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June 27, 2023

File: MV2023L8-0005

Aileen Stevens
Government of the Northwest Territories – Department of Infrastructure
Box 1320
Yellowknife NT X1A2L9

Sent by email

Dear Aileen Stevens,

Re: Hay River Harbour Dredging– Issuance Package – Water Licence MV2023L8-0005 – Miscellaneous – Hay River, NT

The Mackenzie Valley Land and Water Board (Board) met on June 22, 2023 and considered the Application Package from Government of the Northwest Territories – Department of Infrastructure (GNWT – INF) for Water Licence (Licence) MV2023L8-0005 for the Hay River Harbour Dredging (Project) in accordance with the *Waters Act*.

The Board has approved Water Licence MV2023L8-0005 (attached) for a term of five years, effective June 27, 2023 and expiring June 26, 2028. The Licence is supported by the Board's Reasons for Decision. These documents are posted to the Board's Public Registry.¹

Submission Requirements

Please refer to Attachment A of the Licence for a complete summary and timetable of submissions required for the Licence. The Board's decisions on submissions that were considered in conjunction with the Application Package are set out below.

¹ See MLWB Online Registry www.mvlwb.com for [MV2023L8-0005](#)

Management Plans – Approved

The Board has approved the following Plans:

Condition Number and Title	Title of Plan (Version)
Part B, Condition 21, ENGAGEMENT PLAN	Engagement Plan (V1.0) ²
Part F, Condition 6, WASTE MANAGEMENT PLAN	Waste Management Plan (V1.0) ³
Part H, Condition 2, SPILL CONTINGENCY PLAN	Spill Contingency Plan (V1.0) ⁴

When these Plans are next revised and submitted, the Plan(s) must include the changes detailed in the Reasons for Decision.

Management Plans – Revisions Required

The Board requires that the following Plans be revised to include all changes detailed in the Reasons for Decision and submitted by the dates outlined in the following table. The revised Plans will be considered to be approved when the Licensee receives written confirmation of conformity. The Licensee may not commence Project activities until the Plans are approved.

Condition Number and Title	Title of Plan (Version)	Version and Date Revision Due
Part F, Condition 2, Hay River Harbour Restoration - Monitoring Plan	Hay River Harbour Restoration Plan (Version 1.0) ⁵	<p>The GNWT-INF is required to submit a revised submission (Version 1.1) in accordance with comments and commitments made during this review⁶ within 30 days of the effective date of the Licence, for confirmation of conformity from Board staff. Revisions will include, but not be limited to:</p> <ul style="list-style-type: none">• Updating Section 3.3.2 and Table 3-3 to include PHCs and BTEX (MVLWB Comment 8, 9);• Updating Section 4.1 of the Monitoring Plan to include additional text to clarify action levels (MVLWB Comment 10); and• Updating the Plan to include the sampling method that will be used for Dredged Material in the Temporary Storage Areas (MVLWB Comment 11).

² See MLWB Online Registry for GNWT – INF – HR Harbour– [Engagement Plan – Version 1.0 – Apr4 23](#)

³ See MLWB Online Registry for GNWT – INF – HR Harbour – [Waste Management Plan – Version 1.0 – Apr4 23](#).

⁴ See MLWB Online Registry for GNWT – INF – HR Harbour – [Spill Contingency Plan – Version 1.0 – Apr4 23](#)

⁵ See MLWB Online Registry for GNWT – INF – HR Harbour – [Hay River Harbour Restoration Plan - Version 1.0 – Apr3 23](#)

⁶ See MLWB Online Registry for GNWT – INF – HR Harbour – [Review Summary Table – June22 23](#) for MVLWB Staff Comments 7-12, ECCC Comments 1, 3 and 4.

Condition Number and Title	Title of Plan (Version)	Version and Date Revision Due
Part F, Condition 3, Sediment and Erosion Control Plan	Sediment and Erosion Control Plan (Version 1.0) ⁷	<p>The GNWT-INF is required to submit a revised submission (Version 1.1) in accordance with comments and commitments made during this review⁸ within 30 days of the effective date of the Licence, for confirmation of conformity from Board staff. Revisions will include, but not be limited to:</p> <ul style="list-style-type: none"> • Including the information submitted in response to MVLWB Comments 2 and 3; and • Updating Table 2-1 to refer to Section 4.1 of the Monitoring Plan (MVLWB Comment 5).

Inspectors

The Inspectors referred to in the Licence can be contacted at the regional GNWT-ECC offices.⁹

Analyst

The Analyst referred to in the Surveillance Network Program in Schedule 1 of the Licence can be contacted at the Taiga Environmental Laboratory.¹⁰

Licence Processes and Additional Information

Sections 5 and 6 of the Land and Water Board (LWB) *Guide to the Water Licensing Process*¹¹ (Guide) contain detailed information on licence enforcement and potential post-issuance processes, such as amendments to conditions, and assignment to another company. Please be familiar with these sections of the Guide and reach out to Board staff with any questions about LWB processes related to the Licence.

⁷See MLWB Online Registry for GNWT – INF – HR Harbour – [Sediment and Erosion Control Plan – Version 1.0 – Apr3 23](#).

⁸See MLWB Online Registry for GNWT – INF – HR Harbour – [Review Summary Table – June22 23](#) for MVLWB Staff Comments 1-3, ECC Comment 1..

⁹ See GNWT-ECC Regional Offices webpage (<https://www.ecc.gov.nt.ca/en/regional-offices>) for regional contact information.

¹⁰ See GNWT-ECC Taiga Environmental Laboratory webpage (<https://www.ecc.gov.nt.ca/en/services/taiga-environmental-laboratory>) for contact information.

¹¹ See MLWB Policies and Guidelines webpage for LWB [Guide to the Water Licensing Process](#).

Full cooperation of GNWT – INF is anticipated and appreciated. Please contact Tyree Mullaney via [email](#) or at (867) 766-7464 with any questions or concerns regarding this letter.

Yours sincerely,

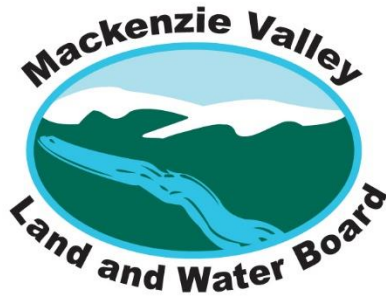
A handwritten signature in blue ink that reads "Tanya MacIntosh". The signature is fluid and cursive, with the first name "Tanya" and last name "MacIntosh" clearly legible.

Tanya MacIntosh

Chair, Mackenzie Valley Land and Water Board

BCC'd to: Dehcho Distribution List
 Rick Walbourne – Manager, Water Regulatory, GNWT-ECC
 Rebekka Lindskoog, AE

Attached: Water Licence MV2023L8-0005
 Reasons for Decision
 Comment Summary Table



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Government of the Northwest Territories – Department of Infrastructure

Water Licence MV2023L8-0005

Pursuant to the *Waters Act* and the Waters Regulations,
the Mackenzie Valley Land and Water Board grants this Water Licence to:

Government of the Northwest Territories – Department of Infrastructure

(Licensee)

of Box 1320 Yellowknife NT X1A 2L9

(Mailing Address)

hereinafter called the Licensee, to proceed with the following undertaking, subject to the annexed definitions and conditions contained therein:

Location:	Hay River, NT
Water Management Area:	Water Management Area 01
Purpose:	Miscellaneous - Dredging
Type:	Type B
Quantity of Water not to be exceeded:	Not applicable.
Effective Date:	June 27, 2023
Expiry Date:	June 26, 2028

A handwritten signature in blue ink that reads "Tanya MacIntosh".

Tanya MacIntosh, Chair
Mackenzie Valley Land and Water Board

A handwritten signature in blue ink that reads "A. Gauthier".

Amanda Gauthier, Witness

Type B Water Licence MV2023L8-0005
Government of the Northwest Territories – Department of Infrastructure
Hay River Harbour Remediation Project

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Part A: Scope and Defined Terms

Scope:	Condition Title
<p>1. This Licence entitles the Licensee to use Water and deposit Waste for miscellaneous activities at the Hay River Dredging Project: The scope of this Licence includes the following:</p> <ul style="list-style-type: none">a) Sediment removal from the Hay River Harbour;b) Deposit of Waste at the Temporary Storage Areas, as identified in the Waste Management Plan – Apr4 23; andc) Progressive Reclamation and associated Closure and Reclamation activities.	SCOPE
<p>3. This Licence is issued subject to the conditions contained herein with respect to the use of Water and the Deposit of Waste in any Waters or in any place under any conditions where such Waste or any other Waste that results from the Deposit of such Waste may enter any Waters. Any change made to the <i>Waters Act</i> and/or Waters Regulations that affects licence conditions and defined terms will be deemed to have amended this Licence.</p>	LEGISLATION SUBJECT TO CHANGE
<p>4. Compliance with this Licence does not relieve the Licensee from responsibility for compliance with the requirements of any applicable federal, territorial, or municipal legislation.</p>	LEGISLATIVE COMPLIANCE

Defined Terms:¹

Action Level – a predetermined qualitative or quantitative trigger which, if exceeded, requires the Licensee to take appropriate actions.

