

NUNAVUT WATER BOARD

WATER LICENCE NO: 3AM-PAN1828

REASONS FOR DECISION INCLUDING RECORD OF PROCEEDINGS



NUNAVUT WATER BOARD

In the Matter of:

Applicant: Hamlet of Pangnirtung

Subject: Application to Replace Expired Type "B" Water Licence

No. 3BM-PAN1417 with a new Type "A" Water Licence

<u>Date:</u> May 4, 2018

<u>Precedence:</u> Where there is any inconsistency or conflict between the *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 Land Claims Agreement Act, the NWNSRTA prevails to the extent of the inconsistency or conflict.



RECORD OF PROCEEDINGS

Applicant: Hamlet of Pangnirtung

Address: P.O. Box 253

Municipality of Pangnirtung, NU

X0A 0R0

Purpose: Application to Replace Expired Type

"B" Water Licence No. 3BM-PAN1417 with a new Type "A" Water Licence

Original

(incomplete) Application Received on: March 16, 2017

Complete Application

Received on:

May 10, 2017

Application Received from:

Hamlet of Pangnirtung

Date of Public

Hearing:

March 21 and 22, 2018

Public Hearing

Record Closed:

March 22, 2018



ATTENDEES:

NWB

Representatives:

Nunavut Water **Board Panel** Members (Panel P18):

Chairman Member Member

L. Toomasie R. Mrazek M. Nartok

Nunavut Water

Executive Director

S. Autut

Board Staff: Director of Technical Services

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Licensing Administrator

R. Dwyer

Director of Board Administration and

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(Meadows Law)

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Interpreters:

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T. Huynh

Sound Technician:

Court Reporter:

Innirvik Support Services

I. Mablick

Applicant:

Hamlet of Pangnirtung Senior Administrative Officer

R. Ladd

Municipal Engineer, Government of

Nunavut – Community and Government

Services

B. Roy

Consulting Engineer (EXP Services

Incorporated)

S. Bliss



Parties: Attending In Person

Indigenous and Northern Affairs Acting Manager, Water Resources

I. Parsons

Canada (INAC)

Water Management Specialist

S. Forte

Water Resource Technician

L. Bachellier

Department of Fisheries and Oceans Canada (DFO)

Senior Fisheries Protection Biologist

R. Janusz

Fisheries Protection Biologist

J. Moyer

Attending Via Teleconference

Environment and Climate Change Canada (ECCC)

Acting Senior Environmental Assessment Coordinator

G. Bernard-Lacaille

Head of Water Quality Expert Support Group

A. Wilson

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-PAN----

/2%20ADMIN/4%20HEARINGS/2%20HEARING/

Hearing Record (including Hearing Transcript):

Available from the Board's public registry using the following

link:

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

%20Municipality/3AM-PAN----

/2%20ADMIN/3%20SUBMISSIONS/2017%20Renewal%20A

mendment/



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ABBREVIATIONS

Short Form	Full Name
CIRNA	Crown-Indigenous Relations and Northern Affairs Canada (formerly INAC and AANDC)
DFO	Fisheries and Oceans Canada
ECCC	Environment and Climate Change Canada (formerly Environment Canada)
GN-CGS	Government of Nunavut, Community and Government Services
INAC	Indigenous and Northern Affairs Canada (formerly AANDC and currently transitioning to CIRNA)
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
NWNSRTA	Nunavut Waters and Nunavut Surface Rights Tribunal Act
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 Hamlet of Pangnirtung (the Hamlet, Licensee or Applicant), seeking to replace the currently expired Type "B" Water Licence No. 3BM-PAN1417 with a new Type "A" Water Licence Application for a term of 15 years. An incomplete application and supporting documentation was submitted on March 16, 2017, with supplementary materials, as required by the NWB to complete the application, being submitted on April 4, 2017 and May 10, 2017 (the initial application and supplementary materials are referenced as "the Application" for the purposes of these Reasons for Decision). Pursuant to a change to the definition of municipal undertaking, and changes to water use thresholds under the *Nunavut Waters Regulations*, ¹ the Hamlet was required to replace their expired Type "B" Licence with a new Type "A" Licence in order to authorize the continued use of water and deposit of waste associated with a "municipal undertaking".

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¹ As of April 2013, when the *Nunavut Waters Regulations*, SOR/2013-69 came into force, the combined effect of a revised definition of "municipal undertaking" under Schedule 1 ("a waste disposal or water system for a municipality" without reference to population size) combined with changes to the Type "A" licensing criteria for water use under Schedule 2 (storage of water in excess of 60,000 cubic metres and/or withdrawal of water exceeding 300 cubic metres per day) triggered the requirement for the Hamlet to move from a Type "B" Licence to a new Type "A" Licence.



The Hamlet of Pangnirtung is located on Baffin Island, in the Qikiqtani Region of Nunavut, with an estimated population of 1,800. The Hamlet operates a potable water treatment and supply facility (including a water storage reservoir), a wastewater treatment plant, and a solid waste management facility. The wastewater treatment plant underwent a major upgrade in 2016. A new truckfill station was constructed then, too. In addition, the Hamlet plans to construct a new landfill by 2024.

The NWB conducted a review of the Application, including a completeness check, technical review, and a technical meeting/pre-hearing conference (TM/PHC) was held by teleconference on December 5 and 6, 2017. Teleconference and interpretation facilities were available in the Hamlet office during the TM/PHC meetings to enable interested members of the community to participate in the meetings.

On March 21 and 22, 2018 the Board held an in-person Public Hearing in respect of the Application in Pangnirtung. A Community Session was hosted by the NWB on the evening of March 21, 2018. The Board closed the Public Hearing Record for the Application at the Public Hearing on March 22, 2018, and remitted the file to the Panel for decision-making.

On the basis of the information provided with the Application by the Hamlet of Pangnirtung, 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 in advance of and during the Public Hearing, and the information provided during the Public Hearing and Community Session, the three-member panel of the Board, Panel (P18), duly appointed by the Board to consider the Application has by way of Motion No. 2018-05-P18-05 and Motion No. 2018-05-P18-06 decided the following:

- To grant, in accordance with the terms and conditions outlined in this Decision, the Hamlet's request to replace the expired Type "B" Water Licence No. 3BM-PAN1417 with the attached Type "A" Water Licence No.: 3AM-PAN1828 (the new Type "A" Licence);
- Specific terms and conditions of note in the new Type "A" Licence include the following:
 - o the term of the Licence will be 10 years, expiring in 2028, although the Board recognizes that during the Board's consideration of the Application the Hamlet requested a 15 year term, the Board, noting that this is the Hamlet's first Type "A" Licence and also recognizing that various planned activities for the Hamlet's municipal services, including construction of a new solid waste management facility proposed in 2024 will be undertaken

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- during the term of the Licence, the Panel decided that 10 years was a more appropriate term;
- no posting of reclamation security is required, as the Licence is for a Municipal undertaking and the Applicant is a government entity;
- o the allowable withdrawal volumes and the rate of withdrawal from the water source (the Duval River) were increased and these changes are in keeping with the Type "A" water use licensing criteria; and
- o a new and more stringent monitoring program, including an extensive monitoring campaign for 2018, is included under the new Type "A" Licence, reflecting both the authorized increases in water use, the current state of the solid waste management facility, and the proposed future construction of a new landfill in 2024.

SECTION I: FILE BACKGROUND AND REGULATORY HISTORY

Current Application

The Application was originally submitted on by the Government of Nunavut – Community and Government Services (GN-CGS) on behalf of the Hamlet of Pangnirtung (Applicant or the Hamlet), on March 16, 2017, with supplementary information being provided by GN-CGS on April 4, 2017 and May 10, 2017. Following the receipt of responses to the NWB's requests for various clarifications and additional information in support of the Application, on May 17, 2017, the NWB acknowledged receipt of the Hamlet's Application, filed by GN-CGS on behalf of the Hamlet, and began the NWB's formal processing of the Application.

Although this Application seeks to replace the Hamlet's expired Water Licence No. 3BM-PAN1417, which was a Type "B" Water Licence, due to the daily water use requirements when the Hamlet is refilling the water reservoir, as well as the volume of water stored within the Hamlet's reservoir when it is full, the Hamlet's water use requirements exceed the updated thresholds for a Type "B" Water Licence and triggered the requirement for a Type "A" Water Licence under the *Nunavut Waters Regulations*, SOR/2013-69.

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 D that is attached to these Reasons for Decision, but a summary of the key Application materials provided by the Hamlet from March 16, 2017 through to March 22, 2018 include the following:

- Authorization Letter from the Hamlet of Pangnirtung (March 16, 2017);
- NIRB Screening Decision Report (March 17, 2017);

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- NIRB Screening Decision Cover Letter (March 17, 2017);
- NIRB Notice of Assessment (March 17, 2017);
- Nunavut Planning Commission, Land Use Conformity Determination (November 22, 2016);
- Application Cover Letter (March 20, 2017);
- Project Summary (English);
- Project Summary (Inuktitut);
- Completed Type "A" Water Licence Application Form (March 16, 2017);
- Operation, Maintenance and Decommissioning Manuals (various dates, reflecting the dates of updates, etc.);
- Applicants' responses to Interveners' submissions (including comments on completeness, technical review comment submissions and the Applicant's commitments from the TM) (various dates);
- English, French and Inuktitut TM/PHC summary documents (November 28, 2017);
- Correspondence from the Hamlet to the NWB requesting an increase to the original term (10 years) of the new Type "A" Licence to 15 years (December 7, 2017); and
- English and Inuktitut Application summary materials presented at the Public Hearing (March 7, 2018).

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

http://www.nwb-oen.ca/public/registry/3%20MUNICIPAL/3A/3AM%20-%20Municipality/3AM-PAN----/1%20APPLICATION/2017%20Renewal/

Scope of the Application

The scope of the Application, as it was originally received by the Board in March 2017 and as supplemented by May 2017 when it was declared to be complete, was as follows:

- 1. Replacement of the expired Type "B" Licence No. 3BM-PAN1417 with a new Type "A" Licence to authorize the continued use of water and deposit of waste associated with a "municipal undertaking" for a term of ten (10) years;
- 2. Storage and use of up to 120,000 cubic metres of freshwater annually. The water would be extracted from the Duval River; with a proposed withdrawal of between 900-2000 m³/day (amount per day depending on the number of hours of pumping per

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day, from a low of 8 hours to a high of 18 hours) and may be stored in the Hamlet's water reservoir facility;

- 3. Continued management of municipal waste (sewage treatment) and industrial (fish processing plant) waste generated by the relevant facilities operated by the hamlet; and
- 4. Continued management of solid waste including municipal solid waste, waste metals, and hazardous waste generated by the Hamlet.

The initial scope of the new Type "A" Water Licence was modified by the Applicant, following discussions at the Technical Meeting in December 2017. On December 7, 2017, the Hamlet submitted correspondence to the NWB to modify the term of the Licence sought by the Applicant from the original 10 year term to a 15 year term.

Licensing History

Both the Northwest Territories Water Board and the NWB have issued water licences in the past to authorize the Hamlet's water use and waste deposit associated with a municipal undertaking. The following summarizes the previous Licences issued to the Hamlet.

Northwest Territories Water Board

- Licence N5L4-1447
 - o Issued on January 1, 1991 and expired on December 31, 2000
 - The Licence allowed for the use of 50,000 cubic metres of water per year and the deposit of waste in support of a Municipal undertaking

Nunavut Water Board

- NWB3PAN0207
 - o Issued on December 1, 2002 and expired on November 31, 2007
 - Allowed for the use of 100,000 cubic metres of water annually in support of a Municipal undertaking
- 3BM-PAN0810
 - o Issued on August 8, 2008 and expired on August 31, 2010
 - Allowed for the use 100,000 cubic metres of water and the deposit of waste in support of a Municipal undertaking
- 3BM-PAN1417
 - o Issued on September 16, 2014 and expired on September 15, 2017.

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• The Licence allowed for the use of 74,000 cubic metres of water annually and the deposit of waste in support of a Municipal undertaking.

Regulatory and Procedural History of the Application

Pre-Licensing Regulatory History of the Application

The Nunavut Planning Commission (NPC)

On November 22, 2016, NPC issued its determination for the Application, which stated that:

- the project is located outside of a region with an approved land use plan and therefore no land use plan conformity assessment was required by the NPC;
- the undertaking does not belong to a class of works or activities that are exempt from screening by the Nunavut Impact Review Board (NIRB), as set out in Schedule 12-1 of the *Nunavut Agreement*; and
- 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)

On March 17, 2017 the NIRB issued its Screening Decision Report associated with the Application,² which states 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:

Subject to the Proponent's compliance with the terms and conditions as set out in [sic] below, the NIRB is of the view that the project proposal is not likely to cause significant public concerns and it unlikely to result in significant adverse environmental and social impacts.³

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 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 progress to be considered by the NWB.

