqaluit, Re: NPC File # 148839-City of Iqaluit New Landfill, from Goump Djalogue, Nunavut Planning Commission (NPC) dated December 03, 2018.
- 5. Submitted **April 09, 2020** by City of Iqaluit, Block 8, Letter to Richard Dwyer, NWB, RE: Notice of Release of Screening Decision Report for for City of Iqaluit's "New Landfill and Waste Transfer Station" Project Proposal, Qikiqtani (South Baffin) Region, from Andrea Omilgoitok, NIRB, dated September 13, 2019.
- 6. Submitted **April 09, 2020** by City of Iqaluit, Block 8, NIRB Screening Decision Report for City of Iqaluit's "New Landfill and Waste Transfer Station" Project Proposal, Qikiqtani (South Baffin) Region.
- 7. Submitted **April 09, 2020** by City of Iqaluit, Block 9, Closure and Decommissioning Plan (Final), prepared by Dillon Consulting, dated January 2020.
- 8. Submitted **April 09, 2020** by City of Iqaluit, Block 9, Solid Waste Landfill, Waste Transfer Station and Northwest Aggregate Deposit Road 90% Drawomgs, submission, prepared by Dillon Consulting, dated January 24, 2020.
- 9. Submitted **April 09, 2020** by City of Iqaluit, Block 9, Method Statement of Construction, prepared by Dillon Consulting, dated January 2020.



- 10. Submitted **April 09, 2020** by City of Iqaluit, Block 9, Landfill & Waste Transfer Station, Facility Monitoring Plan, prepared by Dillon Consulting, dated January 2020.
- 11. Submitted **April 09, 2020** by City of Iqaluit, Block 9, Landfill & Waste Transfer Station, Operations and Maintenance Manual, prepared by Dillon Consulting, dated January 2020.
- 12. Submitted **April 09, 2020** by City of Iqaluit, Block 9, Waste Transfer Station, 90% Drawings, prepared by Dillon Consulting, dated January 24, 2020.
- 13. Submitted **April 09, 2020** by City of Iqaluit, Block 17, Environmental Management Plan (Revised Final), Landfill and Waste Transfer Station, prepared by Dillon Consulting, dated January 2020.
- 14. Submitted **April 09, 2020** by City of Iqaluit, Block 17, Environmental Protection Plan Operations, Closure and Post-Closure Phases (Revised Final) Landfill and Waste Transfer Station, prepared by Dillon Consulting, dated January 2020.
- 15. Submitted **April 09, 2020** by City of Iqaluit, Block 17 Environmental Protection Plan (Revised Final) Construction Phase Landfill and Waste Transfer Station, prepared by Dillon Consulting, dated January 2020.
- 16. Submitted **April 09, 2020** by City of Iqaluit, Block 17 Erosion and Sediment Control Plan, Landfill and Waste Transfer Station, prepared by Dillon Consulting, dated January 2020.
- 17. Submitted **April 09, 2020** by City of Iqaluit, Block 20 CITY OF IQALUIT SOLID WASTE MANAGEMENT PROJECT PUBLIC CONSULTATION REPORT, dated December 2018.
- 18. Submitted **April 09, 2020** by City of Iqaluit, Block 23 Preliminary Geotechnical Investigation Report Revision 1, prepared by Exp Services Inc., dated January 28, 2020.
- 19. Submitted **April 09, 2020** by City of Iqaluit, Block 23 Physical & Biological Assessment Proposed New Landfill Site, Iqaluit, NU, prepared by Exp Services Inc., dated October 2018.
- 20. Submitted **April 09, 2020** by City of Iqaluit, Block 23 Compliance Assessment and Status Report.
- 21. Submitted **April 09, 2020** by City of Iqaluit, Greenhouse Gas Mitigation Assessment Solid Waste Landfill and Transfer Station Investing in Canada Infrastructure Program (ICIP), prepared by Dillon Consulting, dated October 2019.