Analyst – an Analyst designated by the Minister under subsection 65(1) of the *Waters Act*.

Board – the Mackenzie Valley Land and Water Board established under subsection 99(1) of the *Mackenzie Valley Resource Management Act*.

Construction – any activities undertaken during any phase of the Project to construct, build, upgrade, or replace any structures, facilities, or components of, or associated with, the Project.

Deposit of Waste – a deposit of Waste in any Water or in any other place under conditions in which the Waste, or any other Waste that results from the deposit of that Waste, may enter any Waters.

Discharge – a direct or indirect deposit or release of any Water or Wastewater to Water in the Receiving Environment.

Dredged Material – The lakebed sediment that is removed during the Project and placed in the Temporary Storage Areas.

Engagement Plan – a document, developed in accordance with the LWB *Engagement and Consultation Policy* and the *Engagement Guidelines for Applicants and Holders of Water Licences and Land Use Permits*, that clearly describes how, when, and which engagement activities will occur with an affected party during the life of the Project.

Freeboard – the vertical distance between the still Water or Wastewater line and the lowest elevation of the effective Water or Wastewater containment crest on the upstream slope of a containment structure.

Hazardous Waste - a Waste which, because of its quantity, concentration, or characteristics, may be harmful to human health or the environment when improperly treated, stored, transported, or disposed of.

Inspector – an Inspector designated by the Minister under subsection 65(1) of the *Waters Act*.

Licensee – the holder of this Licence.

Minister – the Minister of the Government of the Northwest Territories (GNWT) – Environment and Natural Resources.

Ordinary High-Water Mark – the usual or average level to which a Watercourse rises at its highest point and remains for sufficient time so as to change the characteristics of the land. In flowing Watercourses (rivers, streams), this refers to an active channel/bank-full level, which is often the 1:2-year flood flow return level. In inland lakes, wetlands or marine environments, it refers to those parts of the Watercourse bed and banks that are frequently flooded by Water so as to leave a mark on the land and where the natural vegetation changes from predominantly aquatic vegetation to terrestrial vegetation (excepting Water tolerant species). For reservoirs, this refers to normal high operating levels (full supply level).

¹ Defined terms are capitalized throughout the License, including when used in other definitions.

Defined Terms:¹

Progressive Reclamation – Closure and Reclamation activities conducted during the operating phase of the Project.

Project – the undertaking described in Part A, Conditions 1 and 2.

Receiving Environment – the natural environment that, directly or indirectly, receives any Waste from the Project.

Receiving Water – the Water in the Receiving Environment that receives any direct or indirect Deposit of Waste from the Project.

Remediation – the removal, reduction, or neutralization of substances, Wastes, or hazardous materials from a site in order to prevent or minimize any adverse effects on the environment and public safety, now or in the future.

Spill Contingency Plan (SCP) – a document developed for the Project in accordance with INAC's *Guidelines for Spill Contingency Planning*.

Sump – a human-made excavation or a natural depression designated for depositing Water and/or Waste.

Surveillance Network Program (SNP) – a monitoring program required by this Licence and detailed in Schedule 1.

Temporary Storage Areas – the area(s) designated to contain Dredged Material, as per the Waste Management Plan.

Unauthorized Release – a release to the Receiving Environment of any Water or Waste not authorized under this Licence.

Waste – as defined in section 1 of the *Waters Act*:

- a) a substance that, if added to water, would degrade or alter or form part of a process of degradation or alteration of the quality of the water to an extent that is detrimental to its use by people or by an animal, fish or plant, or
- b) water that contains a substance in such a quantity or concentration, or that has been so treated, processed or changed, by heat or other means, that it would, if added to other water, degrade or alter or form part of a process of degradation or alteration of the quality of that water to the extent described in paragraph (a),

and includes;

- c) a substance or water that, for the purposes of the *Canada Water Act*, is deemed to be waste,
- d) a substance or class of substances prescribed by regulations made under subparagraph 63(1)(b)(i),
- e) water that contains a substance or class of substances in a quantity or concentration that is equal to or greater than a quantity or concentration prescribed in respect of that substance or class of substances by regulations made under subparagraph 63(1)(b)(ii), and
- f) water that has been subjected to a treatment, process or change prescribed by regulations made under subparagraph 63(1)(b)(iii).

Defined Terms:¹

Waste Management Plan (WMP) – a document, developed in accordance with the MVLWB *Guidelines for Developing a Waste Management Plan*, that describes the methods of Waste management for the Project from Waste generation to final disposal.

Water – as defined in section 1 of the *Waters Act*: water under the administration and control of the Commissioner, whether in a liquid or frozen state, on or below the surface of land.

Watercourse – as defined in section 1 of the Waters Regulations: a natural watercourse, body of Water or Water supply, whether usually containing Water or not, and includes, but is not limited to, Groundwater, springs, swamps, and gulches.

Waters Regulations – the regulations proclaimed pursuant to section 63 of the *Waters Act*.

Water Use – as defined in section 1 of the *Waters Act*: a direct or indirect use of any kind, including, but not limited to,

- a) a diversion or obstruction of waters,
- b) an alteration of the flow of waters, and
- c) an alteration of the bed or banks of a river, stream, lake or other body of water, whether or not the body of water is seasonal, but does not include a use connected with shipping activities that are governed by the *Canada Shipping Act, 2001*.

Condition	Condition Title
Part B: General Conditions	
1. The Licensee shall ensure a copy of this Licence is maintained on site at all times.	COPY OF LICENCE
2. The Licensee shall take every reasonable precaution to protect the environment.	PRECAUTION TO PROTECT ENVIRONMENT
3. In conducting its activities under this Licence, the Licensee shall make every reasonable effort to consider and incorporate any scientific information and Traditional Knowledge that is made available to the Licensee.	INCORPORATE SCIENTIFIC INFORMATION AND TRADITIONAL KNOWLEDGE
4. In each submission required by this Licence or by any directive from the Board, the Licensee shall identify all recommendations based on Traditional Knowledge received, describe how the recommendations were incorporated into the submission, and provide justification for any recommendation not adopted.	IDENTIFY TRADITIONAL KNOWLEDGE
5. All references to policies, guidelines, codes of practice, statutes, regulations, or other authorities shall be read as a reference to the most recent versions, unless otherwise noted.	REFERENCES
6. The Licensee shall ensure all submissions to the Board: a) Are in accordance with the LWB <i>Document Submission Standards</i> and, if applicable, <i>Geospatial Data Submissions Standards</i> ; and b) Include any additional information requested by the Board.	SUBMISSION FORMAT
7. The Licensee shall ensure management plans are submitted to the Board in a format consistent with the LWB <i>Standard Outline for Management Plans</i> , unless otherwise specified.	MANAGEMENT PLAN FORMAT
8. The Licensee shall comply with all plans including revisions, approved pursuant to the conditions of this Licence.	COMPLY WITH SUBMISSIONS AND REVISIONS
9. The Licensee shall conduct an annual review of all plans and make any revisions necessary to reflect changes in operations, contact information, or other details. No later than March 31, 2024, each year, the Licensee shall send a notification letter to the Board, listing the documents that have been reviewed and do not require revisions.	ANNUAL REVIEW

Condition	Condition Title
10. The Licensee may propose changes at any time by submitting revised plans that require Board approval to the Board, for approval, a minimum of 90 days prior to the proposed implementation date for the changes. The Licensee shall not implement the changes until approved by the Board.	REVISIONS
11. The Licensee shall revise any submission and submit it as per the Board's directive.	REVISE AND SUBMIT
12. If any date for any submission falls on a weekend or holiday, the Licensee may submit the item on the following business day.	SUBMISSION DATE
13. The Licensee shall comply with the Schedules , which form part of this Licence, and any updates to the Schedules as may be made by the Board.	COMPLY WITH SCHEDULE(S)
14. The Licensee shall comply with the Surveillance Network Program set out in Schedule 1, and any updates to the Surveillance Network Program as may be made by the Board.	COMPLY WITH SURVEILLANCE NETWORK PROGRAM
15. The Licensee shall comply with the Annexes, which form part of this Licence.	COMPLY WITH ANNEX(ES)
16. The Schedules and any compliance dates specified in this Licence may be updated at the discretion of the Board.	UPDATES TO SCHEDULES AND COMPLIANCE DATE(S)
17. The Licensee shall comply with all directives issued by the Board in respect of the implementation of the conditions of this Licence.	COMPLY WITH BOARD DIRECTIVES
18. The Licensee shall ensure signs are posted for all active Surveillance Network Program stations. All sign(s) shall be located and maintained to the satisfaction of an Inspector.	POST SURVEILLANCE NETWORK PROGRAM SIGN(S)
19. The Licensee shall install, operate, and maintain meters, devices, or other such methods for measuring the volumes of Water used and Waste disposed of to the satisfaction of an Inspector.	MEASURE WATER USE AND WASTE DISCHARGED
20. Beginning March 31, 2024, and no later than every March 31 thereafter, the Licensee shall submit an Annual Water Licence Report to the Board and an Inspector. The Report shall be in accordance with the requirements of Schedule 1, Condition 1.	ANNUAL WATER LICENCE REPORT
21. The Licensee shall comply with the Engagement Plan , once approved.	ENGAGEMENT PLAN