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² NIRB Screening Decision Report, NIRB File No.: 16WN066, March 17, 2017.

³ NIRB Screening Decision Report, NIRB File No.: 16WN066, March 17, 2017, at p. 1.



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:

http://www.nwb-oen.ca/public/registry/3%20MUNICIPAL/3A/3AM%20-%20Municipality/3AM-PAN----/

March 16 – April 4, 2017	NWB received from GN-CGS, on behalf of the Hamlet of Pangnirtung or the Applicant, an Application to renew and amend Type "B" Water Licence No. 3BM-PAN1417. Based on the scope of the Application, the NWB determined that the Application would trigger the requirements for a new Type "A" Licence, and directed that the Application should be processed as a new Type "A" Application.
May 10, 2017	NWB received additional information from GN-CGS to address deficiencies in the Application.
May 17, 2017	NWB provided Notice of the Application and distributed the Application for a preliminary technical assessment and completeness check
June 7, 2017	NWB received submissions providing interveners' preliminary technical assessments and completeness checks of the Application from INAC and ECCC.
<u>June 9, 2017</u>	NWB distributed the Application inviting technical review comments in respect of the Application.
<u>June 20 - 22, 2017</u>	NWB received additional information in support of the Application from GN-CGS on behalf of the Applicant.
<u>July 28, 2017</u>	NWB received technical review comments in respect of the Application from INAC, ECCC, and DFO.
August 22, 2017	NWB received and distributed GN-CGS's response to Intervener's Comments.

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October 30, 2017 NWB issued notice of the Technical Meeting and Pre-Hearing

Conference to be held by teleconference on December 5 and 6, 2018, including distributing the draft agendas for the

TM/PHC to parties for comment.

December 5 and 6, 2017 The Technical Meeting and Pre-Hearing Conference were

held for the file via teleconference (teleconference and interpretation facilities were made available by the Hamlet during the TM/PHC for any community members wishing to

participate).

December 7, 2017 The Hamlet files correspondence with the NWB requesting

that the Application be amended to seek a 15-year term for the

new Water Licence.

December 22, 2017 The NWB issues the Pre-Hearing Conference Decision for the

file; including providing a list of commitments, identifying issues to be addressed at the Public Hearing and proposing tentative timelines as the Application proceeded to a Public

Hearing.

January 8, 2018 The NWB issued notice of the in person Public Hearing to be

held in the Hamlet of Pangnirtung tentatively scheduled for

March 21 and 22, 2018.

March 21 and 22, 2018 The NWB Panel (P18) conducted the in person Public Hearing

for the Application, including hosting a Community Session

on the evening of March 21, 2018.

NWB Timeline for Processing the Application

As set out under the NWNSRTA, s. 55.2, the NWB is required to process an Application for a Type "A" Water Licence within 9 months from the receipt of a complete application. However, as expressly noted in s. 55.4, this 9-month period excludes the time that elapses while the NWB is awaiting receipt of information requested from the Applicant.⁴ In this case, and as illustrated by the key procedural steps listed above and outlined in the detailed list of submissions included in APPENDIX D, the Board awaited receipt of additional information from the Applicant in March through May 2017, in June 2017, in December

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 under section 55.2 or its extension.

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⁴ As stated in s. 55.4:



2017 and in February 2018. By the Board's calculation, the time that elapsed while the Board awaited information submissions from the Applicant amounted to approximately 14 weeks (3 and ½ months). The Board provided notice of a <u>complete</u> application on June 9, 2017.⁵ When the 14 weeks of time spent by the NWB waiting for submissions from the Applicant is excluded from this timeline, the NWB has rendered this Decision well within the timeline required under s. 55.2 of the NWNSRTA.

SECTION II: SUMMARY OF FINAL SUBMISSIONS OF THE PARTIES

Hamlet of Pangnirtung (the Applicant or the Hamlet)

Following the TM/PHC, the Applicant proposed the following changes to the terms and conditions of the expired Type "B" Licence No. 3BM-PAN1417:

- increase to the Licence term to 15 years; ⁶ and
- changes to the volume of water withdrawn from the source.

At the Public Hearing and the Applicant's reply to the Interveners' final written submissions, the Hamlet discussed the operation of the following facilities under the Licence:

- water supply system;
- wastewater treatment; and
- solid waste management.

During the Public Hearing, the Applicant also agreed to update the Quality Assurance / Quality Control Plan⁸, Spill Contingency Plan⁹, Operations and Maintenance Manual for the Water Supply¹⁰, and the Wastewater Treatment Plant Bypass Contingency Plan¹¹ as directed

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⁵ NOTE: the initial Notice of Application in May 2017 was intended to solicit comments on completeness of the application only, with the notice of a complete application only being issued after the completeness comments had been received and considered by the Board.

⁶ Government of Nunavut – Community and Government Services on behalf of Hamlet of Pangnirtung (GN-CGS), Exhibit 1, NWB Public Hearing Licence No. 3BM-PAN1417, "Water Board Public Hearing March 21-22, 2018", hard copy of a PowerPoint Presentation, (English and Inuktitut) filed on March 21, 2018.

⁷ Letter to Karén Kharatyan, NWB, Re: 3AM-PAN---- (3BM-PAN1417 renewal), Type "A" Municipal Water Licence – Amendment Application, Hamlet of Pangnirtung, NU; Technical Meeting and Pre-Hearing Conference, request for 15 year term licence, from Ron Ladd, Hamlet dated December 7, 2017.

⁸ B. Roy, GN-CGS, NWB Public Hearing, File No. 3AM-PAN----, Transcript, March 21, 2018, Volume 1, p. 40.

⁹ B. Roy, GN-CGS, NWB Public Hearing, File No. 3AM-PAN----, Transcript, March 21, 2018, Volume 1, p. 39.

¹⁰ R. Ladd, Hamlet of Pangnirtung, NWB Public Hearing, File No. 3AM-PAN----, Transcript, March 21, 2018, Volume 1, p. 34.

¹¹ R. Ladd, Hamlet of Pangnirtung, NWB Public Hearing, File No. 3AM-PAN----, Transcript, March 21, 2018, Volume 1, p. 35.



by the interveners. In addition, the Hamlet committed to obtaining and installing an appropriately sized fish screen¹² and flow measuring devices¹³.

Further, the Applicant expressed its agreement to minimize open burning at the municipal landfill, take action on surface water management at the metal storage area in 2019, erect fencing during the summer season of 2018, and take measures on drainage and containment at the hazardous waste storage area in 2019¹⁴. The Hamlet also provided photo evidence of repairs of the reservoir berm where an earlier INAC inspection identified a depression. Finally, the Applicant expressed its concurrence with the Interveners' recommendation to keep the existing (but not operating) old truckfill station and sewage lagoon in the Licence. The Applicant also acknowledged that they will be required to amend the new Type "A" Licence before the Hamlet is authorized to construct and operate a new landfill and decommission the existing landfill.

Indigenous and Northern Affairs Canada (INAC)

Indigenous and Northern Affairs Canada's (INAC)¹⁵ participation in water licensing processes in Nunavut is informed by their mandate under the following Acts and associated regulations: Department of Indian Affairs and Northern Development Act,¹⁶ Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada, Nunavut Waters and Nunavut Surface Rights Tribunal Act,¹⁷ Territorial Lands Act,¹⁸ and the Arctic Waters Pollution Prevention Act.¹⁹

In addition to comment submissions on completeness and technical review submissions as set out in detail in Appendix D, on February 12, 2018, the NWB received INAC's final written submission summarizing INAC's comments on the Application received throughout the NWB's process. INAC also attended in person in Pangnirtung during the Public Hearing

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 $^{^{12}}$ R. Ladd, Hamlet of Pangnirtung, NWB Public Hearing, File No. 3AM-PAN----, Transcript, March 21, 2018, Volume 1, p. 31.

¹³ R. Ladd, Hamlet of Pangnirtung, NWB Public Hearing, File No. 3AM-PAN----, Transcript, March 21, 2018, Volume 1, p. 32.

¹⁴ Roy, Bhabesh, Municipal Engineer, GN-CGS, to NWB; Re: Public Meeting – Water Board Licence Renewal, filed on February 23, 2018.

¹⁵ As the Ministry is currently being referenced; although the NWB is aware that INAC is expected to transition to CIRNA to reflect that the title of the governing Minister is Crown-Indigenous Relations and Northern Affairs.

¹⁶ R.S.C. 1985, c. I-6.

¹⁷ S.C. 2002, c. 10.

¹⁸ R.S.C. 1985, c. T-7.

¹⁹ R.S.C. 1985, c. A-12.



for the Application on March 21 and 22, 2018, and engaged in further discussion of outstanding issues at that time. ²⁰

INAC recommended carrying over all infrastructure included in the expired Type "B" Water Licence to the new Type "A" Water Licence, noting that none of the works and undertakings included under the expired Licence have been properly decommissioned as yet. On this basis, INAC indicted that the scope of the new Type "A" Water Licence should include the following:

- water reservoir;
- old water truck fill station;
- new water truck fill station;
- wastewater treatment plant;
- sewage lagoon;
- landfill; and
- metal dump.

Additionally, INAC indicated that there was no objection to the Applicant's request for a fifteen (15) year term, provided that the Hamlet of Pangnirtung agrees to undergo a Licence Amendment process prior to any major infrastructure upgrades being undertaken and included within the scope of the new Type "A" Water Licence²¹.

Compliance Issues

INAC expressed its concern over the compliance issues faced by the Applicant; the first issue being the absence of accurate data on withdrawal volumes from the Duval River due to lack of any reliable flow-metering devices on intake. INAC also identified concern with the inadequate quality of data reporting within the Hamlet's annual reports. In response to this concern, the Hamlet committed to improvements to the data collected and reported in the annual report²².

INAC along with Fisheries and Oceans Canada (DFO) also recommended that the Hamlet should determine whether the mouth of the Duval River is fish-bearing, as these Interveners would consider the current design of the fish screen to be inadequate (to prevent harm to fish) if the river is fish bearing.

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²⁰ INAC, Exhibits 6, 7 and 8, NWB Public Hearing Licence No. 3BM-PAN1417, "Indigenous and Northern Affairs Canada Hamlet of Pangnirtung Renewal Application for Water Licence #3AM-PAN----(3BM-PAN1217)" PowerPoint Presentation, filed on March 21, 2017.

²¹ I. Parsons, INAC, NWB Public Hearing, File No. 3AM-PAN----, Transcript, March 21, 2018, Volume 1, p. 82.

²² INAC submission to NWB; Final Submission Regarding Government of Nunavut – Community and Government Services' Type A Water Licence Renewal Application for the Hamlet of Pangnirtung, filed on February 12, 2018.



Water Supply

INAC echoed the DFO's concerns whether the proposed rates of withdrawal from the Duval River are sustainable and ensure adequate protection of the water course. The recommendation from the Interveners was to conduct a hydrology study of the Duval River to determine the maximum allowable drawdown rate, (a rate below which no negative impact to the river ecosystems occurs). Until the results of the study are available, INAC would like to restrict water withdrawals from the Duval River to the months of July and August only²³.

Wastewater Treatment

INAC indicated satisfaction with the current operation of the wastewater treatment plant.

Waste Management

INAC considered the issue of the additional processing of waste from the fish processing plant by the Hamlet to be resolved, as only a small amount of fish waste is now being placed in the landfill. However, the issue of the drainage of runoff and seeps from the metal and hazardous waste storage area was identified as an issue that remains open. INAC identified their concern that contaminants originating from metal and hazardous waste should be contained in order to prevent contaminants from entering the environment. INAC recommended that the NWB develop criteria for leachate and runoff from the metal and hazardous waste areas to be included in the new Type "A" Water Licence, and would like to see the existing monitoring stations PAN-4, PAN-5 and PAN-6 converted into compliance points.

As a result of discussion between the Applicant, INAC and NWB staff at the Public Hearing, the Applicant committed to complete in 2018 more extensive monitoring of runoff and seeps from the waste management facility at monitoring stations PAN-4, PAN-5 and PAN-6 and to complete a stand-alone Drainage / Seepage Monitoring and Management Plan²⁴ for the submission to the Board within the 2018 Annual Report. This document should also include an analysis of the parameters of concern and specify target concentration limits for these parameters²⁵.

A topographical survey will also be required to determine drainage patterns. The Applicant indicated that the survey will be conducted in the summer of 2018 and a topographical map highlighting all infrastructure/facilities will be included within the updated Spill Contingency Plan for submission for Board review within the 2018 Annual Report.

Management Plans

Finally, INAC commented on a number of necessary updates to the Water Reservoir Operations and Maintenance Manual, Wastewater Treatment Plant Bypass Contingency Plan, Spill Contingency Plan, and the Quality Assurance/Quality Control Plan. While the

²³ I. Parsons, INAC, NWB Public Hearing, File No. 3AM-PAN----, Transcript, March 21, 2018, Volume 1, p. 77.