- 22. Submitted **April 09, 2020** by City of Iqaluit, Climate Change Resilience Assessment Solid Waste Landfill and Transfer Station City of Iqaluit

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- Investing in Canada Infrastructure Program (ICIP), prepared by Dillon Consulting, dated October 2019.
- 23. Submitted **April 09, 202**0 by City of Iqaluit, Inuktitut & English Project Summary.
- 24. Submitted **April 09, 2020** by City of Iqaluit, Solid Waste Management Project SUPPORTING SUBMISSION FOR APPLICATION TO AMEND TYPE A WATER LICENCE 3AM-IQA1626, dated April 2020.
- 25. Submitted **April 14, 2020** by City of Iqaluit, Emergency Response Plan (Revised Final) Landfill and Waste Transfer Station, prepared by Dillon Consulting, dated January 2020.
- 26. Letter to Richard Dwyer, NWB, RE: 3AM-IQA1626 City if Iqaluit City of Iqaluit Type A Water Licence Amendment, from Eva Walker, ECCC, dated May 5, 2020
- 27. Letter to Richard Dwywer, NWB, RE: Crown-Indigenous Relations and Northern Affairs Canada Completeness Review of City of Iqaluit Application for Amendment of Type "A" Water Licence No. 3AMIQA-1626, from Bridget Campbell, CIRNA, dated **May 6, 2020**.
- 28. Submitted **May 07, 2020** by City of Iqaluit, Geotechnical Investigation Northwest Granular Deposit, Iqaluit, Nunavut, prepared by exp Serviced Inc., dated January 26, 2016.
- 29. Cover E-mail to Richard Dwyer, NWB, RE: FW: 8211FW: 3AM-IQA1626 2020 amendment application, from Alan Rustom, Colliers Project Leaders (consultant for City of Iqaluit), dated **May 18, 2020**.
- 30. Cover E-mail to Derek Donald, NWB, RE: FW: 8211FW: 3AM-IQA1626 2020 amendment application, Alan Rustom, Colliers Project Leaders (consultant for City of Iqaluit), dated **May 27, 2020**
- 31. Submitted **June 02, 2020** by City of Iqaluit, Geotechnical Investigation Northwest Granular Deposit, Iqaluit, Nunavut, prepared by exp Services Inc., dated January 29, 2016.
- 32. Submitted **June 02, 2020** by City of Iqaluit, Spill Response and Erosion and Sediment Control Plan, prepared by exp Services Inc., dated March 2019.
- 33. Cover E-mail to: Derek Donald, NWB, RE: Fwd: FW: 821131 FW: 3AM-IQA1626 2020 amendment application, from Alan Rustom, Colliers Project Leaders (consultant for City of Iqaluit), dated **June 2, 2020**.
- 34. Submitted **June 02, 2020** by City of Iqaluit, Preliminary Geotechnical Investigation Report Revision 1, prepared by exp Services Inc., dated January 28, 2020.

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- 35. Submitted **June 02, 2020**, by City of Iqaluit, The Northwest Iqaluit Granular Deposit Project, water licence 8BW-IGD1921, prepared by the NWB, date of issuance May 08, 2019.
- 36. Submitted **June 02, 2020**, by City of Iqaluit, Response to NWB Comment Sheet, prepared by Colliers Project Leaders (consultant for City of Iqaluit).
- 37. Submitted **June 02, 2020** Cover E-mail to: Keith Barnes, Dillon Consulting, RE: Iqaluit Liner Lowered by 2 and 4m, from Erik Marko, Colliers Project Leaders (consultant for City of Iqaluit), dated November 27, 2019.
- 38. Submitted **June 02, 2020** by City of Iqaluit, Memo: Leachate Treatment System Evaluation, prepared by Dillon Consulting, dated August 30, 2019.
- 39. Cover E-mail to Richard Dwyer, NWB, RE: 3AM-IQA1626 Amendment Applicant Response, from Bridget Campbell, CIRNA, dated **June 09, 2020**.