Condition	Condition Title
22. A minimum of ten days prior to the initial commencement of Project activities, the Licensee shall provide written notification to the Board and an Inspector. Notification shall include the commencement date, and the name and contact information for the individual responsible for overseeing the Project. Written notification shall be provided to the Board and an Inspector if any changes occur.	NOTIFICATION – COMMENCEMENT
23. A minimum of ten days prior to re-commencement of Project activities following a temporary shut-down period, the Licensee shall provide written notification to the Board and an Inspector. Notification shall include the commencement date, and the name and contact information for the individual responsible for overseeing the Project. Written notification shall be provided to the Board and an Inspector if any changes occur.	NOTIFICATION – RE-COMMENCEMENT
24. The Licensee shall immediately provide written notification to the Board and an Inspector of any non-compliance with the conditions of this Licence.	NOTIFICATION – NON-COMPLIANCE WITH CONDITIONS
25. The Licensee shall immediately provide written notification to the Board of any non-compliance with a Board directive issued in respect of the implementation of the conditions of this Licence.	NOTIFICATION – NON-COMPLIANCE WITH DIRECTIVES
26. The Licensee shall ensure that a copy of any written authorization issued to the Licensee by an Inspector is provided to the Board.	COPY – WRITTEN AUTHORIZATION
27. The Licensee shall submit a current Project schedule to the Board and an Inspector upon request.	SUBMIT CURRENT PROJECT SCHEDULE

Part C: Security

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Part D: Water Use

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Part E: Construction

1. The Licensee shall ensure that all structures intended to contain, withhold, divert, or retain Water or Waste are designed, constructed, and maintained to minimize the escape of Waste to the Receiving Environment.	OBJECTIVE – CONSTRUCTION
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Condition	Condition Title
2. The Licensee shall only use material that is clean and free of contaminants and that has been authorized in writing by an Inspector.	CONSTRUCTION MATERIAL – SOURCE(S)
3. A minimum of ten days prior to the commencement of Construction of any structure(s) intended to contain, withhold, divert, or retain Water or Wastes, the Licensee shall provide written notification to the Board and an Inspector. Notification shall include the Construction commencement date, and the name and contact information for the individual responsible for overseeing the Construction. Written notification shall be provided to the Board and an Inspector if any changes occur.	NOTIFICATION – CONSTRUCTION

Part F: Waste and Water Management

1. The Licensee shall manage Waste and Water with the objective of minimizing the impacts of the Project on the quantity and quality of Water in the Receiving Environment through the use of appropriate mitigation measures, monitoring, and follow-up actions.	OBJECTIVE – WASTE AND WATER MANAGEMENT
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Management and Monitoring Plans

2. The Licensee shall comply with the Hay River Harbour Restoration – Monitoring Plan , once approved.	HAY RIVER HARBOUR RESTORATION – MONITORING PLAN
3. The Licensee shall comply with the Sediment and Erosion Control Plan , once approved.	SEDIMENT AND EROSION CONTROL PLAN
4. A minimum of ten days prior to commencing dredging activities, the Licensee shall submit, to the Board, the TSS-Turbidity Curve, as per the Hay River Harbour Restoration – Monitoring Plan.	TSS-TURBIDITY CURVE

Inspection of Structures and Facilities

5. The Licensee shall conduct weekly inspections of the Temporary Storage Sites or as otherwise directed by an Inspector or the Board. Records of these inspections shall be made available to the Board or an Inspector upon request.	WEEKLY INSPECTION OF TEMPORARY STORAGE SITES
6. The Licensee shall conduct daily erosion inspections of Discharge locations during periods of Discharge, or more frequently as directed by an Inspector. Records of these inspections shall be made available to the Board or an Inspector upon request.	DAILY INSPECTIONS OF DISCHARGE LOCATIONS

Condition	Condition Title												
Discharge and Disposal Locations and Rates													
7. The Licensee shall dispose of all Waste as described in the approved Waste Management Plan .	WASTE MANAGEMENT PLAN												
8. A minimum of ten days prior to disposing of any Waste into a licenced municipal facility, the Licensee shall provide written notification to the Board and an Inspector.	NOTIFICATION – WASTE DISPOSAL												
9. A minimum of ten days prior to commencing dredging activities, the Licensee shall submit, to the Board, the location coordinates for all SNP stations.	SURVEILLANCE NETWORK PROGRAM - STATION LOCATIONS												
10. Prior to removing Dredged Material from the Temporary Storage Sites for reuse, the Licensee shall ensure all Dredged Material meets the remediation criteria in the most current version of the <i>Government of the Northwest Territories' Environmental Guideline for Contaminated Site Remediation</i> .	TEMPORARY STORAGE SITES – REUSE CRITERIA												
11. The Licensee shall ensure that any representative samples of Dredged Material collected and analyzed meet the following sampling requirements, at a minimum:	TEMPORARY STORAGE SITES – DREDGED MATERIAL SAMPLING REQUIREMENTS												
<table border="1"> <thead> <tr> <th>Soil Volume (m³)</th><th>Sample Quantity</th></tr> </thead> <tbody> <tr> <td>1-50</td><td>1</td></tr> <tr> <td>51-100</td><td>2</td></tr> <tr> <td>101-1,000</td><td>3</td></tr> <tr> <td>1,001-2,000</td><td>4</td></tr> <tr> <td>2,001-4,000</td><td>5</td></tr> </tbody> </table>		Soil Volume (m ³)	Sample Quantity	1-50	1	51-100	2	101-1,000	3	1,001-2,000	4	2,001-4,000	5
Soil Volume (m ³)	Sample Quantity												
1-50	1												
51-100	2												
101-1,000	3												
1,001-2,000	4												
2,001-4,000	5												
12. The Licensee shall not dispose of Waste, including Wastewater, to any Watercourse, or to the ground surface within 100 metres of the Ordinary High-Water Mark of any Watercourse.	DISPOSAL LOCATION – ORDINARY HIGH-WATER MARK												

Part G: Aquatic Effects Monitoring

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Part H: Spill Contingency Planning

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|---|---|
| 1. The Licensee shall ensure that Unauthorized Releases associated with the Project do not enter any Water. | OBJECTIVE – PREVENT WASTE INTO WATER |
| 2. The Licensee shall comply with the Spill Contingency Plan , once approved. | SPILL CONTINGENCY PLAN |

Condition	Condition Title
<p>3. If a spill or an Unauthorized Release occurs or is foreseeable, the Licensee shall:</p> <p>a) Implement the approved Spill Contingency Plan referred to in Part H, Condition 2;</p> <p>b) Report it immediately using the NU-NT Spill Report Form by one of the following methods:</p> <ul style="list-style-type: none"> • Telephone: (867) 920-8130 • Fax: (867) 873-6924 • E-mail: spills@gov.nt.ca • Online: Spill Reporting and Tracking Database <p>c) Notify the Board and an Inspector immediately; and</p> <p>d) Within 30 days of initially reporting the incident, or within a timeframe authorized by an Inspector, submit a detailed report to the Board and an Inspector, including descriptions of causes, response actions, and any changes to procedures to prevent similar occurrences in the future. Written notification shall be provided to the Board and an Inspector if any changes occur.</p>	REPORT SPILLS
4. The Licensee shall ensure that spill prevention infrastructure and spill response equipment is in place prior to commencement of the Project.	SPILL PREVENTION AND RESPONSE EQUIPMENT
5. The Licensee shall restore all areas affected by spills and Unauthorized Releases to the satisfaction of an Inspector.	CLEAN UP SPILLS
6. The Licensee shall not establish any fuel storage facilities or refueling stations, or store chemicals or Wastes within 100 metres of the Ordinary High-Water Mark of any Watercourse.	MATERIAL STORAGE – ORDINARY HIGH-WATER MARK

Part I: Closure and Reclamation

- | | |
|--|--------------------------------|
| 1. The Licensee shall endeavor to carry out approved Progressive Reclamation as soon as is reasonably practicable. | PROGRESSIVE RECLAMATION |
|--|--------------------------------|

Signed on behalf of the Mackenzie Valley Land and Water Board



Tanya MacIntosh, Chair



Amanda Gauthier, Witness

Schedule 1: Surveillance Network Program (SNP)