²⁴ I. Parsons, INAC, NWB Public Hearing, File No. 3AM-PAN----, Transcript, March 21, 2018, Volume 1, p. 109.

²⁵ I. Parsons, INAC, NWB Public Hearing, File No. 3AM-PAN----, Transcript, March 21, 2018, Volume 1, p. 106.



management plans are functional and should be implemented once the Licence is approved, INAC requested that the Applicant be required to update the plans to address concerns raised during the licensing process as well.

Environment and Climate Change Canada (ECCC)

Environment and Climate Change Canada's (ECCC) participates in the water licensing process in the exercise of their jurisdiction under the *Department of the Environment Act*, R.S.C. 1985, c. E-10, *Canadian Environmental Protection Act*, 1999,²⁶ Fisheries Act,²⁷ Migratory Birds Convention Act, 1994²⁸ and Species at Risk Act.²⁹

ECCC outlined the following comments in the Department's submission on February 12, 2018³⁰, as well as during the Public Hearing for the Application. ³¹ Unfortunately due to travel issues, ECCC personnel were not able to attend the Public Hearing in person, and participated by teleconference only. Although the NWB appreciates that travel and scheduling restrictions may sometimes dictate that Interveners are limited in their ability to attend Public Hearings in person, the NWB maintains that participation by teleconference is not a substitute for in person attendance. As is often the case at the NWB's Public Hearings, the parties present in Pangnirtung were able to meet outside the Public Hearing to discuss and develop solutions to outstanding issues. In the Board's experience, these discussions are much more difficult when parties are not able to conduct these discussions in person and with the full participation of the other interveners, the Board's technical staff and interested community members. In addition, having to present via teleconference during the Community Session portion of the Public Hearing very much limits the ability of ECCC personnel to engage directly, including undertaking any required consultation with the community of Pangnirtung.

The Board also notes that as is almost always the case in Nunavut, technical limitations beyond the Board's control often result in the proceedings being very much disrupted by repeated telecommunications failures. In this particular Public Hearing, there were several unplanned breaks in the Schedule to accommodate for dropped calls, having teleconference

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²⁶ S.C. 1999, c. 33.

²⁷ R.S.C. 1985, c. F-14.

²⁸ S.C. 1994, c. 22.

²⁹ S.C. 2002, c. 29.

³⁰ ECCC submission to NWB; Re: Respecting the Hamlet of Pangnirtung's Type a Municipal Water Licence Renewal Application Submitted by Government of Nunavut-Community Government Services, filed on February 12, 2018.

³¹ ECCC, Exhibit 5, NWB Public Hearing Licence No. 3BM-PAN1417, "Type "A" Water License (sic) for the Hamlet of Pangnirtung Type "A" Municipal Water Licence Application Government of Nunavut – Community Government Services" PowerPoint Presentation, filed on March 21, 2018.



participants being unable to hear simultaneous interpretation, etc.³² These interruptions are not only time-consuming and disruptive to participants in attendance, they can also mean that teleconference participants suddenly find themselves unable to participate in any manner at the Public Hearing. To be sure, participation by teleconference is better than no participation, but the significant limitations on this type of participation and the regulatory system mean that the NWB's decision-makers and affected communities all feel the effects when interveners as central to the process as ECCC are unable to participate full. The NWB urges ECCC and all Interveners to see the importance and value in attending Public Hearings in person and to make every effort to do so.

In respect of ECCC's written submissions and presentations at the Public Hearing, ECCC requested a number of updates to the Hamlet's Quality Assurance and Quality Control Plan, more specifically requesting the following improvements:

- Include field blanks rather than trip blanks in its QA/QC
- Use replicate or split samples for QA/QC on sample analyses.
- Append lab sheets that document the lab's internal QA/QC
- Include a data reporting protocol³³.

Secondly, ECCC requested limiting the toxicity testing requirement included in the expired Type "B" Licence to rainbow trout only and to bring forward this revised toxicity testing requirement in the new Type "A" Water Licence. ECCC also "encourages the Hamlet to minimize to whatever extent possible the non-segregated waste volumes that are open burned"³⁴ until the new landfill facility is commissioned in 2024. Lastly, ECCC directed the Applicant to update the spill line number in the Operation and Maintenance Plan for Solid Waste Facilities. In all other respects, ECCC was satisfied with information provided by the Applicant. The NWB acknowledges that the Hamlet of Pangnirtung agreed to address all issues / changes proposed by the Intervener³⁵.

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³² See for example, numerous disruptions associated with maintaining a functional teleconference line noted on the first day of the Public Hearing, NWB Public Hearing, File No. 3AM-PAN----, Transcript, March 21, 2018, Volume 1, pp. 80, 89, 93, 94, 96-98, 102 and 103.

³³ ECCC, Exhibit 5, NWB Public Hearing Licence No. 3BM-PAN1417, "Type "A" Water License (sic) for the Hamlet of Pangnirtung Type "A" Municipal Water Licence Application Government of Nunavut – Community Government Services" PowerPoint Presentation at p.2, filed on March 21, 2018.

³⁴ G. Bernard-Lacaille, ECCC, NWB Public Hearing, File No. 3AM-PAN----, Transcript, March 21, 2018, Volume 1, line 26, p. 141 and line 1, p. 142.

³⁵ Roy, Bhabesh, Municipal Engineer, GN-CGS, to NWB; Re: Public Meeting – Water Board Licence Renewal, filed on February 23, 2018.



Fisheries and Oceans Canada (DFO)

Fisheries and Oceans Canada (DFO) is responsible for regulating coastal and inland fisheries as well as administering habitat and serious harm provisions under the Federal *Fisheries Act*.³⁶ DFO also complies with *Fisheries Protection Policy* and the *Fisheries Productivity Investment Policy*, which set out guidance on the application of fisheries protection and measures to offset serious harm to fish. DFO is also responsible for administering the provisions of the *Species at Risk Act*³⁷ applicable to aquatic species at risk.

In its final submission³⁸ received on February 12, 2018 and in its Public Hearing presentation,³⁹ DFO emphasized the requirement for the water withdrawal rate from the Duval River not to exceed 10% of instantaneous flow, and advised the Hamlet to cease withdrawal when instantaneous flow in the river is below 30% of the mean annual discharge. In addition, DFO recommended the Applicant withdraw water from Duval River only during the months of July and August. DFO also recommended the installation of a properly sized fish screen at intake. The Board is satisfied that the Applicant as stated in the Hamlet's final responses⁴⁰ and presentation,⁴¹ agreed to conduct a hydrological study of Duval River, limit the water withdraw during the months recommended by Interveners, apply with the restrictions associated with water withdraw and install an acceptable fish screen.

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. In the evening of March 21, 2018, as part of the in person Public Hearing, the Board hosted a Community Session. Despite Public Notice of the Public Hearing being published and posted in January 2018 and then advertised in the community in the weeks prior to the Public Hearing, very few members of the public attended the Public Hearing and Community Session. For more detail regarding attendees from the community, Appendix E provides the sign in sheets for the Public Hearing, including the Community Session. During the Public Hearing, including the Community Session no specific questions

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³⁶ R.S.C. 1985, c. F-14.

³⁷ S.C. 2002, c. 29.

³⁸ DFO submission to NWB: Re: Notice of Public Hearing – Type "A" Water Licence for the Hamlet of Pangnirtung, filed on February 12, 2018.

³⁹ DFO, Exhibit 2, NWB Public Hearing Licence No. 3BM-PAN1417, "Fisheries and Oceans Canada Type "A" Water License (sic) for the Hamlet of Pangnirtung" PowerPoint Presentation, filed on March 21, 2018.

⁴⁰ Roy, Bhabesh, Municipal Engineer, GN-CGS, to NWB; Re: Public Meeting – Water Board Licence Renewal, filed on February 23, 2018.

⁴¹ Hamlet of Pangnirtung submission to NWB: Re: Type "A" Municipal Water Licence – Amendment Application (in four parts), filed on March 7, 2018.



were posed on the record, nor were any concerns raised by the members of the public in attendance.

SECTION IV: JURISDICTION OF THE NWB

Under Division 2 of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*⁴² (*NWNSRTA*) the NWB has jurisdiction to issue a licence,⁴³ amend a licence,⁴⁴ or in certain circumstances, cancel a licence.⁴⁵ 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.⁴⁶

In setting the terms and conditions of a licence, the NWB is guided by these objects and the NWB's statutory duty to make *all* reasonable efforts to minimize *any* adverse effects on aquatic ecosystems. Reading several of the Articles of Nunavut Agreement together,⁴⁷ 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*, ⁴⁸ the Board has delegated its power to dispose of all matters related to the Application for a new Type "A" Water Licence to replace expired licence No. 3BM-PAN1417, including the conduct of the Public Hearing, to a Panel of the Board (which is referred to as Panel P18 or the Hamlet of Pangnirtung Panel).

As with any applications considered by the NWB, the burden of proof rests with the Applicant, the Hamlet of Pangnirtung, to demonstrate that the Hamlet's request for a new Type "A" Water Licence should be granted and that the proposed terms and conditions

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⁴² Sections 42-81 of the NWNSRTA.

⁴³ See ss. 42, 48, 55, 56, and 70 of the NWNSRTA.

⁴⁴ See s. 43(1)(b) of the NWNSRTA.

⁴⁵ See s. 43(1)(c) of the NWNSRTA.

⁴⁶ See s. 35 of the NWNSRTA.

⁴⁷ This approach is consistent with the direction provided in Article 2, section 2.9.1 of the NLCA.

⁴⁸ S.C. 2002, c. 10.



(amendments to the expired licence) 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."⁴⁹

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

On November 22, 2016, the Nunavut Planning Commission (NPC) determined that because the undertaking is located outside of a region with an approved land use plan, no land use plan conformity assessment was required by the NPC. Further, the NPC also determined that the undertaking was not exempt from screening by the Nunavut Impact Review Board (NIRB), as set out in Schedule 12-1 of the *Nunavut Agreement*, and as a result, the NPC forwarded the Application to the Nunavut Impact Review Board for assessment of the potential ecosystemic and socio-economic effects by screening the undertaking under Article 12 of the *Nunavut Agreement* and Part 3 of the *NuPPAA*.

Impact Assessment

On March 17, 2017 the NIRB issued the Screening Decision Report associated with the Application,⁵⁰ concluding that further effects assessment of the undertaking was not required in accordance with Article 12 of the *Nunavut Agreement* and s. 92(1)(a) of the *NuPPAA*.

The following NIRB Screening Decision terms and conditions are relevant to the Board's consideration of the water licence:

Water Use

5. The Proponent shall not extract water from any fish-bearing waterbody unless the water intake hose is equipped with a screen of appropriate mesh size to ensure that there is no entrapment of fish.

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⁴⁹ Section 23.1 of the Nunavut Water Board "Rules of Practice and Procedure for Public Hearing" (May 11, 2005).

⁵⁰ NIRB Screening Decision Report, NIRB File No.: 16WN066, March 17, 2017.



Landfill Operations

- 11. 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.
- 12. 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.
- 13. The Proponent shall take appropriate dust suppression measures when conducting soil topping of landfill materials, or landfill capping activities.
- 14. 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.

Ground and Noise Disturbance

18. The Proponent shall implement suitable erosion and sediment suppression measures on all areas before, during and after conducting activities in order to prevent sediment from entering any waterbody.

Restoration of Disturbed Areas

20. 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.

Other

35. The Proponent should engage with local residents regarding planned activities in the area and should solicit available Inuit Qaujimaningit regarding the project area which may inform project activities. Posting of translated public notices and direct engagement with potentially interested groups and individuals prior to undertaking project activities is strongly encouraged.

Other NIRB Concerns and Recommendations Change in Project Scope

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

Nunavut Water Board

11. 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

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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.⁵¹

On the basis of the NPC's consideration of the project and the NIRB's assessment of the project, the NWB has concluded that the land use planning and impact assessment requirements for the Application under ss. 38 and 39 of the *NWNSRTA* have been met and the Application can now be considered by the NWB.

SECTION VI: DECISION TO ISSUE

On the basis of the Application, the written materials filed with the Board, and submissions of the parties and the community provided to the Panel at the Public Hearing, the Board has decided to issue a new Type "A" Water Licence No. 3AM-PAN1828 (the Licence) subject to the terms and conditions set out below. The Licence authorizes the Hamlet of Pangnirtung's continued use of water and deposit of waste for a Municipal Undertaking as defined under Schedule 1 of the *Nunavut Waters Regulations*, and also contains terms and conditions necessary to protect the environment, conserve freshwater resources, and provide appropriate safeguards in respect of the use of water in accordance with the Application.