- 40. Letter to Richard Dwyer, NWB, RE: 3AM-IQA1626 City if Iqaluit City of Iqaluit Type A Water Licence Amendment ECCC Technical Review Comments, from Margaret Fairbairn, ECCC, dated **July 17, 2020**.
- 41. Letter to Richard Dwyer, NWB, RE: Crown-Indigenous Relations and Northern Affairs Canada's technical review of the City of Iqaluit's amendment application for water licence #3AM-IQA1626 for new solid waste disposal facilities, from Bridget Campbell, CIRNA, dated **July 17, 2020**.
- 42. Submitted **July 30, 2020**, by ECCC, Environment and Climate Change Canada's Presentation to the Nunavut Water Board Regarding the Municipality of Iqaluit Type A Water Licence Renewal and Amendment.
- 43. Cover E-mail to Derek Donald, NWB, RE: Application for Amendment to Construct and Operate New Solid Waste Disposal Facilities; City of Iqaluit Municipal Water Licence 3AM-IQA1626 (City of Iqaluit Extension Request), from Alan Rustom, Colliers Project Leaders (consultant for City of Iqaluit), dated July 30, 2020.
- 44. Letter to Amy Elgersma, City of Iqaluit, RE: Type "A" Water Licence No: 3AM-IQA1626; Application for Amendment to Construct and Operate New Solid Waste Disposal Facilities; City of Iqaluit Municipal Water Licence; Technical Meeting and Pre-Hearing Conference Update, from Richard Dwyer, NWB, dated August 4, 2020.
- 45. Cover E-mail to Amy Elgersma, City of Iqaluit, RE: Application for Amendment to Construct and Operate New Solid Waste Disposal Facilities; City of Iqaluit Municipal Water Licence 3AM-IQA1626, from Richard Dwyer, NWB, dated **Augsut 4, 2020**.
- 46. Cover E-mail to Amy Elgersma, City of Iqaluit, RE: Application for Amendment to Construct and Operate New Solid Waste Disposal Facilities;

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- City of Iqaluit Municipal Water Licence 3AM-IQA1626, from Richard Dwyer, NWB, dated **September 03, 2020**.
- 47. Letter to Amy Elgersma, City of Iqaluit, RE: Type "A" Water Licence No: 3AM-IQA1626; Application for Amendment to Construct and Operate New Solid Waste Disposal Facilities; City of Iqaluit Municipal Water Licence; Technical Meeting and Pre-Hearing Conference Draft Agenda, from Richard Dwyer, NWB, dated **September 10, 2020**.
- 48. Cover E-mail to Amy Elgersma, City of Iqaluit, RE: Application for Amendment to Construct and Operate New Solid Waste Disposal Facilities; City of Iqaluit Municipal Water Licence 3AM-IQA1626, from Richard Dwyer, NWB, dated **September 10, 2020**.
- 49. Cover E-mail to Ricahrd Dwyer, NWB, RE: City of Iqaluit Municipal Water License technical meeting and pre-hearing conference, from James Elliot, Government of Nunavut Department of Environment (GN-DOE), dated **September 11, 2020**.
- 50. Cover E-mail to Amy Elgersma, City of Iqaluit, RE: Application for Amendment to Construct and Operate New Solid Waste Disposal Facilities; City of IqaluitMunicipal Water Licence 3AM-IQA1626, from Bridget Campbell, CIRNA, dated **September 14, 2020**.
- 51. Cover E-mail to Richard Dwyer, NWB, RE: Application for Amendment to Construct and Operate New Solid Waste Disposal Facilities; City of IqaluitMunicipal Water Licence 3AM-IQA1626, from Jody Small, ECCC, dated **September 14, 2020**.
- 52. Submitted **September 14, 2020**, by ECCC, Environment and Climate Change Canada's Presentation to the Nunavut Water Board Regarding the Municipality of Iqaluit Type A Water Licence Renewal and Amendment.