Reporting Requirements

1. The Licensee shall, within thirty (30) days following the month being reported, submit to the Board and an Inspector, in electronic and printed format acceptable to the Board, a **Surveillance Network Program Report**, which shall include, but not be limited to the following:
 - a) Tabular summaries of all data and information generated under the SNP for the month being reported, including rationale for SNP sites where samples were not collected (but should have been) and results and interpretation of quality assurance / quality control procedures;
 - b) Information regarding the calibration and status of the meters and devices referred to in Part B, Item 6 (of the body);
 - c) The coordinates of all SNP sites which were established within the month being reported, including an updated map identifying the locations of all the SNP sites;
 - d) A tabular summary of cumulative water use;
 - e) Tabular summaries of all data and information generated under the Supplementary Measurement Requirements referred to in Part C.
2. More frequent sample collection may be required at the request of an Inspector.
3. All sampling, sample preservation, and analyses shall be conducted in accordance with methods prescribed in the current edition of APHA "Standard Methods for the Examination of Water and Wastewater" at the time of analysis, or by such other methods approved by an Analyst.
4. All analyses shall be performed in a laboratory accredited by the Canadian Association for Laboratory Accreditation (CALA) for the specific analyses to be performed or as approved by an Analyst.
5. A minimum of sixty (10) days prior to the collection of SNP samples, the Licensee shall submit to an Analyst for approval, a **Quality Assurance and Quality Control (QA/QC) Plan**, which shall include a list of techniques that will be used to collect and analyze samples collected under the SNP.
6. The Licensee shall adhere to the QA/QC Plan, once approved, and shall annually review the plan and make any necessary revisions to reflect changes in Operations or as directed by the Board. Revisions to the plan shall be submitted to the Analyst for approval.
7. If the QA/QC Plan is not approved by the Analyst, the Licensee shall revise the plan according to the Analyst's direction and re-submit it to the Analyst for approval.

Surveillance Network Station Descriptions and Sampling Requirements

1. SNP Station information is set out below. The location of each Station is approximate and subject to approval from an Inspector.

SNP Station Quick Reference Guide

Station #	Description	UTM Coordinates (Zone11V)	Status
SNP – 1	Monitor Sump Water quality, Temporary Storage Area 1	To be determined	Active
SNP – 2	Monitor Sump Water quality, Temporary Storage Area 2	To be determined	Active

Station #	Description	UTM Coordinates (Zone11V)	Status
SNP – 3	Monitor Sump Water quality, Temporary Storage Area 3	To be determined	Active
SNP – 4	Monitor Sump Water quality, Temporary Storage Area 4	To be determined	Active
SNP – 5	Monitor Sump Water quality, Temporary Storage Area 5	To be determined	Active
SNP – 6	Monitor Sump Water quality, Temporary Storage Area 6	To be determined	Active
SNP – 7	Monitor Sump Water quality, Temporary Storage Area 7	To be determined	Active
SNP – 8	Monitor Sump Water quality, Temporary Storage Area 8	To be determined	Active

Sumps

SNP Station - 1

Description:	Sump, Temporary Storage Area 1
Location:	To be determined
Sampling Frequency:	Weekly, during dewatering
Sampling Parameters:	Field parameters ¹ Total and dissolved solids Major ions ² Total and dissolved metals ³ Petroleum hydrocarbons ⁴
Rationale:	To monitor water quality as per the Hay River Harbour Restoration – Monitoring Plan
Status:	Active

SNP Station - 2

Description:	Sump, Temporary Storage Area 2
Location:	To be determined
Sampling Frequency:	Weekly, during dewatering
Sampling Parameters:	Field parameters ¹ Total and dissolved solids Major ions ² Total and dissolved metals ³ Petroleum hydrocarbons ⁴
Rationale:	To monitor water quality as per the Hay River Harbour Restoration – Monitoring Plan
Status:	Active

SNP Station - 3

Description:	Sump, Temporary Storage Area 3
Location:	To be determined
Sampling Frequency:	Weekly, during dewatering
Sampling Parameters:	Field parameters ¹ Total and dissolved solids Major ions ² Total and dissolved metals ³ Petroleum hydrocarbons ⁴
Rationale:	To monitor water quality as per the Hay River Harbour Restoration – Monitoring Plan
Status:	Active

SNP Station - 4

Description:	Sump, Temporary Storage Area 4
Location:	To be determined
Sampling Frequency:	Weekly, during dewatering
Sampling Parameters:	Field parameters ¹ Total and dissolved solids Major ions ² Total and dissolved metals ³ Petroleum hydrocarbons ⁴
Rationale:	To monitor water quality as per the Hay River Harbour Restoration – Monitoring Plan
Status:	Active

SNP Station - 5

Description:	Sump, Temporary Storage Area 5
Location:	To be determined
Sampling Frequency:	Weekly, during dewatering
Sampling Parameters:	Field parameters ¹ Total and dissolved solids Major ions ² Total and dissolved metals ³ Petroleum hydrocarbons ⁴
Rationale:	To monitor water quality as per the Hay River Harbour Restoration – Monitoring Plan
Status:	Active

SNP Station - 6

Description:	Sump, Temporary Storage Area 6
Location:	To be determined
Sampling Frequency:	Weekly, during dewatering
Sampling Parameters:	Field parameters ¹ Total and dissolved solids Major ions ² Total and dissolved metals ³ Petroleum hydrocarbons ⁴
Rationale:	To monitor water quality as per the Hay River Harbour Restoration – Monitoring Plan
Status:	Active

SNP Station - 7

Description:	Sump, Temporary Storage Area 6
Location:	To be determined
Sampling Frequency:	Weekly, during dewatering
Sampling Parameters:	Field parameters ¹ Total and dissolved solids Major ions ² Total and dissolved metals ³ Petroleum hydrocarbons ⁴
Rationale:	To monitor water quality as per the Hay River Harbour Restoration – Monitoring Plan
Status:	Active

SNP Station - 8

Description:	Sump, Temporary Storage Area 6
Location:	To be determined
Sampling Frequency:	Weekly, during dewatering
Sampling Parameters:	Field parameters ¹ Total and dissolved solids Major ions ² Total and dissolved metals ³ Petroleum hydrocarbons ⁴
Rationale:	To monitor water quality as per the Hay River Harbour Restoration – Monitoring Plan
Status:	Active

¹Field Parameters shall include the following measurements:

pH	Temperature
Conductivity	Dissolved Oxygen

²Major ions shall include the following parameters:

Calcium	Magnesium
Chloride	Sodium
Alkalinity	Fluoride
Total Dissolved Solids*	Potassium
Sulphate	Total Hardness

* Total dissolved solids (calculated) shall be calculated as per the American Public Health Association's *Standard Methods for the Examination of Water and Wastewater, 21st Edition (2005)*:

$$\text{TDS}_{\text{calc}} (\text{mg/L}) = (0.6 \times \text{Total Alkalinity as CaCO}_3) + \text{Na}^+ + \text{Mg}^+ + \text{K}^+ + \text{Ca}^{2+} + \text{SO}_4^- + \text{Cl}^- + \text{NO}_3^- + \text{F}^- + \text{SiO}_3^{2-}$$

³ICP-MS Metal Scan shall include, at a minimum, the following parameters:

Aluminum	Manganese
Antimony	Mercury
Arsenic	Molybdenum
Barium	Nickel
Beryllium	Rubidium
Boron	Selenium
Cadmium	Silver
Cesium	Strontium
Chromium	Thallium
Cobalt	Titanium
Copper	Uranium
Iron	Vanadium
Lead	Zinc
Lithium	

⁴Petroleum Hydrocarbons shall include the following parameters:

Fraction 1 (C1 – C10)	Fraction 2 (>C10-C16)
Fraction 3 (>C16-C34)	Fraction 4 (>C34)
BTEX (Benzene, Toluene, Ethylbenzene, and Xylene)	

Schedule 2: Annual Water Licence Report

Condition

1. The **Annual Water Licence Report** referred to in Part B, Condition 20 of this Licence shall include, but not be limited to, the following information about activities conducted during the previous calendar:
 - a) A brief summary of Project activities;
 - b) An updated Project schedule;
 - c) A summary of engagement activities conducted in accordance with the approved **Engagement Plan**, referred to in Part B, Condition 21 of this Licence;
 - d) A summary of how Traditional Knowledge was incorporated into decision making;
 - e) A summary of Construction activities conducted in accordance with Part E of this Licence;
 - f) A summary of major maintenance activities conducted in accordance with this Licence;
 - g) A summary of activities conducted in accordance with the approved **Hay River Harbour Restoration - Monitoring Plan**, referred to in Part F, Condition 2 of this Licence, including:
 - i. A summary of approved updates or changes to the process or facilities required for the management of Water and Wastewater;
 - ii. A summary and interpretation of water quality monitoring results, including any Action Level exceedances;
 - iii. A description of actions taken in response to any Action Level exceedances; and
 - iv. A summary and interpretation of monitoring results of Dredged Material.
 - h) A summary of activities conducted in accordance with the approved **Waste Management Plan**, referred to in Part F, Condition 7 of this Licence, including:
 - i. A summary of approved updates or changes to the process or facilities required for the management of Waste;
 - ii. Monthly and annual quantities, in cubic metres, of Dredged Material disposed of, by location;
 - iii. Monthly and annual quantities, in cubic metres, of Dredged Material removed from the Temporary Storage Sites, identified by location; and
 - iv. A map depicting the location of the Temporary Storage Sites and Sumps.
 - i) A summary of activities conducted in accordance with the approved **Sediment and Erosion Control Plan**, referred to in Part F, Condition 3 of this Licence, including:
 - i. A summary of approved updates or changes to the process or facilities required for the management of erosion and sedimentation;
 - ii. A description of any erosion susceptible areas encountered;
 - iii. A summary of activities undertaken to prevent or mitigate erosion;
 - iv. A report of the performance of mitigations applied to each area;
 - v. A summary and interpretation of monitoring results, including any Action Level exceedances; and
 - vi. A description of actions taken in response to any Action Level exceedances.