In deciding to recommend the issuance of a new Type "A" Water Licence, the Board however is troubled by the fact that the Hamlet has been without a Licence since the prior Type "B" Water Licence expired on September 15, 2017. The Board advises the Hamlet that for future amendment/renewal applications, the NWB expects submission of a completed application at least 12 months prior to the proposed change, or expiry (for a licence renewal application) in order to allow sufficient time for the NWB to process the application and to allow the Minister 90 days to consider the NWB's recommendation.

In concluding that a new Type "A" Water Licence should be issued, the NWB is also not satisfied with the current state of the municipal landfill. While the Board recognizes that there are many competing priorities for the Hamlet of Pangnirtung, the Board is concerned that runoff and leachate from landfill could potentially cause harm to surface water on its way into the marine environment. The Board is of opinion that more stringent monitoring of the existing landfill's runoff and leachate in 2018 will provide additional data and help to identify or confirm chemical parameters that could present potential risks to the environment.

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⁵¹ NIRB Screening Decision Report, NIRB File No.: 16WN066, March 17, 2017.at pp. 12-15.



The Board does, however, recognize the recent improvements made by the Hamlet regarding the community's wastewater treatment process. The Board will expect the Hamlet to provide updates to the Board about the Hamlet's progress in terms of enhancing their mitigation of environmental risks.

Conditions for Issuance of a Licence

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

The Board may not issue a licence unless the applicant satisfies the Board that

- (a) any waste produced by the appurtenant undertaking will be treated and disposed of in a manner that is appropriate for the maintenance of the water quality standards and effluent standards that are prescribed by the regulations or, in the absence of such regulations, that the Board considers acceptable; and
 - (b) the financial responsibility of the applicant, taking into account the applicant's past performance, is adequate for
 - (i) the completion of the appurtenant undertaking,
 - (ii) such measures as may be required in mitigation of any adverse impact, and
 - (iii) the satisfactory maintenance and restoration of the site in the event of any future closing or abandonment of that undertaking.

Financial Responsibility of the Applicant

As outlined under the NWNSRTA, s. 57(b), the NWB considers three aspects of the responsibility of an Applicant to carry out a licensed undertaking:

- (i) the financial ability of the Applicant to complete the appurtenant undertaking;
- (ii) the ability of the Applicant to undertake measures to adequately monitor for impacts and implement measures to mitigate any impacts; and
- (iii) the Applicant's ability to maintain and restore the site during care and maintenance, closure and abandonment.

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As a public authority, the Board's inquiry into the financial responsibility of the Applicant is somewhat different than would be the case for other types of corporate or individual water licence applicants. Reflecting this distinction, the Board has focused this inquiry on the second and third elements of the financial responsibility assessment: the ability to undertake measures to adequately monitor and mitigate impacts and the ability of the Hamlet to maintain and restore the site during care and maintenance, closure and abandonment.

During the Board's assessment of the extent to which the Hamlet has the ability to undertake the required monitoring and mitigation measures, the Board has considered the Applicant's compliance history as an indication of the Hamlet's ability to undertake impact monitoring and the mitigation necessary to conduct the undertaking in a manner that is protective of the freshwater environment.

On August 10, 2015, then AANDC (now INAC) Inspector's direction was issued to the Applicant. The inspector made the following observations:

- 1. On June 22, 2015, during a routine inspection of the Pangnirtung Metal Storage Area it was observed that three streams have caused three separate breaches to the berm surrounding the Storage Area.
- 2. At the time of inspection, water was flowing through the breached berms and pooling in the Storage Area.
- 3. Signs of oil and other fluids from the facility were visibly entering the streams and were observed flowing out of the facility into the receiving environment.⁵²

In his Water Licence Inspection Form, the Inspector noted: "(t)he Hamlet has been directed to implement measures immediately to stop the spill of fluids from the Meral [sic] Storage Area into streams, and to repair the damaged berm wall surrounding the Metal Storage area and properly divert water around the facility by October 31, 2015." To respond to the Inspector's Direction, the Hamlet completed required repairs on the infrastructure in question. During subsequent inspections, no similar observations were made. The Applicant provided photo evidence⁵³ for all outstanding items noted in INAC inspection reports (forms).

It was also noted by INAC that the quality of data reporting in the Applicant's annual reports has been lacking to date. NWB generally notes that the Applicant's monitoring and reporting practices have been improved since 2015, due to the Hamlet's commitments during the

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⁵² AANDC Inspector's Direction Pursuant to Section 87(1) of the *Nunavut Waters And Nunavut Surface Rights Tribunal Act*, S.C. 2002, c.10, dated August 10, 2015.

⁵³ Bhabesh Roy, Municipal Engineer, GN-CGS, to NWB; Re: Public Meeting – Water Board Licence Renewal, filed on February 23, 2018.



technical review and Public Hearing, as well as measures taken by further formalization of the reporting process. The Board has included requirements within the Licence to also update its Quality Assurance/Quality Control Plan to address concerns raised by ECCC during the licensing process.

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.⁵⁴ 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 provides, 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 May 14, 2017, and in the Notice of Public Hearing, published by the Board on January 8, 2018, anyone having a water user compensation claim was advised 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 a Licence

As stated above and pursuant to s. 42(1) of the *NWNSRTA*, the NWB has decided to issue Water Licence 3AM-PAN1828 subject to the terms and conditions set out in these Reasons for Decision and the attached Licence. In issuing the Licence, the NWB is satisfied that the Application contained the required information and is in the proper form having regard to the requirements of the *NWNSRTA*⁵⁵ and associated Regulations.⁵⁶

Applications 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 Hamlet of Pangnirtung 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 Hamlet has also provided the necessary application and supplementary information required to evaluate whether a Licence to replace and amend the expired licence should be granted and also to assess whether the amendments to the expired 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

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⁵⁴ See ss. 58-60 of the NWNSRTA.

⁵⁵ See s. 48 of the *NWNSRTA*.

⁵⁶ Nunavut Waters Regulations, SOR/2013-69.



In relation to future applications to undertake significant modification to the activities included within the scope of the new Type "A" Water Licence, the NWB reminds the Hamlet of Pangnirtung that it must comply with all requirements of the *Nunavut Agreement*, ⁵⁷ the *NuPPAA*, ⁵⁸ and the NWNSRTA. ⁵⁹ In particular, the Board notes that the scope of the authorized use of water use and deposit of waste is as provided by the Hamlet 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 and may subsequently be referred to the Nunavut Impact Review Board 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 Hamlet that the provisions of s. 46 of the *NWNSRTA* states: "[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 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 initially requested a 10-year term for the Licence; however, following the Technical Meeting and Pre-Hearing Conference, the Applicant requested that the term be changed to 15 years based on the life cycle of the facilities and the recognition that several potential upgrades to facilities are unlikely to be completed within 15 years. The Applicant also noted that in contrast to the shorter term of the expired Type "B" Water Licence, which was 3 years, having a longer term included in the new Type "A" Water Licence would allow the Hamlet to focus scarce resources more clearly on upgrading and improving the water, wastewater treatment and waste disposal infrastructure used by the Hamlet in fulfillment of the licence terms and conditions.

While acknowledging that the Hamlet has a valid rationale for applying to have a longer licence term now that the classification of the Licence has moved from a Type "B" Licence that did not require a Public Hearing to renew to a Type "A" Licence that does require some

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⁵⁷ See Article 12, Clause 12.4.3 (b) of the NLCA.

⁵⁸ Nunavut Planning and Project Assessment Act S.C. 2013, c. 14 (NuPPAA).

⁵⁹ See s. 43 of the NWNSRTA.



form of Public Hearing to renew, in dealing with previous municipal water licences, the NWB has been very hesitant to issue long-term licences for municipal undertakings, especially with persistent and significant non-compliance issues, including operating under an expired licence.⁶⁰

With respect to this Application, the Board recognizes that the Hamlet has taken and is taking steps to secure the capital necessary to construct improved facilities. In particular, the Board notes that the Hamlet has fulfilled a significant commitment to improving their Wastewater Treatment Facility and is planning for a new landfill. Consequently, the Board remains cautiously optimistic that the Hamlet is increasingly capable of taking the steps necessary to meet its commitments both now and in the future. However, the Board also notes that this will be the first time that the Hamlet is responsible for fulfilling the more extensive terms and conditions associated with a Type "A" Water Licence, and as such, the Hamlet's compliance history with the previous less onerous Type "B" Water Licence requirements may not be predictive of the Applicant's on-going ability to fully meet the requirements of the new Type "A". The Board expects that in future when the Hamlet seeks to amend the new Type "A" Licence to add a new landfill (2022-2023) the Board will be able to consider the Hamlet's compliance under the new Type "A" and may be more comfortable with a more extended term than the Board is comfortable with in this Decision.

In the Board's view, the Hamlet's very clear commitment (with the support and renewed commitment of GN-CGS) to compliance and continuous improvement, justifies the issuance of a longer term than the previous 3-year term of the expired Type "B" Licence, but for the preceding reasons the Panel was hesitant to issue the Licence for the full 15-year term ultimately requested by the Applicant in December. In the Board's view, a fair compromise is a ten-year term, which will enable the Hamlet to focus on complying with the terms and conditions in the Licence rather than on efforts to renew the Licence for shorter terms, but still allows for the Board to ensure that the Hamlet is able to turn commitments into results and full compliance.

SECTION VII: WATER LICENCE 3AM-PAN1828 TERMS AND CONDITIONS

The Licence does not take effect until approval of the Minister is given or deemed to have been given pursuant to s. 56 of the NWNSRTA.⁶¹ As indicated in Section VI, the Panel has decided to issue a Licence, subject to the conditions contained herein.

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⁶⁰ See for example the discussion in Nunavut Water Board, Type "A" Water Licence No. 3AM-IQA1626 Reasons for Decision, Including Record of Proceedings, June 17, 2016 at p. 32.

⁶¹ Section 56 of the NWNSRTA states:



To provide context and clarity, the NWB has provided the discussion and comments about specific terms and conditions that follow. The NWB has not, however, provided specific comments for those licence terms and conditions that are clear in their wording and intent on the face of the Licence.

Part A: Scope, Definitions and Enforcement

Scope

The scope of activities, works, and undertakings included under the Licence is set out in Part A, and includes:

- a. Use, management, and protection of the Duval River drainage basin;
- b. Withdrawal of Water from Duval River to a storage reservoir to support community needs;
- c. Continued operation of the following municipal facilities:
 - a. Water Treatment and Supply Facility to treat and store water for municipal use:
 - b. Wastewater Treatment Plant to treat and dispose of wastewater and sewage; and
 - c. Solid Waste Management Facility to dispose of solid and hazardous wastes generated within the municipality.

Definitions

Several definitions were added to the list of definitions for the Licence to reflect the additions to the monitoring requirements from the previous expired Type "B" Water Licence.

Enforcement

To ensure that the Hamlet complies with the terms and conditions of the Licence, inspectors, designated and empowered by the Minister of Crown-Indigenous Relations and Northern Affairs Canada may inspect or examine works, activities, and undertakings associated with the use of waters and/or the deposit of waste for the purposes of exercising their powers in accordance with the *NWNSRTA*. ⁶²

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 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 Licence.

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⁶² Sections 85-88 of the NWNSRTA.



Compliance

The Hamlet should note that compliance with the terms and conditions of this Licence does not necessarily absolve the Hamlet from the responsibility to comply with all other applicable legislation, guidelines, and directives.

Part B: General Conditions

Part B of the Licence addresses many of the general terms and conditions that apply to the undertaking, such as annual report submission, protocols for handling documents related to the Licence, posting of signage at sites associated with the undertaking, and more.

Changes made to this section of the Licence centred on revisions to the terms and conditions of the expired Type "B" Licence to ensure that the new Type "A" Licence requirements are consistent with the revised scope of the Municipal Undertaking and also to be consistent with other Type "A" Water Licences issued by the NWB to authorize other municipal undertakings.

Part C: Conditions Applying to Security

No security posting is required, as the Licence was sought for a Municipal Undertaking.

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

Section 11 of the *NWNSRTA* states "... no person shall use, or permit the use of, water in Nunavut except in accordance with the conditions of a licence."

Part D of the Licence focuses on water use and the related management plans. The Applicant sought to increase the maximum allowable annual water volume withdrawn from the water source from 74,000 m³ to 120,000 m³ due to the requirement to fully drain, clean and fill the Hamlet's water storage reservoir every five years.

To ensure that the amount of water use authorized under the Licence does not negatively impact freshwater resources and river ecosystems, the Board has included several terms and conditions under Part D of the Licence designed to preserve the source of the Hamlet's water withdrawal, the Duval River. Notably, a hydrological study is to be conducted by the Licensee to determine the maximum allowable water withdrawal rate on the Duval River. Until the conclusion of such study, the Hamlet is only authorized to withdraw water in the months of July and August, as proposed by INAC and DFO.