- 53. Cover E-mail to Richard Dwyer, NWB, RE: Application for Amendment to Construct and Operate New Solid Waste Disposal Facilities; City of IqaluitMunicipal Water Licence 3AM-IQA1626, from Bridget Campbell, CIRNA, dated **September**, **14**, **2020**.
- 54. Submitted **September 14, 2020**, by CIRNA, Amendment Application for the City of Iqaluit Water Licence 3AM-IQA1626 Nunavut Water Board Technical Meeting August 12 13, 2020.
- 55. Submitted **September 15, 2020**, by City of Iqaluit, Landfill and Waste Transfer Station.
- 56. Letter to Amy Elgersma, City of Iqlauit, RE: Type "A" Water Licence 3AM-IQA1626 Amendment Application for a New Solid Waste Management Facility, City of Iqaluit; Technical Meeting and Pre-Hearing Conference Final Agenda, from Richard Dwyer, NWB, dated **September 15, 2020**.

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- 57. Submitted **September 17, 2020** by CIRNA, Table Further Questions.
- 58. Cover E-mail to Amy Elgersma, City of Iqaluit, RE: 3AM-IQA1626 CIRNAC follow-up questions for the City of Iqaluit generated at today's Technical Meeting, from Bridget Campbell, CIRNA, dated **September 17, 2020**.
- 59. Submitted **September 18, 2020** by ECCC, Table 1: City of Iqaluit Municipal Water License Amendment (Type "A" License 3AM-IQA-1626) Summary of ECCC's outstanding technical comments and requests presented at Nunavut Water Board Technical Meeting September 17, 2020.
- 60. Distributed **September 18, 2020** by NWB, Draft List of Commitments Technical Meeting (TM) September 17, 2020 Held in Relation to An Application to Amend Water Licence No. 3AM-IQA1626/
- 61. Distributed **September 18, 2020**, by NWB, FINAL AGENDA (Cont.)
 TECHNICAL MEETING AND PRE-HEARING CONFERENCE CITY OF
 IQALUIT MUNICIPAL WATER LICENCE WATER LICENCE
 AMENDMENT (TYPE "A" LICENCE 3AM-IQA1626)
- 62. Cover E-mail to Amy Elgersma, City of Iqlauit, RE: Application for Amendment to Construct and Operate New Solid Waste Disposal Facilities; City of IqaluitMunicipal Water Licence 3AM-IQA1626, from Richard Dwyer, NWB, dated **September 18, 2020**.
- 63. Prepared **September 21, 2020**, by NWB, LIST OF ISSUES TECHNICAL MEETING AND PRE-HEARING CONFERENCE 3AM-IQA1626
- 64. Submitted **Septebmer 22, 2020**, by City of Iqaluit, Draft List of Commitments Technical Meeting (TM) September 17, 2020 Held in Relation to An Application to Amend Water Licence No. 3AM-IQA1626.
- 65. Submitted **September 22, 2020**, by ECCC TECHNICAL MEETING & PHC CITY OF IQALUIT Iqaluit, Nunavut September 17, 2020 Registration Form Day One
- 66. Cover E-mail to Amy Elgersma, City of Iqaluit, RE: Application for Amendment to Construct and Operate New Solid Waste Disposal Facilities; City of IqaluitMunicipal Water Licence 3AM-IQA1626 (City of Iqaluit response to the draft list of commitments) from Richard Dwyer, NWB, dated September 23, 2020.
- 67. Letter to Richard Dwyer, NWB, RE: Licence No. 3AM-IAQ-1626– City of Iqaluit– Solid Waste Application for Amendment to Construct and Operate New Solid Waste Disposal Facilities, from Jody Small, ECCC, dated **September 25, 2020**.
- 68. Submitted **September 29, 2020** by City of Iqaluit, Application for Amendment to include Dead Dog Lake Extraction.