Condition

- j) A summary of the results and any actions taken as a result of the following inspections:
 - i. Inspections conducted to fulfill Condition WEEKLY INSPECTION OF TEMPORARY STORAGE SITES of this Licence;
- k) A summary of activities conducted in accordance with the approved **Spill Contingency Plan**, referred to in Part H, Condition 2 of this Licence, including:
 - i. A list and description for all Spills and Unauthorized Releases, including the date, NWT spill number, volume, location, summary of the circumstances and follow-up actions taken, and status (i.e., open or closed), in accordance with the reporting requirements in Part H, Condition 3 of this Licence; and
 - ii. An outline of any spill training carried out.
- l) A summary of any Closure and Reclamation work completed;
- m) A list of any non-compliance(s) with the conditions of this Licence or any directive from the Board pursuant to the conditions of this Licence;
- n) A summary of actions taken to address concerns, non-conformances, or deficiencies in any reports filed by an Inspector;
- o) Any other details requested by the Board by November 30 of the year being reported.

Attachments

Attachment A – Concordance Table of Items Requiring Submission

The table below summarizes the items the Licensee is required to submit as per the Licence conditions. In the event of a discrepancy between this table and the Licence conditions, the Licence conditions shall prevail.

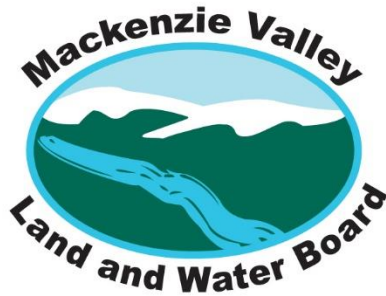
Condition Location	Item	Date
Part B, Condition 20	Annual Water Licence Report	Beginning March 31, 2024, and no later than every March 31 thereafter, the Licensee shall submit an Annual Water Licence Report to the Board and an Inspector. The Report shall be in accordance with the requirements of Schedule 1, Condition 1.
Part B, Condition 21	Engagement Plan	The Licensee shall conduct an annual review of all plans and make any revisions necessary to reflect changes in operations, contact information, or other details. No later than March 31, 2024, each year, the Licensee shall send a notification letter to the Board, listing the documents that have been reviewed and do not require revisions.
Part F, Condition 2	Hay River Harbour Restoration – Monitoring Plan	The Licensee shall conduct an annual review of all plans and make any revisions necessary to reflect changes in operations, contact information, or other details. No later than March 31, 2024, each year, the Licensee shall send a notification letter to the Board, listing the documents that have been reviewed and do not require revisions.
Part F, Condition 3	Sediment and Erosion Control Plan	The Licensee shall conduct an annual review of all plans and

		<p>make any revisions necessary to reflect changes in operations, contact information, or other details. No later than March 31, 2024, each year, the Licensee shall send a notification letter to the Board, listing the documents that have been reviewed and do not require revisions.</p>
Part F, Condition 7	Waste Management Plan	<p>The Licensee shall conduct an annual review of all plans and make any revisions necessary to reflect changes in operations, contact information, or other details. No later than March 31, 2024, each year, the Licensee shall send a notification letter to the Board, listing the documents that have been reviewed and do not require revisions.</p>
Part H, Condition 2	Spill Contingency Plan	<p>The Licensee shall conduct an annual review of all plans and make any revisions necessary to reflect changes in operations, contact information, or other details. No later than March 31, 2024, each year, the Licensee shall send a notification letter to the Board, listing the documents that have been reviewed and do not require revisions.</p>

Attachment B – Revision History Table

The table below summarizes revisions made to the Licence since its effective date (as set out on the Cover Page).

Date	Location of Change	Description of Change



7th Floor - 4922 48th Street
PO Box 2130, Yellowknife NT X1A 2P6

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Reasons for Decision

Issued pursuant to section 72.25 of the *Mackenzie Valley Resource Management Act* (MVRMA) and subsection 26(1) of the *Waters Act*.

Water Licence Application	
File Number	MV2023L8-0005
Company	Government of the Northwest Territories – Department of Infrastructure
Project	Hay River Dredging Project
Location	Hay River, NT
Activity	Miscellaneous
Date of Decision	June 22, 2023

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On June 22, 2023, the Mackenzie Valley Land and Water Board (MLWB or Board) met and considered the Application made by Government of the Northwest Territories – Department of Infrastructure (GNWT-INF) (Applicant) to the Board on DATE for Water Licence (Licence) (MV2023L8-0005) for the deposit of waste for the Hay River Harbour Dredging Project (the Project) in Hay River Area. After reviewing the Application and the evidence gathered during the regulatory proceeding, the Board has made the following decisions:

- 1) To issue Water Licence MV2023L8-0005 for a term of 5 years;
- 2) To approve Version 1.0 of the Engagement Plan;
- 3) To approve Version 1.0 of the Waste Management Plan;
- 4) To approve Version 1.0 of the Spill Contingency Plan;
- 5) To approve the Hay River Harbour Restoration Monitoring Plan, the Government of the Northwest Territories – Department of Infrastructure is required to submit a revised submission in accordance with comments and commitments made during this review within 30 days of the effective date of the Licence, for confirmation of conformity from Board staff.
- 6) To approve the Sediment and Erosion Control Plan, the Government of the Northwest Territories – Department of Infrastructure is required to submit a revised submission in accordance with comments and commitments made during this review within 30 days of the effective date of the Licence, for confirmation of conformity from Board staff.

These Reasons for Decision set out the Board’s regulatory process for the Application and rationale for decisions regarding the Licence. A summary of the Application and the main issues identified during the proceeding is provided in sections [2.0](#) and [3.0](#) below, followed by an outline of the regulatory process for the Application in [section 4.0](#). [Section 5.0](#) describes how the applicable legislative requirements have been met. The Board’s decisions and supporting rationale are set out in [section 6.0](#) for the Licence.

1.0 List of Defined Terms and Acronyms

Applicant/Licensee	Government of the Northwest Territories – Department of Infrastructure
Application	The complete application package submitted by the Applicant for Water Licence MV2023L8-0005
DFO	Fisheries and Oceans Canada
Distribution List	The list of individuals and organizations to whom materials from the regulatory proceeding were circulated. ¹
EA	Environmental Assessment
ECCC	Environment and Climate Change Canada
GNWT	Government of the Northwest Territories
GNWT-ECC	Government of the Northwest Territories – Environment and Climate Change
Inspector	An Inspector designated under subsection 65(1) of the Waters Act
Licence	Water Licence MV2023L8-0005

¹ To access the Distribution List, see the LWBs’ Online Review System for [GNWT – INF – Hay River Dredging – Apr18_23](#)

LWBs	Land and Water Boards of the Mackenzie Valley
MVEIRB	Mackenzie Valley Environmental Impact Review Board
MVLWB or Board	Mackenzie Valley Land and Water Board
MVRMA	Mackenzie Valley Resource Management Act
Minister	Minister of the Government of the Northwest Territories – Environment and Climate Change
ORS	Online Review System (https://new.onlinereviewssystem.ca/reviews)
Party	As per the LWB Rules of Procedures , an applicant, a person, or an organization participating in this regulatory process.
Project	Hay River Dredging Project, the undertaking as described in Part A of the Licence
Review Board	Mackenzie Valley Environmental Impact Review Board
SCP	Spill Contingency Plan
Standard Licence Conditions	LWB Standard Water Licence Conditions Template
WMP	Waste Management Plan

2.0 Summary of Application

On April 4, 2023 the Applicant submitted application for a new Licence MV2023L8-0005 (the Application).² The Application is for the dredging of the navigation channel to mechanically excavate a 30m wide and 2.4m deep navigation channel for emergency use, to be completed by local contractors in coordination with GNWT – Marine Transportation Services.

The excavated sediment from the navigation channel will be loaded onto a barge, allowed to passively dewater, and when the barge is at capacity, the sediment would be offloaded to haul trucks located on shore. The haul trucks would transfer the sediment to GNWT-INF property on Vale Island and municipal property in the Town of Hay River, by a sealed truck bed to mitigate further dewatering on roads. The sediment would be temporarily stored at the locations.

The dredging program will include the removal and temporary storage of the following estimated volumes of sediment:

- Dredge Area A: the shipping lanes approaching the outfall to Great Slave Lake to a width of 30m, dredging 16,000m³; and
- Dredge Area B: the three fingers in the East Channel, dredging 68,000m³.

These activities are located within a non-federal area of the Dehcho Region.