In addition, there are terms and conditions in the Part D that prescribe the Licensee that prescribe that the Hamlet's withdrawal shall not exceed ten per cent (10%) of

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instantaneous flow in the river and require that the Hamlet shall cease all water withdrawal when the instantaneous flow in the river is below thirty per cent (30%) of the mean annual discharge. Also, current water withdrawal volumes are estimated by the flowmeters on the Hamlet's vacuum trucks, which are known to be inaccurate. Recognizing that greater certainty regarding withdrawal volumes is necessary, the NWB has also included a requirement to equip the intake at the river end with appropriate flow measuring devices. Finally, in keeping with DFO's recommendations, the Board has retained requirements in the Licence for the use of DFO–compliant fish screens.

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

Part E of the Licence focuses on terms and conditions relevant to Waste Management and the associated plans. The terms and conditions were developed taking into account the Licensee's intention to construct a new waste management facility by 2024. The current state of the existing landfill in Pangnirtung is dissatisfactory to the Parties and Board. Consequently, the Board has included terms and conditions to require improvements to the condition of the landfill, while recognizing that the remaining operational life of the current facility is limited.

Specifically, the Board has included terms and conditions that require the Hamlet to implement measures to prevent hazardous materials and/or and leachate from the solid waste disposal facility and metal and hazardous waste storage area from entering water and to control surface runoff from these areas. These measures include erecting a fence around the metal and hazardous waste storage area in 2018, developing and implementing a standalone Drainage / Seepage Monitoring and Management Plan, and conducting a more extensive sampling campaign on run-off and leachate from the solid waste area. The sampling campaign will help to identify the parameters of concern and establish target concentration limits as compliance limits under the new Type "A" Water Licence.

Part F: Conditions Applying to Modifications and Construction

While the Scope of this Licence does not include any new construction, the Applicant has indicated that there are plans for a future capital project to construct a new waste management facility by the year 2024. Such activity would likely constitute a significant modification to the new Type "A" Water Licence and would require the Hamlet of Pangnirtung apply to the NWB for a Licence Amendment.

This section of the Licence also addresses minor or limited changes that may constitute minor modifications that do not fundamentally change the nature and scope of the undertaking and that may be carried out by the Licensee without seeking an amendment to the Licence.

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The provisions of Part F, Item 1 allow for a Licensee to carry out certain types of "modifications" (as defined in the Licence) without consent from the Board. However, pursuant to Article 11, Section 11.5.9A and Article 12, Section 12.4.3 of the *Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada (Nunavut Agreement)* and ss. 76 and 141 of the *Nunavut Planning and Project Assessment Act (NuPPAA)*,⁶³ a proposed modification submitted under this Licence may require processing by the Nunavut Planning Commission (NPC) and a screening determination by the Nunavut Impact Review Board (NIRB). It is therefore the responsibility of the Licensee to notify and consult with the NPC and the NIRB to ensure the requirements of Articles 11 and 12 of the *Nunavut Agreement* and the applicable requirements of *NuPPAA* are met prior to submitting a notification of modification to the NWB under the Licence.

Further, the Applicant is required to obtain permission from the NWB for modifications that do not meet the definition of modifications or the criteria of Part G, Item 1. Without written consent from the NWB, the Licensee is not allowed to carry out any modifications. Changes that do not meet the definition of modification under the Licence or the requirements of Part F may be considered to be amendments to the Licence and could be subject to a Type "A" water licence amendment process, including a public hearing as may be required under the *NWNSRTA*.

In the course of review of the application for this Licence, the Licensee expressed its intention to decommission the old truck fill station in 2019. As per Part I, Item 1 of the new Type "A" Water Licence, the Licensee shall submit a Closure and Reclamation Plan at least 6 months prior to decommissioning of <u>any</u> facilities, including the old truck fill. In addition, the Licensee plans to construct a new waste management facility by 2024 and decommission the facility that is currently in use, in which case, the Licensee shall be required to submit an application for amendment to the Board before initiating the decommissioning of the existing solid waste management facility and construction of a new landfill.

Part G: Conditions Applying to Spill Contingency Planning

The Licensee is required to conduct a topographical study of the facilities included in the scope of this Licence and update the Spill Contingency Plan with an addition of a topographical map.

Part H: Conditions Applying to Monitoring

⁶³ S.C. 2013, c. 14.

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With respect to the monitoring requirements under the Licence, the NWB's jurisdiction is very broad and the NWB may include conditions in the licence related to monitoring programs to be undertaken.⁶⁴

During the course of the technical review and Public Hearing associated with the Application, INAC's expressed the view that because the landfill is a natural attenuation type of facility, run-off and leachate from the solid waste area ought to be characterized, and criteria for the quality of this effluent ought to be developed. During the Public Hearing, a discussion took place between the Hamlet, INAC and NWB Staff and a common approach has been accepted. The new Type "A" Water Licence reflects terms and conditions suggested during these discussions. The NWB has added terms and conditions to the new Type "A" Water Licence that require the Hamlet to conduct a more extensive sampling campaign at Monitoring Stations PAN-4, PAN-5, and PAN-6 in the summer of 2018. As a result of this campaign, parameters of concern will be identified and target concentration limits will be developed. In addition, the Hamlet's Quality Assurance / Quality Control Plan will require a number of updates to further improve the quality of laboratory testing and reporting. The Licensee shall submit an updated QA/QC Plan that shall take into account all recommendations received.

Part I: Conditions Applying to Abandonment, Closure, and Reclamation

Under this section of the new Type "A" Water Licence, the Hamlet is required at least six (6) months prior to commencing the decommissioning of a facility, to submit to the Board for approval in writing, a Final Closure and Reclamation Plan prepared by an Engineer in accordance with industry's best practices and relevant guidelines.

The Licensee advised the Board that a new Waste Management Facility will likely be constructed in 2024. As the approval of this facility will require an Amendment to the Licence, the Board is of opinion that the amendment application for the new landfill shall also include a Closure and Reclamation Plan for the existing landfill.

Schedules A, B and H

Schedules A, B, and H have been included in the Licence to provide additional context, details and guidance with respect to the specific requirements of Parts A, B and H respectively of the Licence. Additionally, the schedules help to provide the Board and the Licensee with some flexibility for addressing reasonable changes to administrative details that, in the Board's view, do not require an amendment to the Licence. The following sections outline the schedules included in the Licence.

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⁶⁴ See s. 70(1)(c) of the NWNSTRA.



Schedule A

The Licence includes Schedule A, Definitions, that provides the meaning of terms as defined in the Licence. The function of this Schedule is to support consistent interpretation and application of key terms of the Licence.

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, stipulates that a report, detailing the use of water and the deposit of waste activities must 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.

The NWB has included on its FTP site, a standardized form for annual reporting that the Hamlet can use to submit reporting information, supplemented by other relevant information.

Schedule H

This Schedule is linked to Part H of the Licence and the Conditions Applying to Monitoring. This Schedule includes updates or changes to the monitoring requirements, taking into consideration the Licensee's requests, intervener's recommendations, the Boards Mandate and the scope of the undertaking.

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. Spill Contingency Plan;
- 2. Wastewater Treatment Plant Bypass Contingency Plan;
- 3. Water Reservoir Operations and Maintenance Manual;
- 4. Quality Assurance / Quality Control Plan;
- 5. Mechanical and Electrical Operation and Maintenance Plan;
- 6. Operation and Maintenance Plan for Solid Waste Facilities; and
- 7. Wastewater Treatment Plant Process Operation Manual.

In respect of the Board's handling and review of plans received under the Licence, it should be noted that there are two different approaches for handling plans required under the Licence. For some plans, the Board merely "accepts" the plans as received. For plans that are accepted by the Board, the Board generally posts the plan on the NWB public registry, but does not invite or receive technical review or other forms of comment in respect of the Page 38 of 60



plan. In contrast, for plans that are "approved" by the Board, comments are typically invited on these plans and the Board reviews the plan and considers whether to approve such plans or not. These plans as approved are integral to the Licensee's compliance with the conditions of the Licence.

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 a part of the Licence.

The following subsections summarize the Board's specific requirements and/or treatment of particular management plans or documents. The Board set deadlines for submission of updates to the Plans; however, the Board expects the Licensee to implement the required changes on the day that the issuance of the Licence is approved by the Minister.

Spill Contingency Plan (SCP)

The Spill Contingency Plan dated August 10, 2017 is approved by the Board with the issuance of the Licence. The Hamlet is required to update its SCP for the Board's review to take into account the following:

- a. replacing any references to a "facility supervisor" with the relevant job title;
- b. including the requirement to place a sufficient number of spill kits at each location where important quantities of potential contaminants are stored;
- c. including the requirement to place a sufficient number of spill kits at the solid waste facility; and
- d. including a topographical map of the facilities authorized under the Licence.

Wastewater Treatment Plant Bypass Contingency Plan

The Wastewater Treatment Plant Bypass Contingency Plan dated August 10, 2017 is approved by the Board with the issuance of the Licence. The Licensee is required to update the Plan for submission in the 2018 Annual Report for the Board's review to include CIRNA within the list of agencies that should be contacted in case of a plant bypass.

Water Reservoir Operations and Maintenance Manual

The Water Reservoir Operations and Maintenance Manual dated December 20, 2017 is approved by the Board with the issuance of the Licence. The Licensee is required to update the Plan for submission in the 2018 Annual Report for the Board's review to address the following:

a. Section 3.1 that states, "The GN Municipal Engineer and INAC Inspector are to conduct an annual inspection that would include..." is to be reworded to reflect that the INAC / CIRNA Inspector is not obligated to conduct an annual inspection;

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- b. Update Section 4 with replacing the AANDC abbreviation with CIRNA;
- c. Include the requirement for an appropriately sized fish screen on the water intake; and
- d. Include any other applicable requirements set out in the new Licence.

Quality Assurance/Quality Control Plan

The Quality Assurance/Quality Control Plan dated December 19, 2017 has been found to be acceptable by the Board. However, the Hamlet is still required to update the Quality Assurance/Quality Control Plan for inclusion within the 2018 Annual Report to include the following:

- a. acute toxicity testing conducted annually and using rainbow trout;
- b. usage of field blanks instead of trip blanks;
- c. usage of replicate or split samples on sample analyses;
- d. appending lab sheets that document the lab's internal Quality Assurance and Quality Control program;
- e. inclusion of a data reporting protocol as well as checks on accuracy of data handling, and how to provide explanations for any anomalous results; and
- f. usage of intermediate sampling containers to be avoided. In cases where it is impossible, procedures for properly cleaning the containers, including the use of non-phosphate soap, need to be included.

The updated Plans are to be submitted on or before the deadline set by the Board in the Licence. However, the Board expects that the Hamlet shall implement, whenever practical all necessary updates with the approval of the Licence.

Operation and Maintenance Plan for the Solid Waste Facilities

The Operation and Maintenance Plan for the Solid Waste Facilities dated December, 2017 is approved by the Board with the issuance of this Licence.

Wastewater Treatment Plant Process Operation Manual

The Wastewater Treatment Plant Process Operation Manual dated February, 2015 is approved by the Board with the issuance of this Licence.

Mechanical and Electrical Operation and Maintenance Plan

The Board acknowledges the receipt of the document entitled "Mechanical and Electrical Operation and Maintenance Plan" dated September, 2016, that was included as part of the Application.