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- 69. Submitted **September 29, 2020** by City of Iqaluit Location Map of Dead Dog Lake.
- 70. Submitted **September 29, 2020** by City of Iqaluit Dead Dog Lake Water Extraction for Dust Suppression Supporting Submission for Application to Amend to Amend Type A Water Licence 3AM-IQA1626.
- 71. Letter to Alan Rustom, Colliers Project Leaders (consultant for City of Iqaluit), RE: Water Licence Amendment, from Jim Clare, AECOM Canada Ltd., dated **September 30, 2020**.
- 72. Memo to Alan Rustom, Colliers Project Leaders (consultant for City of Iqaluit) RE: July 2020 Regulator (ECCC/CIRNAC) Comments Responses, from Keith Barnes, Dillon Consulting, dated **October 2, 2020**.
- 73. Memo to Alan Rustom, Colliers Project Leaders (consultant for City of Iqaluit) RE: July 2020 Regulator (ECCC/CIRNAC) Comments Responses October 9, from Keith Barnes, Dillon Consulting, dated **October 9, 2020**.
- 74. Letter to Iqaluit Distribution List, RE: Type "A" Water Licence No: 3AM-IQA1626; Pre-Hearing Conference Decision Regarding an Application to Amend Water Licence No: 3AM-IQA1626, from Stephanie Autut, NWB, dated **October 16, 2020**.
- 75. Cover E-mail to Amy Elgersma, City of Iqaluit, RE: City of Iqaluit Pre-Hearing Conference Decision Regarding an Application to Amend Water Licence No: 3AM-IQA1626, from Richard Dwyer, NWB, dated **October 17**, **2020**.
- 76. Cover E-mail to Amy Elgersma, City of Iqaluit, RE: City of Iqaluit Notice of Public Written Hearing regarding an Application to AmendWater Licence No: 3AM-IQA1626, from Richard Dwyer, NWB, dated **November 10, 2020**.
- 77. Letter to Richard Dwyer, NWB, RE: Crown-Indigenous Relations and Northern Affairs Canada's Review of the City of Iqaluit's Pre-Hearing Conference Commitments regarding the Amendment Application for Water Licence #3AM-IQA1626 for New Solid Waste Disposal Facilities, from Bridget Campbell, CIRNA, dated **November 26, 2020**.
- 78. Letter to Richard Dwyer, NWB, RE: 3AM-IQA1626 City of Iqaluit Water Licence Amendment Application, from Margaret Fairbairn, ECCC, dated **November 26, 2020**.
- 79. Cover E-mail to Richard Dwyer, NWB, RE: City of Iqaluit Pre-Hearing Conference Decision Regarding an Application to Amend Water Licence No: 3AM-IQA1626, from Bridget Campbell, CIRNA, dated **November 26, 2020**.
- 80. Letter to Alan Rustom, Colliers Project Leaders (consultant for City of Iqaluit), RE: City of Iqaluit Landfill and Waste Transfer Station Regulator

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- Response Package December 15, 2020, from Keith Barnes, Dillon Consulting, dated **December 15, 2020**.
- 81. Submitted **December 15, 2020**, by Colliers Project Leaders (consultant for City of Iqaluit), November 2020 Regulator (ECCC/CIRNAC) Comments Iqaluit Landfill and Waste Transfer Station Project 3AM-IQA1626 Responses.
- 82. Submitted **December 15, 2020**, by Colliers Project Leaders (consultant for City of Iqaluit), Environmental Protection Plan Operations, Closure and Post-Closure Phases Landfill and Waste Transfer Station.
- 83. Submitted **December 15, 2020**, by Colliers Project Leaders (consultant for City of Iqaluit), Environmental Protection Plan Construction Phase Landfill and Waste Transfer Station.
- 84. Submitted **December 15, 2020**, by Colliers Project Leaders (consultant for City of Iqaluit), Facility Monitoring Plan Landfill and Waste Transfer Station.