In making its decision and preparing these Reasons for Decision, the Board has reviewed and considered:

- 1) The Application as submitted by the Applicant for the Project;

² See MLWB Online Registry www.mvlwb.com for [GNWT – INF – Licence Application – Apr4_23](#)

- 2) The evidence and submissions received by the Board from the Applicant in relation to the Licence; and
- 3) The comments and recommendations, evidence, and submissions received by the Board from Parties during the regulatory proceeding.

3.0 Main Issues Raised During the Regulatory Proceeding

These Reasons for Decision focus primarily on the following key issues raised during the regulatory proceeding.

Issues that were resolved by Parties to the Board's satisfaction during the proceeding are not addressed in detail in these Reasons.

4.0 Regulatory Process

On April 4, 2023, the Applicant submitted the Application and the Application was subsequently deemed complete and circulated to the Distribution List for public review on the Online Review System (ORS).³ Public notice of the Application was published in *News North* during the week of DATE to fulfill paragraphs 43(1)(a) of the [Waters Act](#).⁴

As part of the public review, Board staff requested comments and recommendations to assist with the Board's preliminary screening determination. Board staff also circulated a draft Licence for review with the Application to allow all Parties the opportunity to comment on the specific wording of the draft conditions.

By May 18, 2023, the Board received comments and recommendations regarding the Application from the following Parties: Kátł'odeeche First Nation, Environment and Climate Change Canada. Board staff also submitted comments and questions for the purposes of clarification. On May 25, 2023, the Applicant responded to the Parties' comments and recommendations.⁵

On June 22, 2023, the Board met and made its preliminary screening determination for the Project.⁶

On June 22, 2023, the Board met to make decisions regarding the Application. These decisions and related reasons are described in sections [5.0](#) and [6.0](#) below.

5.0 Legislative Requirements Related to Licence Issuance

This Project is subject to the [MVRMA](#), the [Waters Act](#), and the [Waters Regulations](#) with respect to licensing, because it is located in a non-federal area.

³ See MLWB Online Review System for GNWT – INF – HR Harbour – [New Type B Water Licence – Apr18 23](#)

⁴ See MLWB Online Registry for GNWT- INF – HR Harbour– [Notice of Application – Apr24 23](#).

⁵ See MLWB Online Registry for GNWT – INF – HR Harbour – [Review Summary Table – June22 23](#).

⁶ See MLWB Online Registry for GNWT – INF – HR Harbour – [Preliminary Screening Determination and RFD – June27 23](#).

As per the [Waters Regulations](#), the proposed use of water, and the deposit of waste for this Project require a licence. Accordingly, the Board has jurisdiction to issue the Licence as per section 26 of the Waters Act.

In conducting its regulatory process for the Application (as described in sections [3.0](#) and [4.0](#) above), the Board has ensured that section 62 of the [MVRMA](#) and all applicable legislative requirements have been satisfied as outlined in the subsections below. The Board has considered the people and users of the land and water in the Mackenzie Valley, and any Traditional Knowledge and scientific information that was made available to the Board during the regulatory proceeding, as per section 60.1 of the [MVRMA](#). The consideration of information provided to the Board is discussed in detail below and in sections [6.0](#).

5.1 Consultation, Engagement, and Public Notice

As per paragraph 60.1(a) of the [MVRMA](#), in exercising its authority, the Board must consider the importance of conservation to the well-being and way of life of Indigenous peoples of Canada, specifically those to whom section 35 of the *Constitution Act*, 1982, applies and who use an area of the Mackenzie Valley. Accordingly, the Board works with applicants, affected parties (including Indigenous governments and organizations), and other parties (such as other boards and regulators) to ensure that potential impacts of proposed projects, including impacts on rights under section 35, are understood and carefully considered before decisions are made with respect to the issuance of permits and licences.

The Board's requirements for engagement are set out in the LWB [Engagement and Consultation Policy](#) and [Engagement Guidelines for Applicants and Holders of Water Licences and Land Use Permits](#). The Policy and Guidelines were developed to ensure that the Board's obligations for achieving meaningful consultation (as set out by land claims and applicable legislation) with all affected parties, including Indigenous groups in the Mackenzie Valley, are met and engagement and consultation results clearly articulated. Engagement commenced in February of 2023 and concluded in June of 2023. In accordance with the Policy and Guidelines, the Applicant's engagement efforts and proposed procedures are detailed in the Engagement Record and Plan (Version 1.1), respectively,⁷ submitted with the Application. The Board has approved the Applicant's Engagement Plan (Version 1.0), and the Board's reasons for this decision are described below in [section 6.3](#). Following issuance, the Applicant must continue engagement efforts as outlined in the Engagement Plan, once approved, and as required in the Licence.

The Application was posted to the Board's Public Registry and distributed through the ORS. As the Project is located in the Dehcho Region, the appropriate organizations, governments, First Nations, and Indigenous organizations were included in the Distribution List.⁸ The Distribution List was used throughout this proceeding to circulate submissions, information, and updates relevant to the proceeding; the List

⁷ See MLWB Online Registry for GNWT – INF – HR Harbour – [Engagement Record V1.1 – June2 23](#) and GNWT-INF – HR Harbour – [Engagement Plan V1.0 – Apr4 23](#).

⁸ To access the Distribution List, see the LWBs' Online Review System for GNWT – INF – HR Harbour – [New Type B Water Licence – Apr18 23](#)

was updated if needed, and (if requested) individuals with specific interests in the Project were added. More information about the proceeding for the Application is provided above in [section 4.0](#).

In accordance with sections 63 and 64 of the [MVRMA](#), the Board is satisfied that notice of and access to copies of the Application was provided, and that a reasonable amount of time was given to communities, First Nations, and the public to participate in this proceeding and make submissions to the Board.

In accordance with the Minister of Indian Affairs and Northern Development's 2004 [Policy Direction to the MVLWB regarding the Akaitcho Territory Dene First Nations](#), the Akaitcho Dene First Nation was notified of the Application through the ORS distribution. The Akaitcho Dene First Nation member nations, Kát'odeeche First Nation, participated in the proceeding, and in developing the Licence conditions, the Board considered the information and recommendations provided by these Parties. More detailed information about how this evidence was specifically considered is set out in sections [6.0](#)

5.2 Land Use Plan Conformity

As per section 61 of the [MVRMA](#), where an approved Land Use Plan applies, the Board must confirm conformity with the Land Use Plan before issuing a permit or licence.

No approved Land Use Plans apply in the Project area.

5.3 Water Use Fees

The Applicant is exempt from paying fees for the right to use water as per section 3 of the [Waters Act](#).

5.4 Existing Licences

During the time period established in the Notice of Application, no licensees or applicants contacted the Board to identify potential effects from the Project on other projects, and there are no other applicants with precedence. Accordingly, with respect to paragraph 26(5)(a) of the [Waters Act](#), the Board is satisfied that issuing the Licence to the Applicant will not adversely affect, in any significant way, any existing licensee or any other applicant, provided the Applicant complies with the conditions of the Licence.

5.5 Compensation to Existing Water Users

Paragraph 26(5)(b) of the [Waters Act](#) prohibits the issuance of the Licence unless the Board is satisfied that appropriate compensation has been or will be paid by the Applicant to persons who would be adversely affected by the deposit of waste proposed by the Applicant, at the time when the Applicant filed the Application with the Board.

The Board received no claims for compensation either during the time period established in the Notice of Application, or during the remainder of the proceeding. Provided the Applicant complies with the Licence conditions, the Board is satisfied there are no water users or persons listed in paragraph 26(5)(b) of the [Waters Act](#) who will be adversely affected by the proposed deposit of waste.

5.6 Water Quality Standards

With regards to subparagraph 26(5)(c)(i) of the [Waters Act](#), no water quality standards have been prescribed in the [Waters Regulations](#); however, the LWB [Waste and Wastewater Management Policy](#) applies to the Licence, and the primary objective of the Policy is “protection of water quality in the receiving environment.” The Board is satisfied that the conditions set out in the Licence are consistent with the Policy and compliance with these conditions will ensure that waste will be managed and disposed of in a manner that will be protective of water quality in the receiving environment. These conditions and detailed rationale are described in [section 6.7](#) (Licence).

5.7 Effluent Quality Standards

The Project does not entail the disposal of effluent, so subparagraph 26(5)(c)(ii) of the [Waters Act](#) does not apply.

5.8 Financial Responsibility

Under paragraph 26(5)(d) of the [Waters Act](#), before the Board can issue the Licence, it must be satisfied that the Applicant’s financial responsibility is adequate to complete the Project, including any required mitigation measures, and the closure and reclamation of the site.

The Applicant is a public government, and the Board is confident that the Applicant is capable of meeting any financial obligations set out in the [Waters Act](#) and Licence.

As a result, and for the reasons set out above, the Board is satisfied that the legislated requirement to establish the financial responsibility of the Applicant for the Project has been met.