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APPENDIX A - Agendas for Public Hearing and Community Session AGENDA

PUBLIC HEARING

TYPE "A" LICENCE NO. 3AM-PAN----, RENEWAL/AMENDMENT APPLICATION

March 21, 2018, 9:00 a.m. – 5:00 p.m., EST, <u>Pangnirtung Community Hall</u> March 22, 2018, 9:00 a.m. – 5:00 p.m., EST, <u>Pangnirtung Community Hall</u>

- 1. Opening Prayer
- 2. Opening Remarks by the Chairperson, which shall include the purpose of the Hearing and the scope of matters which will be considered by the Board
- 3. Introduction of the Board Members and staff
- 4. Identification and introduction of the Parties
- 5. Introduction of the Elders and their role in the Hearing
- 6. Introduction and identification of the persons, associations, agencies, etc., who have not submitted interventions but who have expressed a desire to speak at the Hearing
- 7. Identification of any Motions or any objections
- 8. Presentation by the Applicant
- 9. Questioning of the Applicant by Parties respecting the Applicant's presentation
- 10. Questioning by the Board staff and Panel Members
- 11. Presentation by Interveners
- 12. Questioning of Interveners by Parties
- 13. Questioning by the Board staff and Panel Members
- 14. Presentation by any other persons, associations, agencies, etc. who have advised the Chairperson that they wish to speak
- 15. Questioning of other persons, associations, agencies, etc. by Parties
- 16. Questions by the Board staff and Panel Members
- 17. Upon completion of presentations by all Parties, the Board will give the Applicant the opportunity to reply. Then all Parties will have the opportunity to make final closing statements taking into account matters raised at the Hearing

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- 18. Closing remarks by the Chairperson; and
- 19. Closing Prayer

AGENDA

COMMUNITY SESSION

TYPE "A" LICENCE NO. 3AM-PAN----, RENEWAL/AMENDMENT APPLICATION

March 21, 2018, 7:00 p.m. – 10:00 p.m., EST, Pangnirtung Community Hall

- 1. Opening Prayer
- 2. Opening Remarks by the Chair
- 3. Presentation by the Nunavut Water Board (NWB) Type "A" water licensing process for the Application (15 minutes)
- 4. Questions and/or comments from community members and other participants
- 5. Presentation by the Hamlet of Pangnirtung on the Renewal Application before the Board for Type "A" Water Licence 3AM-PAN---- (20 Minutes)
- 6. Question and/or comments from community members and other participants
- 7. Presentation from each intervening party pertaining to its mandate and role(s) in the water licensing process as well as an overview of their findings during their technical review (15 Minutes/Intervener)
- 8. Questions and/or comments from community members and other participants
- 9. Closing Remarks
- 10. Closing Prayer



<u>APPENDIX B - Exhibit List</u>

Exhibit	Exhibit Description	Date	From
1	Hard Copy Information package provided at the Public Hearing, consisting of Public Hearing Summary (English/Inuktitut) PowerPoint Presentation (English)	March 21, 2018	Government of Nunavut – Community and Government Services on behalf of Hamlet of Pangnirtung (GN- CGS)
2	Hard Copy PowerPoint Presentation Fisheries and Oceans Canada Type "A" Water License (sic) for the Hamlet of Pangnirtung Nunavut Water Board Public Hearing (English/Inuktitut)	March 21, 2018	Fisheries and Oceans Canada (DFO)
3	Hard Copy Executive Summary DFO Comments (Inuktitut)	March 21, 2018	Fisheries and Oceans Canada (DFO)
4	Hard Copy Executive Summary DFO Comments (English)	March 21, 2018	Fisheries and Oceans Canada (DFO)
5	Hard Copy PowerPoint Presentation Environment and Climate Change Canada Type "A" Water License (sic) for the Hamlet of Pangnirtung Type "A" Municipal Water Licence Application Government of Nunavut – Community Government Services (English/Inuktitut)	March 21, 2018	Environment and Canada (ECC)
6	Hard Copy PowerPoint Presentation Indigenous and Northern Affairs Canada Hamlet of Pangnirtung Renewal Application for Water Licence #3AM-PAN(3BM-PAN1217)	March 21, 2018	Indigenous and Northern Affairs Canada (INAC)



Exhibit	Exhibit Description	Date	From
7	Hard Copy Executive Summary INAC Comments (Inuktitut)	March 21, 2018	Indigenous and Northern Affairs Canada (INAC)
8	Hard Copy Executive Summary INAC Comments (English)	March 21, 2018	Indigenous and Northern Affairs Canada (INAC)
9	Hard Copy Caduceon Environmental Laboratories Final Report Report No. B17-22112 (English)	March 21, 2018	Government of Nunavut – Community and Government Services on behalf of Hamlet of Pangnirtung (GN- CGS)
10	Hard Copy PowerPoint Presentation Nunavut Water Board Community Session Presentation (English/Inuktitut)	March 21, 2018	Nunavut Water Board
11	Hard Copy Picture of culverts constructed by DFO	March 22, 2018	Government of Nunavut – Community and Government Services on behalf of Hamlet of Pangnirtung (GN-CGS)



APPENDIX C - List of Acronyms

CIRNA	Crown-Indigenous Relations and Northern Affairs Canada (formerly INAC, Formerly AANDC)	
DFO	Fisheries and Oceans Canada	
ECCC	Environment and Climate Change Canada (former EC)	₽₽СL ₫≼∪⊂ሆታ。 (፫,٩₫,ብሩር ሲ.
		EC-d ^c)
GN	Government of Nunavut	_pa৯c r≪L√r
INAC	Indigenous and Northern Affairs Canada	
NIRB	Nunavut Impact Review Board	ᠴᠣᢀᠮ᠂ᢦᢎᡳ᠘ᡧ᠘ᢏ
NPC	Nunavut Planning Commission	$\neg \sigma \gg_{r} L <_{c} \sigma \nabla_{f} >_{c}$
NuPPAA	Nunavut Planning and Project Assessment Act	
NWB	Nunavut Water Board	ᠴᡆᢀᠮ᠘᠘ᠸᡙᡠ᠐᠘᠘ᢞᡳ
РНС	Pre-Hearing Conference	Δ
TM	Technical Meeting	



APPENDIX D - List of Submissions and Correspondence

Application:

1. Cover letter and initial submission of application for water licence by GN-CGS, on Behalf of the Hamlet of Pangnirtung (Hamlet), an Application to renew and amend Type "B" water Licence No. 3BM-PAN1417. Based on the scope of the Application, the Nunavut Water Board (NWB) determined that the Application would trigger the requirements for a Type "A" Licence, and should be treated as Type "A" Application dated March 20, 2017.

Initial Submission & Correspondence:

- 2. Letter to Karén Kharatyan, NWB, Re: Hamlet Authorization Letter, from Ron Ladd, Hamlet, dated March 16, 2017.
- 3. Letter to The Honourable Carolyn Bennett, Minister Indigenous and Northern Affairs Canada (INAC) copied to Thomas Kabloona, NWB Chairperson, Re: Screening Decision for the Government of Nunavut Community and Government Services' "Renewal of the Municipality of Pangnirtung Water Licence #3BMPAN1417 Type B to Type A" Project Proposal, Qikiqtani Region, from Elizabeth Copland, Nunavut Impact Review Board (NIRB) Chairperson, dated March 17, 2017.
- 4. Letter to Tracie McCaie, INAC, copied to Karén Kharatyan, NWB, Re: Notice of Release of Screening Decision Report for Government of Nunavut Community and Government Services' "Renewal of the Municipality of Pangnirtung Water Licence #3BM-PAN1417 Type B to Type A" Project Proposal, Qikiqtani Region, from Natasha Lear, NIRB, dated March 17,2017.
- 5. Submitted, March 17, 2017, by NIRB, Screening Decision Report 16WN066, 3BM-PAN1417, dated March 17, 2017.
- 6. Letter to Karén Kharatyan, NWB, Re: Application for the Renewal of the Water Licence # 3BM-PAN 1417, TYPE-B of the Municipality of Pangnitung to TYPE A, from Bhabesh Roy, Community Government Services (CGS), dated March 20, 2017.
- 7. Submitted, March 20, 2017, by CGS, Project Proposal of the Municipality of Pangnirtung Water Licensed facilities under Water Licence # 3BM-PAN 1417 in English, dated March 20, 2017.
- 8. Submitted, March 20, 2017, by CGS, Project Proposal of the Municipality of Pangnirtung Water Licensed facilities under Water Licence # 3BM-PAN 1417 in Inuktitut, dated March 20, 2017
- 9. Submitted, March 20, 2017, by CGS, Application for Type B Water Licence # 3BM-PAN1417 Renewal to Type A of the Municipality of Pangnirtung, dated March 20, 2017.
- 10. Letter with application attached to Karén Kharatyan, NWB, Re: Application for the Renewal of the Water Licence # 3BM-PAN 1417, TYPE-B of the Municipality of Pangnitung to TYPE A, from Bhabesh Roy, Community Government Services (CGS), dated March 20, 2017
- 11. Submitted, March 20, 2017, by CGS, OPERATION & MAINTENANCE MANUAL PANGNIRTUNG TRUCK FILL STATION, dated September 20, 2016.

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- 12. Submitted, March 22, 2017, by CGS, prepared by exp Services Inc., Spill Contingency Plan Hamlet of Pangnirtung, Pangnirtung, Nunavut, dated October 31, 2016.
- 13. Submitted, March 22, 2017, by CGS, Water Licence Application, dated March 20, 2017.
- 14. Submitted, March 22, 2017, by CGS, prepared by exp Services Inc., WWTP Bypass Contingency Plan Hamlet of Pangnirtung, Pangnirtung, Nunavut, dated October 31, 2016
- 15. Letter, submitted April 6, 2017, to Karén Kharatyan, NWB, RE: Application for the Renewal of the Water Licence # 3BM-PAN 1417, TYPE-B of the Municipality of Pangnitung to TYPE A, application documents submitted by usb in postal mail, O&M Manual Fish Process Plant to be submitted at later date, from Bhabhesh Roy, CGS, dated March 20, 2017.
- 16. Submitted, April 6, 2017, by CGS, prepared by exp Services Inc., Fish Process Plant Waste Management Plan Hamlet of Pangnirtung, Pangnirtung, Nunavut, dated April 6, 2017.
- 17. Submitted, April 25, 2017, by CGS, Solid Waste O&M Plan, dated June 2014.
- 18. Submission April 25, 2017, by CGS, Pangnirtung Water Water Treatment Plant Documentation O&M, undated.
- 19. Submitted April 25, 2017, by CGS, prepared by EATON, Electrical Distritubtion System Report WWTP, dated January 2015.
- 20. Submitted April 25, 2017, by CGS, prepared by General Electric, O&M Manual ZeeWeed 500 Series, dated October 2014.
- 21. Submitted April 25, 2017, by CGS, prepared by exp Services Inc., Process Operation Manual Pangnirtung Wastewater Treatment Facility Upgrade, dated February 2015.
- 22. Cover E-mail: 3BM-PAN1417 NWB's Correspondence Regarding Renewal Amendment Application, to Bhabesh Roy, CGS, from Ida Porter, NWB, dated May 4, 2017.
- 23. Letter to Bhabesh Roy, CGS, Re: Licence No. 3BM-PAN1417 Submission of Renewal Amendment, Application for Hamlet of Pangnirtung Municipal Licence from Sean Joseph, NWB, dated May 4, 2017.
- 24. Submitted, May 10, 2017, by CGS, prepared by exp Services Inc., Pangnirtung Fish Waste Lagoon Decommissioning Plan, dated May 23, 2013.
- 25. Submitted, May 10, 2017, by CGS, Solid Waste O&M Plan, dated May 2017.
- 26. Submitted, May 10, 2017, by CGS Response to NWB Correspondence dated May 4, 2017.
- 27. Cover E-mail: 3BMPAN1417 Hamlet of Pangnirtung Type "B" Renewal Amendment Water Licence Application Qikiqtani Region, to Bhabesh Roy and Interested Parties, from Robin Ikkutisluk, NWB, dated May 17, 2017.
- 28. Letter to Bhabesh Roy, CGS, Re: Licence No. 3BM-PAN1417 Submission of Renewal Amendment Application, from Karén Kharatyan, NWB, dated May 17, 2017.
- 29. Cover E-mail: one day extension 3BM-PAN1417, to Ian Parsons, INAC, from Karén Kharatyan, NWB, dated June 6, 2017.
- 30. Letter to Karén Kharatyan, NWB, Re: 3BM-PAN1417 Hamlet of Pangnirtung Water Licence Renewal Amendment, from Emily Nichol, ECCC, dated June 6, 2017.
- 31. Letter to NWB, Re: Completeness Assessment and Initial Technical Assessment of Water Licence Renewal and Change to Type 'A' Water Licence Hamlet of Pangnirtung (3BM-PAN1417), from Sarah Forte, Lisa Bachellier, INAC, dated June 7, 2017.