- 85. Submitted **December 15, 2020**, by Colliers Project Leaders (consultant for City of Iqaluit), Operations and Maintenance Manual Landfill and Waste Transfer Station.
- 86. Submitted **December 15, 2020**, by Colliers Project Leaders (consultant for City of Iqaluit), Landfill and Waste Transfer NWB File: 3AM-IQA1626 Commitment 17 Supplementary Information.
- 87. Submitted **December 15, 2020**, by Colliers Project Leaders (consultant for City of Iqaluit), SOLID WASTE LANDFILL AND WASTE TRANSFER STATION 100% SUBMISSION.
- 88. Submitted **December 15, 2020**, by Colliers Project Leaders (consultant for City of Iqaluit), Landfill and Waste Transfer Station NWB File: 3AM-IQA1626 CIRNAC Comment 2.iii. and Comment 10.1 Supplementary Information.
- 89. Submitted **December 15, 2020**, by Colliers Project Leaders (consultant for City of Iqaluit), Environmental Protection Plan Construction Phase Landfill and Waste Transfer Station.
- 90. Submitted **December 15, 2020**, by Colliers Project Leaders (consultant for City of Iqaluit), Erosion and Sediment Control Plan Landfill and Waste Transfer Station.
- 91. Submitted **December 15, 2020**, by Colliers Project Leaders (consultant for City of Iqaluit), Environmental Protection Plan Operations, Closure and Post-Closure Phases Landfill and Waste Transfer Station.
- 92. Submitted **December 15, 2020**, by Colliers Project Leaders (consultant for City of Iqaluit), Geotechnical Investigation Proposed Waste Transfer Station.

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- 93. Submitted **January 11, 2021**, by CIRNA, Final Written Submission City of Iqaluit Application to Amend Type A Water Licence 3AM-IQA1626
- 94. Letter to Richard Dwyer, NWB, RE: 3AM-IQA1626 City of Iqaluit Water Licence Amendment Application, from Margaret Fairbairn, ECCC, dated **January 11, 2021**.
- 95. Submitted **January 11, 2021**, by ECCC, ENVIRONMENT AND CLIMATE CHANGE CANADA'S FINAL WRITTEN SUBMISSION TO THE NUNAVUT WATER BOARD RESPECTING THE CITY OF IQALUIT'S TYPE A MUNICIPAL WATER LICENCE AMENDMENT APPLICATION
- 96. Cover E-mail to Amy Elgersma, City of Iqaluit, RE: City of Iqaluit Notice of Public Written Hearing regarding an Application to Amend Water Licence No: 3AM-IQA1626 (Written Hearing Update), from Richard Dwyer, NWB, dated **January 12, 2021**.
- 97. Submitted **January 19, 2021**, by Colliers Project Leaders (consultant for City of Iqaluit), January 11, 2021 Regulator (Crown-Indigenous Relations and Northern Affairs Canada) Comments, City of Iqaluit Application to Amend Type A Water License 3AM-IQA1626 Response.
- 98. Submitted **January 21, 2021** by City of Iqaluit, Landfill 90 % Submission Opinion of Probable Budget (January 24, 2020).
- 99. Submitted **January 21, 2021** by City of Iqaluit, Waste Transfer Station 90 % Submission Opinion of Probable Budget (January 24, 2020).
- 100. Letter to Iqaluit Distribution List, RE: Closure of the Public Hearing Record in Respect of the Written Public Hearing Associated with the Nunavut Water Board's Processing of An Amendment Application for Water Licence 3AM-IQA1626 filed by the City of Iqaluit to Construct and Operate a New Solid Waste Management Facilities, from Stephanie Autut, NWB, dated January 25, 2021.
- 101. Cover E-mail to Amy Elgersma, City of Iqaluit, RE: City of Iqlauit Water Licence Amendment Application for water licence 3AM-IQA1626, from Richard Dwyer, NWB, dated **January 25, 2021**.