5.9 Minimization of Adverse Effects

With regards to subsection 27(2) of the [Waters Act](#), the Board must ensure that the Licence conditions minimize potential adverse effects on other water and land users from the proposed use of water and deposit of waste. As discussed above in [section 5.1](#), the Applicant conducted pre-application engagement, and the Board also provided opportunities for potentially affected parties to make submissions to the Board during the regulatory proceeding. The Board did not receive notice of potentially adverse effects on other users of the water and lands in the Project area.

Regardless, as noted above in sections 5.9 and 5.10, and as detailed in [section 6](#), the Board has set conditions in the Licence to regulate waste management for the purpose of protecting the receiving environment. Additionally, as described in [section 6.5](#), based on the evidence, the Board has set conditions regarding the use of water for the Project, including limitations on the sources and volumes of water the Licensee can use. It is the opinion of the Board that compliance with the Licence conditions that have been set to protect the water sources and the receiving environment will also minimize any potential adverse effects on other water and land users in the Project area.

5.10 Time Limit

As required under section 48(1) of the [Waters Act](#), the Board made its decision on the Licence within nine months after receiving the complete Application.

5.11 Environmental Review (Part 5 of the MVRMA)

5.11.1 Preliminary Screening

On June 22, 2023, the Board met and determined that the Project is being proposed in response to an emergency to protect property and that it is in the interest of public welfare, health, and safety. Accordingly, the Board has determined that the Project is exempt from preliminary screening under paragraph 119(b) of the MVRMA. Consequently, no preliminary screening was conducted.⁹

The Board is satisfied that the requirements of Part 5 of the [MVRMA](#) have been met for the Project.

6.0 Decision – Water Licence MV2023L8-0005

Having due regard to the facts, circumstances, and the merits of the submissions made to it, and to the purpose, and provisions of the [MVRMA](#) and the [Waters Act](#), the Board has determined that Licence MV2023L8-0005 should be issued, subject to the scope, defined terms, conditions, and term contained therein. The Board's determinations and reasons for this decision are set out below.

The Licence has been developed to address the Board's statutory responsibilities; to protect the receiving environment and minimize potential adverse effects on other water users; and to address issues within the Board's jurisdiction that were identified and investigated during the regulatory proceeding.

In developing the Licence, the Board considered the LWB [Standard Water Licence Conditions Template](#) (Standard Licence Conditions) and included a number of these standard conditions that are relevant to the Project. As noted in [section 4.0](#), Board staff circulated a draft Licence for review to allow Parties to provide specific input to the Board on possible conditions, and the Board considered these review comments and recommendations in making its determination on the Licence conditions.

The Standard Licence Conditions have been established by the Land and Water Boards (LWBs) based on information from LWB policies and guidelines, other applicable guidelines and best practices, meetings with Inspectors, input from LWB staff, and feedback from a public review. Each standard condition has been evaluated against the following characteristics of an ideal condition:

- Clearly part of LWBs' authority;
- Has a clear purpose and rationale;
- Is practical and enforceable; and
- Does not conflict with existing legislation (i.e., is not less stringent).

⁹ See MLWB Online Registry for GNWT – INF – HR Harbour – [Preliminary Screening Determination and RFD – June27 23](#)

The Standard Licence Conditions include general rationale for each standard condition, and as such, the language of any standard condition included in the Licence is only discussed in detail in the following sections of these Reasons for Decision when it specifically relates to concerns or recommendations raised during the regulatory proceeding. The Board's reasons for developing and including Project-specific conditions, including discussion of any concerns and recommendations raised regarding these conditions, are detailed in the relevant sections below.

6.1 Term of Licence

The Applicant has applied for a term of five years for the Licence. Subsection 26(2) of the [Waters Act](#) allows for a licence term of not more than 25 years for a type B licence. After reviewing the submissions made during this regulatory process, the Board has determined an appropriate term for the Licence is five years.

6.2 Part A: Scope and Defined Terms

Part A of the Licence contains the scope and the defined terms used throughout the Licence.

6.2.1 Scope

The scope of the Licence is written to ensure the Licensee is entitled to conduct activities which have been applied for and have been subject to Part 5 of the [MVRMA](#). In setting out the scope of the Licence, the Board endeavoured to provide enough detail to identify and describe the authorized activities, without being unduly restrictive or prescriptive, and to allow for Project flexibility, as contemplated in the Application, throughout the term of the Licence.

Based on the activities described in the Licence Application and on the scope outlined in the Standard Licence Conditions, the Board included a draft scope in the draft Licence that was circulated for public review. The Board did not receive any comments or recommendations regarding the draft scope during the proceeding, so the Board accepted it as the scope of the Licence.

The conditions in Part A are consistent with the Standard Licence Conditions. These conditions ensure that the scope of the authorization includes all deposits of waste associated with the Project, and also clarify that the Licensee must comply with applicable legislation, including any changes to legislation that are deemed to automatically amend the Licence.

6.2.2 Defined Terms

The Board defined certain terms in the Licence to ensure a common understanding of the conditions, to avoid future differences in interpretation of the Licence, to reflect Project-specific evidence, and to support consistency across licences and permits issued by the LWBs. For the most part, the Board selected applicable defined terms relevant to the Project from the Standard Licence Conditions. Where appropriate, the Board created new defined terms, modified standard wording, or used Project-specific definitions to reflect the evidence as described below:

- **Dredged Material** was included because it is specifically related to this Project. This definition was required for the definition of Temporary Storage Areas and is referred to in the TEMPORARY STORAGE SITES – REUSE CRITERIA, TEMPORARY STORAGE SITES – DREDGED MATERIAL SAMPLING REQUIREMENTS Conditions.

6.3 Part B: General Conditions and Schedule 1

Part B of the Licence primarily contains general administrative conditions regarding implementation of the Licence, and compliance with the Licence conditions, Board directives, and LWB policies and procedures. This section also details compliance requirements and review and revision procedures for submissions required under the Licence. These conditions are consistent with the Standard Licence Conditions and are applicable to all licences.

PART B: COMPLY WITH SURVEILLANCE NETWORK PROGRAM and Schedule 1

A Surveillance Network Program (SNP) is set out in Schedule 1 of the Licence. The SNP details the sampling and monitoring requirements related to compliance with several conditions in the Licence. Requirements for measuring flows, volumes, and meteorological data are based on standard licence conditions as are the reporting requirements. The Board can update the SNP in accordance with UPDATES TO SCHEDULES AND COMPLIANCE DATE(S) Condition.

The Application included the Project's proposed monitoring in the Monitoring Plan.¹⁰ Board staff drafted a licence to include the six (6) sump locations adjacent to the Temporary Storage Areas as SNP locations. No comments were received regarding the locations and parameters required for sampling. The Project includes other monitoring, but is operational in nature (i.e. real-time monitoring during dredging operations) and is more appropriately administered through the approval of the Monitoring Plan.

During the public review of the Application, Board staff requested the exact locations of the SNP stations. In response, GNWT-INF indicated that Sump locations will be determined during site preparation and before the Dredged Material is deposited. The Sump location will be determined based on truck access, and will depend on the natural grade of the property to allow for the water to pool towards the Sump. GNWT-INF committed to provide these locations 10 days prior to the commencement of dredging.¹¹ Therefore, Staff included the SURVEILLANCE NETWORK PROGRAM - STATION LOCATIONS Condition in Part F of the Licence.

Part B: UPDATES TO SCHEDULES AND COMPLIANCE DATES

Compliance dates are included in the Licence conditions for various submissions and other requirements, and Schedules are appended to the Licence to set out the detailed requirements associated with specific conditions in the main body of the Licence. The purpose of the Schedules is to provide greater clarity and to aid in interpretation of Licence conditions.

¹⁰ See MVLWB Online Registry for [Hay River Harbour Restoration Monitoring Plan – Apr3 23](#).

¹¹ See MLWB Online Registry for GNWT – INF – HR Harbour – [Review Summary Table – June22 23](#), MVLWB Staff Comment 12.

This standard Condition is included in the Licence to clarify that the Board may, at its discretion, update compliance dates and the Schedules and that such updates are not considered amendments to the Licence, unless otherwise directed by the Board. Such updates may be requested by the Licensee in writing at least 90 days in advance, or may be initiated by the Board based on the information available to it, and will undergo the Board's public review process before being considered by the Board.

Part B: ANNUAL WATER LICENCE REPORT and Schedule 1

The requirements for the Annual Water Licence Report are outlined in the ANNUAL WATER LICENCE REPORT Condition, and Schedule 2, Condition 1. The purpose of the Annual Water Licence Report is to provide the Board and all interested parties the opportunity to be annually updated on Project components and activities and compliance with Licence conditions, and to provide a platform for interested parties to submit comments, observations, feedback, and questions as necessary. The Report is also an important tool for evaluating the effectiveness of the Licence conditions.

In establishing the Annual Report requirements in the Licence, the Board primarily included requirements from the Standard Licence Conditions that are applicable to the Project and reflect the Licence conditions. All of these requirements are intended to provide clarity and summarize information already captured through existing submissions; they are not meant to be onerous. The Board organized these requirements to coincide with the layout of the Licence and to be consistent with the Standard Licence Conditions.