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- 32. Letter to Bhabesh Roy, CGS, Re: Licence No. 3BM-PAN1417 Renewal Amendment Application 3AM-PAN----; Notice of Application and Invitation to Conduct Full Technical Review, from Karén Kharatyan, NWB, dated June 9, 2017.
- 33. Cover E-mail: Pangnirtung WL # 3BMPAN1417 renewal application-Responses, to Bhabesh Roy, CGS, and Interested Parties, from Richard Dwyer, NWB, dated June 2017.
- 34. Submitted, June 20, 2017, by CGS, Ottawa Caduecon Lab Waste Water Test Results, dated May 3, 2016.
- 35. Submitted June 20, 2017, by CGS, Waste Water Treatment Facility Effluent Summary dated December 13, 2016.
- 36. Submitted June 20, 2017, by CGS, CGS Response to May 4, 2017 NWB Response to Comments Request dated, May 4, 2017.
- 37. Submitted June 20, 2017, by CGS, Waste Water Treatment Plant Lab Test Results dated, May 24, 2017.
- 38. Submitted June 20, 2017, by CGS, Response to Environment Climate Change Canada (ECCC), dated June 6, 2017.
- 39. Submitted June 20, 2017, by CGS, Response to INAC Comments, dated June 7, 2017.
- 40. Letter to Karén Kharatyan, NWB, Re: Renewal Water Licence #3BM-PAN1417 of the Municipality of Pangnirtung: Responses to the questions, from Bhabesh Roy, CGS, dated June 20, 2017.
- 41. Submitted, June 20, 2017, by CGS, Pangnirtung Environmental facilities sketches for relative location, undated.
- 42. Submitted June 20, 2017, by CGS, Revised Solid Waste O&M Plan, dated June 2017.
- 43. Submitted, June 20, 2017, by CGS, Waste Water Treatment Plant Overall Plan drawing, dated October 16, 2015.
- 44. Letter to Karén Kharatyan, NWB, Re: Renewal Water Licence #3BM-PAN1417 of the Municipality of Pangnirtung: Responses to questions, from Bhabesh Roy, CGS, dated June 22, 2017.
- 45. Submitted June 22, 2017, by CGS, prepared by Dalhousie University, Draft Desktop Review on the Sustainability of Nunavut's Drinking Water Sources, undated.
- 46. Cover E-mail: Licence No. 3BM-PAN1417 Renewal Amendment Application 3AM-PAN---; Notice of Application and Invitation to Conduct Full Technical Review, Extension request to submit comments withdrawn, from to Richard Dwyer, NWB, from Megan McCusker, DFO, dated June 28, 2017.
- 47. Cover E-mail: Extension to Pangnirtung comments, to Bhabesh Roy, CGS, from Richard Dwyer, NWB, dated July 6, 2017.
- 48. Letter to Karén Kharatyan, NWB, Re: 3AM-PAN---- Government of Nunavut, Community and Government Services Hamlet of Pangnirtung Water Licence Renewal and Amendment, from Emily Nichol, ECCC, dated July 19, 2017.
- 49. Cover E-mail: Extension on Pangnirtung licence, to NWB, from Ian Parsons, INAC, dated July 20, 2017.
- 50. Cover E-mail: Subject: Water Licence (Type A), Duval River, Municipality of Pangnirtung (17-HCAA- 00779), to Karén Kharatyan, NWB, from Sara Eddy, DFO, dated July 21, 2017.



- 51. Submitted, July 21, 2017, by CGS, Pangnirtung Environmental Facilities Sketch, undated.
- 52. Cover E-mail: Licence No. 3BM-PAN1417 Renewal Amendment Application 3AM-PAN---; Notice of Application and Invitation to Conduct Full Technical Review, comment period extension, to Bhabesh Roy, CGS, and Interested Parties, from Richard Dwyer, NWB, dated July 21, 2017.
- 53. Letter to Richard Dwyer, NWB, Re: Indigenous and Northern Affairs Canada's (INAC) Review of the Hamlet of Pangnirtung's Type "A" Water Licence Application #3AM-PAN---- Municipal Undertaking, from Sarah Forte, INAC, dated July 28, 2017.
- 54. Letter to Ron Ladd, Hamlet and Bhabesh Roy, CGS, Re: 3AM-PAN---- (3BM-PAN1417), Type "A"; Renewal Amendment Application for the Hamlet of Pangnirtung's Municipal Water Licence, from Richard Dwyer, NWB, dated August 4, 2017.
- 55. Submitted, August 21, 2017, by CGS, 2015-2017 Wastewater Lab Results Hamlet of Pangnirtung Revised August 20, dated August 4, 2017.
- 56. Submitted August 21, 2017, by CGS, Aerial Photo of Pangnirtung Waste Facilities and Drainage network, dated 2017.
- 57. Submitted August 21, 2017, by CGS, Pangnirtung Community Plan and Zoning By-Law, dated March 2007.
- 58. Submitted August 21, 2017, by CGS, prepared by Dalhousie University, Desktop Risk Assessment on the Sustainability of Nunavut's Primary Drinking Water Sources, dated July 14, 2017.
- 59. Submitted August, 21, 2017, by CGS, Pangnirtung Environmental facilities sketches for relative locations, undated.
- 60. Submitted August 21, 2017, by CGS, Pangnirtung Leachate test Results, dated August 14, 2017.
- 61. Submitted August 21, 2017, by CGS, Pangnirtung Waste Facilities Plan and Cross section sketch, undated.
- 62. Submitted August 21, 2017, by CGS, Response to DFO comments, dated July 21, 2017.
- 63. Submitted August 21, 2017, by CGS, Response to ECCC comments, dated July 19, 2017.
- 64. Submitted August 21, 2017, by CGS, Response to INAC comments, dated July 28, 2017.
- 65. Submitted August 21, 2017, by CGS, Revised O&M Plan Solid Waste Facilities, dated August 2017.
- 66. Submitted August 21, 2017, by CGS, prepared by exp Services Inc., Spill Contingency Plan, dated August 10, 2017.
- 67. Submitted August 21, 2017, by CGS, Weekly Water Delivery Log template, undated.
- 68. Submitted August 21, 2017, by CGS, Wastewater Treatment Plant Overall Plan, dated October 16, 2015.
- 69. Submitted August 21, 2017, by CGS, prepared by exp Services Inc. Wastewater Treatment Plant Bypass Contingency Plan, dated August 10, 2017.
- 70. Submitted August 21, 2017, by CGS, NWB Correspondence Re: 3AM-PAN---- (3BM-PAN1417), Type "A"; Renewal Amendment Application for the Hamlet of Pangnirtung's Municipal Water Licence, dated August 4, 2017.



- 71. Cover E-mail: 3AM-PAN---- (3BM-PAN1417), Type "A"; Renewal Amendment Application for the Hamlet of Pangnirtung's Municipal Water Licence, applicant response to parties comments satisfactory?, to Ron Ladd, Hamlet, Bhabesh Roy, CGS, and Interested Parties, from Richard Dwyer, NWB, dated August 22, 2017.
- 72. Cover E-mail: 3AM-PAN---- (3BM-PAN1417), Type "A"; Renewal Amendment Application for the Hamlet of Pangnirtung's Municipal Water Licence, DFO Concerns Addressed, to Richard Dwyer, NWB, from Sara Eddy, DFO, dated August 25, 2017.
- 73. to Richard Dwyer, NWB, Re: 3AM-PAN---- Government of Nunavut, Community and Government Services Type A Renewal Amendment Application for the Hamlet of Pangnirtung's Municipal Water Licence Follow-up to Proponent's Response to Environment and Climate Change Canada's Technical Comments, from Emily Nichol, ECCC, dated August 31, 2017.
- 74. Letter to Richard Dwyer, NWB, Re: Indigenous and Northern Affairs Canada's comments on responses submitted for the Hamlet of Pangnirtung's Type "A" Water Licence Application #3AM-PAN---- Municipal Undertaking, from Sarah Forte, INAC, dated September 1, 2017.
- 75. Cover E-mail: Hamlet of Pangnirtung Water Licence Renewal Application 3AM-PAN, follow-up correspondence upcoming, to Bhabesh Roy, CGS and Interested Parties, from Richard Dwyer, NWB, dated October 10, 2017.
- 76. Letter to Ron Ladd, Hamlet, Bhabesh Roy, CGS Re: 3AM-PAN---- (3BM-PAN1417 renewal), Type "A" Municipal Water Licence Amendment Application, Hamlet of Pangnirtung, NU; Technical Meeting and Pre-Hearing Conference, from Stephanie Autut, NWB, dated October 30, 2017.
- 77. Cover E-mail: 3AM-PAN---- (3BM-PAN1417 renewal), Type "A" Municipal Water Licence Amendment Application, Hamlet of Pangnirtung, NU; Technical Meeting and Pre-Hearing Conference, to Ron Ladd, Hamlet, Bhabesh Roy, CGS, and Interested Parties, from Richard Dwyer, NWB, dated October 30, 2017.
- 78. Prepared, November 20, 2017, by Richard Dwyer, NWB, TV, Radio Notice of Technical Meeting and Pre-hearing.
- 79. Prepared, November 21, 2017, by Richard Dwyer, NWB, Registration Form Technical Meeting & Pre-Hearing Conference December 5-6, 2017.
- 80. Letter to Karén Kharatyan, NWB, Re: File: 3AM-PAN(3BM-PAN 1417) Renewal/amendment dated October 30, 2017, technical meeting attendance confirmation, from Ron Ladd, Hamlet, dated November 21, 2017.
- 81. Cover E-mail: 3AM-PAN---- (3BM-PAN1417 renewal), Type "A" Municipal Water Licence Amendment Application, Hamlet of Pangnirtung, NU; Technical Meeting and Pre-Hearing Conference, draft Agenda comments, to NWB, from Emily Nicol, ECCC, dated November 24, 2017.
- 82. Cover E-mail: 3AM-PAN---- (3BM-PAN1417 renewal), Type "A" Municipal Water Licence Amendment Application, Hamlet of Pangnirtung, NU; Technical Meeting and Pre-Hearing Conference attendance confirmation, to NWB, from Lisa Bachellier, INAC, dated November 27, 2017.
- 83. Cover E-mail: 3AM-PAN---- (3BM-PAN1417 renewal), Type "A" Municipal Water Licence Amendment Application, Hamlet of Pangnirtung, NU; Technical Meeting and Pre-Hearing Conference attendance confirmation, to NWB, from Sara Eddy, DFO, dated, November 28, 2017.

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- 84. Submitted November 28, 2017, by CGS Pangnirtung Environmental facilities under Water Licence sketches for relative locations, undated.
- 85. Submitted November 28, 2017, by CGS, Hamlet Letter (Inuktitut & English) to Karén Kharatyan, NWB, Re: File: 3AM-PAN (3BM-PAN 1417) Renewal/amendment dated October 30, 2017, Hamlet Attendance confirmation technical meeting, pre-hearing conference, from Ron Ladd, Hamlet, dated November 21, 2017.
- 86. Submitted November 28, 2017, by CGS, prepared by exp Services Inc., Type "A" Municipal Water Licence-Amendment Application Hamlet of Pangnirtung, NU Technical Meeting and Pre-hearing Conference, Dec. 5-6, 2017, Solid Wastes INAC_ECCC_DFO Questions and Responses, (Inuktitut & English), undated.
- 87. Submitted November 28, 2017, by CGS, prepared by exp Services Inc., Type "A" Municipal Water Licence-Amendment Application Hamlet of Pangnirtung, NU Technical Meeting and Pre-hearing Conference, Dec. 5-6, 2017, Wastewater INAC_ECCC_DFO Questions and Responses, (Inuktitut & English), undated.
- 88. Submitted November 28, 2017, by CGS, presentation 3AM-PAN- (3BM-PAN1417 renewal) Type "A" Municipal Water Licence Amendment Application, Hamlet of Pangnirtung, NU Technical Meeting and Pre-Hearing Conference, undated.
- 89. Submitted November 29, 2017, by CGS, prepared by exp Services Inc, Type "A" Municipal Water Licence-Amendment Application Hamlet of Pangnirtung, NU Technical Meeting and Pre-hearing Conference, Dec. 5-6, 2017 TM and PHC Summary (Inuktitut, French, English) undated.
- 90. Submitted November 30, 2017, by CGS, Pangnirtung Facilities location map, undated.
- 91. Submitted December 1, 2017, by INAC, INAC Summary Nunavut Water Board Technical Meeting and Prehearing Teleconference December 5-6, 2017 (English, French) undated.
- 92. Submitted December 1, 2017, by INAC, INAC Presentation, Hamlet of Pangnirtung Renewal Application for Water Licence #3AM-PAN----(3BM-PAN1217) Nunavut Water Board Technical Meeting and Pre-Hearing Teleconference December 5-6, 2017 (English & Inuktitut) undated.
- 93. Submitted December 4, 2017, by INAC, INAC Summary Nunavut Water Board Technical Meeting and Prehearing Teleconference December 5-6, 2017 (Inuktitut) undated.
- 94. Cover E-mail: 3AM-PAN---- (3BM-PAN1417), Type "A" Municipal Water Licence Amendment Application, Hamlet of Pangnirtung; Information Pertaining to the December 5 6, 2017, Technical Meeting / Pre-Hearing Conference, to Hamlet, CGS, and Interested Parties, from Richard Dwyer, NWB, dated December 4, 2017.
- 95. Letter to Ron Ladd, Hamlet, and Bhabesh Roy, CGS, Re: 3AM-PAN---- (3BM-PAN1417), Type "A" Municipal Water Licence Amendment Application, Hamlet of Pangnirtung; Information Pertaining to the December 5 6, 2017, Technical Meeting / Pre-Hearing Conference, from Stephanie Autut, NWB, dated December 4, 2017.
- 96. Submitted December 6, 2017, by CGS, Technical Meeting and Pre-hearing Conference Registration Forms, (participant registration).
- 97. Letter to Karén Kharatyan, NWB, Re: 3AM-PAN---- (3BM-PAN1417 renewal), Type "A" Municipal Water Licence Amendment Application, Hamlet of Pangnirtung, NU; Technical Meeting and Pre-Hearing Conference, request for 15 year term licence, from Ron Ladd, Hamlet dated December 7, 2017.

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- 98. Submitted December 20, 2017, by CGS, Duval River Flow data: 1973 to 1983: Hamlet of Pangnirtung, dated July 20, 2017.
- 99. Submitted December 20, 2017, by CGS, Duval River Flow sketch, undated.
- 100. Submitted December 20, 2017, by CGS, O&M Plan Solid Waste Facilities, dated December 2017.
- 101. Submitted December 20, 2017, by CGS, Letter to Karén Kharatyan, NWB, Re: Request for 15 year term water licence, from Ron Ladd, Hamlet, dated December 7, 2017.
- 102. Submitted December 20, 2017, by CGS, prepared by exp Services Inc, INAC, Arktis Solutions Inc. (Arktis), exp Services Inc. Technical Memo Reservoir Berm Repairs dated December 15, 2017, INAC Inspection dated July 26, 2016, Arktis Site Review dated September 7, 2016, INAC Inspection dated October 2, 2017.
- 103. Submitted December 20, 2017, by CGS, prepared by exp Services Inc., Pangnirtung Water Reservoir Portable Pump Intake Screen Sizing, dated December 20, 2017.
- 104. Submitted December 20, 2017, by CGS, prepared by exp Services Inc., Water Reservoir Operations and Maintenance Manual, dated December 20, 2017.
- 105. Letter to Karén Kharatyan, NWB, Re: 3AM-PAN---- (3BM-PAN1417 renewal) Type "A" Municipal Water Licence Amendment Application, Hamlet of Pangnirtung, Commitments List, dated December 21, 2017.
- 106. Submitted December 21, 2017, by CGS, List of Commitments Resulting from Technical Meeting for Water Licence No. 3AM-PAN---- Renewal Application, undated.
- 107. Submitted December 21, 2017, by CGS, Letter to Karén Kharatyan, NWB, Re: Request for 15 year term water licence, from Ron Ladd, Hamlet, dated December 7, 2017.
- 108. Letter to Pangnirtung Distribution List, Re: Type "A" Water Licence 3AM-PAN----: Pre-Hearing Conference Decision Regarding an Application for a Water Licence to Replace 3BM-PAN1417, from Stephanie Autut, NWB, dated December 22, 2017.
- 109. Prepared January 8, 2018, by Richard Dwyer, NWB, Public Hearing Notice (English & Inuktitut).
- 110. Cover E-mail: 3AM-PAN---- Hamlet of Pangnirtung Water Licence Notice of Public Hearing, to Bhabesh Roy, CGS and Interested Parties, from Richard Dwyer, NWB, dated January 9, 2018.
- 111. Letter to Local Organizations in Pangnirtung Re: Post Notice of Public Hearing, from Richard Dwyer, NWB, dated January 11, 2018.
- 112. Cover E-mail: 3AM-PAN---- Hamlet of Pangnirtung documents submission, to Bhabesh Roy, CGS, and Interested Parties, from Richard Dwyer, NWB, dated January 22, 2018.
- 113. Submitted January 22, 2018, by CGS, Duval River Flow data: 1973 to 1983: Hamlet of Pangnirtung, dated July 20, 2017.
- 114. Submitted January 22, 2018, by CGS, Duval River Flow sketch, undated.
- 115. Submitted January 22, 2018, by CGS, List of Commitments Resulting from Technical Meeting for Water Licence No. 3AM-PAN---- Renewal Application, undated.
- 116. Submitted January 22, 2018, by CGS, Letter to Karén Kharatyan, NWB, Re: 3AM-PAN---- (3BM-PAN1417 renewal) Type "A" Municipal Water Licence Amendment Application, Hamlet of Pangnirtung, Commitments List, dated December 21, 2017.

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- 117. Submitted January 22, 2018, by CGS, prepared by exp Services Inc. Quality Assurance Quality Control Plan, dated December 19, 2017.
- 118. Submitted January 22, 2018, by CGS, OPERATION & MAINTENANCE MANUAL PANGNIRTUNG TRUCK FILL STATION, dated September 2016.
- 119. Submitted January 22, 2018, by CGS, prepared by metcon Sales & Engineering Ltd., Pump O&M Manuals, dated August 25, 2016.
- 120. Submitted January 22, 2018, by CGS, Letter to Karén Kharatyan, NWB, Re: Request for 15 year term water licence, from Ron Ladd, Hamlet, dated December 7, 2017
- 121. Submitted January 22, 2018, by CGS, O&M Plan Solid Waste Facilities, date December 2017.
- 122. Submitted January 22, 2018, by CGS, prepared by exp Services Inc., Pangnirtung Water Reservoir Portable Pump Intake Screen Sizing, dated December 20, 2017.
- 123. Submitted January 22, 2018, by CGS, prepared by exp Services Inc, INAC, Arktis Solutions Inc. (Arktis), exp Services Inc. Technical Memo Reservoir Berm Repairs dated December 15, 2017, INAC Inspection dated July 26, 2016, Arktis Site Review dated September 7, 2016, INAC Inspection dated October 2, 2017
- 124. Submitted January 22, 2018, by CGS, prepared by exp Services Inc., Water Reservoir Operations and Maintenance Manual, dated December 20, 2017
- 125. Letter to Stephanie Autut, NWB, Re: 3AM-PAN---- Government of Nunavut, Community and Government Services Type A Renewal Amendment Application for the Hamlet of Pangnirtung's Municipal Water Licence Pre-Hearing Conference Decision Regarding an Application for Water Licence to Replace 3BM-PAN1417, from Susanne Forbich, ECCC, dated January 23, 2018.
- 126. Letter to NWB Re: Notice of Public Hearing Type "A" Water License for the Hamlet of Pangnirtung (DFO Final Submission), from Dale Nicholson, DFO, dated February 9, 2018.
- 127. Submitted February 12, 2018, by DFO Letter to NWB Re: Notice of Public Hearing Type "A" Water License for the Hamlet of Pangnirtung, Final Submission, (English & Inuktitut) from Dale Nicholson, DFO, dated February 9, 2018.
- 128. Letter to Richard Dwyer, NWB, Re: 3AM-PAN---- Government of Nunavut, Community and Government Services Type A Renewal Amendment Application for the Hamlet of Pangnirtung's Municipal Water Licence ECCC Final Submission, from Susanne Forbich, ECCC, dated February 12, 2018.
- 129. Submitted February 12, 2018, by ECCC, Environment and Climate Change Canada's Final Written Submission to the Nunavut Water Board, Respecting The Hamlet of Pangnirtung's Type A Municipal Water Licence Renewal Application, dated February 12, 2018.
- 130. Submitted February 12, 2018, by INAC, Final Submission Regarding Government of Nunavut Community and Government Services' Type A Water Licence Renewal Application for the Hamlet of Pangnirtung, dated February 12, 2018.
- 131. Cover E-mail: 3AM-PAN---- Application for Water Licence Final Written Submissions, to Bhabesh Roy, CGS, and Interested Parties, from Richard Dwyer, NWB, dated February 12, 2018.
- 132. Submitted February 21, 2018, by ECCC, Final Written Submission Executive Summary in Inuktitut.



- 133. Submitted February 22, 2018, by INAC, Final Written Submission Executive Summary in Inuktitut.
- 134. Cover E-mail: 3AM-PAN---- Applicant responses, to Bhabesh Roy, and Interested Parties, from Richard Dwyer, NWB, dated February 23, 2018.
- 135. Memorandum submitted, February 23, 2018, by CGS, prepared by exp Services Inc., Re: Public Meeting Water Board Licence Renewal, Response to DFO_ECCC_INAC comments, dated February 22, 2018.
- 136. Submitted, February 27, 2018, by CGS, prepared by exp Services Inc, Executives Summary in English and Inuktitut, undated.
- 137. Cover E-mail: 3AM-PAN---- Hamlet of Pangnirtung Public Hearing Update and Agenda, to Ron Ladd, Hamlet, Bhabesh Roy, CGS, and Interested Parties, from Richard Dwyer, NWB, dated March 5, 2018.
- 138. Letter to Bhabesh Roy, CGS, Re: Licence 3AM-PAN----, Type "A"; Hamlet of Pangnirtung, Renewal/Amendment Application; Public Hearing Update and Hearing Agenda, from Stephanie Autut, NWB, dated March 5, 2018.
- 139. Submitted March 7, 2018, CGS, prepared by exp Services Inc., Public Hearing Summary (English).
- 140. Submitted March 7, 2018, CGS, prepared by exp Services Inc., Public Hearing Summary (Inuktitut).
- 141. Submitted March 7, 2018, by CGS, 3AM-PAN- (3BM-PAN1417 renewal) Type "A" Municipal Water Licence Amendment Application, Hamlet of Pangnirtung, NU Public Hearing, presentation, undated.
- 142. Submitted March 9, 2018, by ECCC, Environment and Climate Change Canada's Presentation to the Nunavut Water Board Regarding the Hamlet of Pangnirtung's Type A Municipal Water Licence Renewal Application submitted by Government of Nunavut Community Government Services, undated.
- 143. Submitted March 9, 2018, by INAC, Hamlet of Pangnirtung Renewal Application for Water Licence #3AM-PAN----(3BMPAN1217) Nunavut Water Board Public Hearing Pangnirtung, March 21-22, 2018, undated.
- 144. Submitted March 9, 2018, by DFO, Type "A" Water License for the Hamlet of Pangnirtung, Nunavut Water Board Public Hearing Hamlet of Pangnirtung March 21 22, 2018, undated.
- 145. Prepared March 12, 2018, by the NWB, Public Hearing Agenda (English), undated.
- 146. Prepared March 12, 2018, by the NWB, Public Hearing Agenda (Inuktitut), undated.
- 147. Letter to Bhabesh Roy, CGS, Re: Licence 3AM-PAN----, Type "A"; Hamlet of Pangnirtung, Renewal/Amendment Application; Public Hearing Update and Hearing Agenda, from Stephanie Autut, NWB, dated March 12, 2018.
- 148. Cover E-mail: 3AM-PAN----, Type "A"; Hamlet of Pangnirtung, Renewal/Amendment Application; Public Hearing Update and Hearing Agenda, to Ron Ladd, Hamlet, Bhabesh Roy, CGS, from Richard Dwyer, NWB, dated March 12, 2018.
- 149. Prepared March 14, 2018, by Assol Kubeisinova, NWB, Nunavut Water Board (NWB) Community Session Presentation, Regarding an Application for a new Type "A" Water Licence 3AM-PAN---- Hamlet of Pangnirtung, undated.



- 150. Submitted March 16, 2018, by ECCC, Environment and Climate Change Canada's Presentation (Inuktitut) to the Nunavut Water Board Regarding the Hamlet of Pangnirtung's Type A Municipal Water Licence Renewal Application submitted by Government of Nunavut Community Government Services, undated.
- 151. Prepared by Richard Dwyer, NWB, Public Hearing Registration Forms (participant registration) registration dated March 21, 2017.
- 152. Prepared by Richard Dwyer, NWB, Public Hearing Registration Forms (community session, participant registration) registration dated March 21, 2017.
- 153. Prepared by Richard Dwyer, NWB, Public Hearing Registration Forms (participant registration) registration dated March 22, 2017.
- 154. Submitted by GN-CGS, Photo response to INAC questions, undated.



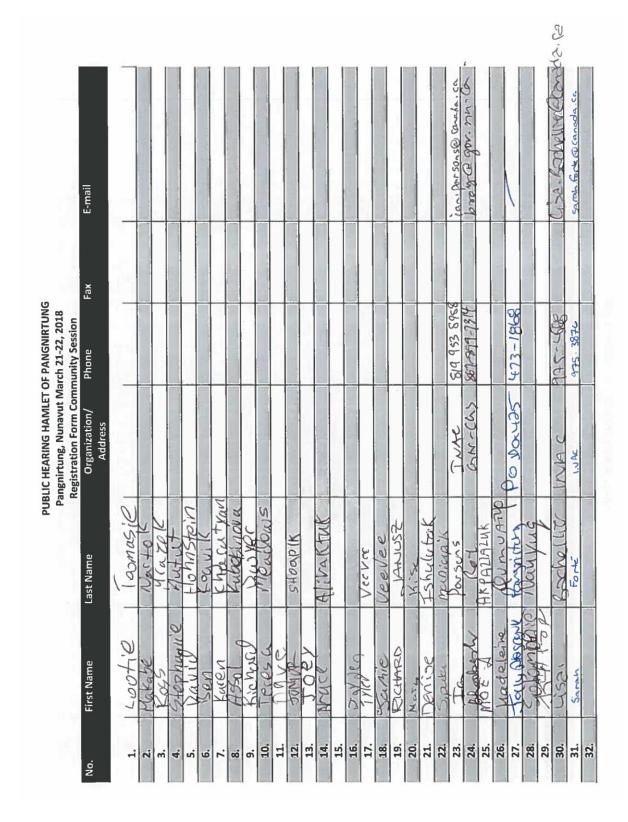
<u>APPENDIX E - Sign-in Sheets – List of Participants in the Public Hearing</u>

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