For clarity, Annual Water Licence Reports are required each year, regardless of whether the Licensee has conducted any activity during the reporting year.

Part B: ENGAGEMENT PLAN

The Board assesses engagement adequacy through the LWB [Engagement and Consultation Policy](#) and [Engagement Guidelines for Applicants and Holders of Water Licences and Land Use Permits](#). In accordance with the Policy and Guidelines, the Applicant included an Engagement Record and Plan in the Applications,¹² and these documents were distributed for public review with the Application.

During the public review of the Application, KFN raised concerns about their economic benefit from the Project.¹³ GNWT-INF indicated that there are ongoing discussions between GNWT-INF and KFN regarding economic benefits of the project, and included an updated Engagement Log with their response.¹⁴

¹² See MVLWB Online Registry for MV2023L8-0005 – GNWT-INF - [Hay River Harbour – Engagement Plan – Apr4_23](#).

¹³ See MVLWB Online Registry for MV2023L8-0005 – GNWT-INF - See MLWB Online Registry for GNWT – INF – HR Harbour – [Review Summary Table – June22_23, KFN Comment 3](#).

¹⁴ See MVLWB Online Registry for MV2023L8-0005 – GNWT-INF - [Hay River Harbour - Consultation and Engagement Log - June2_23](#).

The Board has approved the Engagement Plan, Version 1 because it meets the requirements of the Policy and Guidelines and is appropriate for the Project activities.

6.4 Part C: Conditions Applying to Security Requirements

The Board did not include security requirements in the Licence. As per section 94 of the [MVRMA](#), territorial and federal governments are not required to post security for permits. Although this exemption does not include licences, it is Board practice to not require security for a water licence when the applicant is the territorial and federal government, as the liability with respect to the undertaking already rests with the government. The Board is satisfied that the Licensee will be accountable for carrying out closure and reclamation even though a security deposit is not required.

6.5 Part D: Conditions Applying to Water Use

The Project does not require the use of Water; therefore, Part D of the Licence was intentionally left blank.

6.6 Part E: Conditions Applying to Construction

Part E of the Licence contains conditions applying to Construction activities for the Project. These are consistent with the Standard Licence Conditions.

6.7 Part F: Conditions Applying to Waste and Water Management

Part F of the Licence contain conditions applying to Waste and Water management activities for the Project. These are consistent with the Standard Licence Conditions. Project-specific conditions were developed where necessary.

Part F: WASTE MANAGEMENT PLAN

All applicants must submit detailed waste management information, identifying all types of waste that will be produced by the project (including quantity and quality) and describing the disposal methods that are proposed for each type of waste. For most applicants, this will be in the form of a Waste Management Plan, developed in accordance with the LWB [Guidelines for Developing a Waste Management Plan](#), and licences and permits will include standard conditions regarding compliance with the Plan, as approved by the Board. The Guidelines can be applied to a wide range of projects and are intended to ensure that all waste management activities are carried out in a way that is consistent with best practices and applicable guidelines to minimize waste released from a project.

The Licensee included a Waste Management Plan in the Applications.¹⁵ The Board considered this Plan as part of the Application Package.

¹⁵ See MVLWB Online Registry for [Hay River Harbour Waste Management Plan – Apr 23](#).

During the public review of the Application, no concerns were raised regarding the Waste Management Plan.

The Board has approved the Waste Management Plan, Version 1 because it meets the requirements of the Guidelines and is appropriate for the Project activities.

Part F: MONITORING PLAN

GNWT-INF submitted a Monitoring Plan with the Application.¹⁶ During the public review, several review comments were submitted regarding the Plan. In response to comments, GNWT-INF made commitments to revise the Monitoring Plan with additional information.¹⁷

Board staff included a Schedule of requirements for the Monitoring Plan in the draft Licence that was publicly reviewed; however, based on the additional information provided by GNWT-INF in response to comments, the Board has chosen not to include these Schedule requirements in the Licence.

In addition to these Plan updates, GNWT-INF committed to submitting a TSS-turbidity curve (MVLWB Comment 7) and exact Sump locations (MVLWB Comment 12) prior to commencing dredging activities. Therefore, the Board included the SURVEILLANCE NETWORK STATION LOCATIONS and TSS-TURBIDITY CURVE conditions in Part F of the Licence.

Based on the Applicant's responses to public comments, and the additional information provided by GNWT-INF, the Board has chosen to approve the Monitoring Plan, but requires that the Licensee revise the Plan and submit Version 1.1 within 90 days of the effective date of the Licence, to reflect the updates agreed to in the public review. This will include:

- Updating Section 3.3.2 and Table 3-3 to include PHCs and BTEX (MVLWB Comment 8, 9);
- Updating Section 4.1 of the Monitoring Plan to include additional text to clarify action levels (MVLWB Comment 10); and
- Updating the Plan to include the sampling method that will be used for Dredged Material in the Temporary Storage Areas (MVLWB Comment 11).

Version 1.1 shall be submitted to the Board, for confirmation of conformity from Board staff. The Licensee may not commence the activities described in the Plan until the Plan has been approved.

¹⁶ See MVLWB Online Registry for [Hay River Harbour Restoration Monitoring Plan – Appr3 23](#).

¹⁷ See MVLWB Online Registry for GNWT – INF – HR Harbour – [Review Summary Table – June22 23](#), MVLWB Staff Comments 7-12, ECCC Comments 1, 3 and 4.

Part F: SEDIMENT AND EROSION CONTROL PLAN

GNWT-INF submitted a Sediment and Erosion Control Plan with the Application.¹⁸ During the public review, several review comments were submitted regarding the Plan. In response to comments, GNWT-INF provided additional information and made commitments to revise the Sediment and Erosion Control Plan with additional information.¹⁹

Both Board staff and ECCC asked GNWT-INF about not using a barrier as a mitigation for the main dredging opportunity, on which GNWT-INF provided further rationale.²⁰ The Sediment and Erosion Control Plan referenced two Department of Fisheries and Oceans Canada (DFO) guidance documents, *Measures to Avoid Causing Harm to Fish and Fish Habitat*²¹ and *Code of Practice: Routine Maintenance Dredging for Navigation*²², which both recommend installing/maintaining effective erosion and sediment control measures for the type of work proposed by this Project. When asked by Board staff if the Department of Fisheries and Oceans Canada (DFO) had approved GNWT-INF's decision and rationale to not use curtains for dredging, GNWT-INF indicated that DFO will provide their Letter of Advice following the decision of the LWB, but has been engaged regarding GNWT-INF's construction approach.²³ Because direct harm to fish, as well as harm to fish habitat falls under the jurisdiction of the Department of Fisheries and Oceans Canada, the Board understands that the Project cannot proceed without DFO's approval following the Board's decision on the issuance of this Licence.

Based on the additional information included in the Applicant's responses, and in consideration of additional regulatory oversight by DFO through their Letter of Advice, the Board has chosen to approve the Sediment and Erosion Control Plan, but requires that the Licensee revise the Plan and submit Version 1.1 within 90 days of the effective date of the Licence, to reflect the updates agreed to in the public review. This will include:

- Including the information submitted in response to MVLWB Comments 2 and 3; and
- Updating Table 2-1 to refer to Section 4.1 of the Monitoring Plan (MVLWB Comment 5).

Version 1.1 shall be submitted to the Board, for confirmation of conformity from Board staff. The Licensee may not commence the activities described in the Plan until the Plan has been approved.

¹⁸ See MVLWB Online Registry for [Hay River Harbour - Sediment and Erosion Control Plan - Apr4 23](#).

¹⁹ See MLWB Online Registry for GNWT – INF – HR Harbour – [Review Summary Table – June22 23](#), MVLWB Staff Comments 1-6, ECCC Comment 5.

²⁰ See MLWB Online Registry for GNWT – INF – HR Harbour – [Review Summary Table – June22 23](#), MVLWB Staff Comments 1-6, ECCC Comment 5.

²¹ Department of Fisheries and Oceans Canada [Measures to Avoid Causing Harm to Fish and Fish Habitat](#).

²² Department of Fisheries and Oceans Canada [Code of Practice: Routine Maintenance Dredging for Navigation](#).

²³ See MLWB Online Registry for GNWT – INF – HR Harbour – [Review Summary Table – June22 23](#), MVLWB Staff Comment 3.

Effluent Quality Criteria

The Board's approach to managing the deposit of waste to the receiving waters through water licence conditions is described in the LWB [Waste and Wastewater Management Policy](#).

Part F: EFFLUENT QUALITY CRITERIA

The Licence does not include Effluent Quality Criteria. This section is therefore intentionally left blank.

6.8 Part G: Conditions Applying to Aquatic Effects Monitoring Program

This section of the Licence was intentionally left blank.

6.9 Part H: Conditions Applying to Contingency Planning

Part H of the Licence contains conditions related to spill contingency planning and reporting, reclamation of spills and unauthorized discharges, and emergency response for the Project. These conditions are consistent with the Standard Licence Conditions.

Part H: SPILL CONTINGENCY PLAN

All applicants must describe spill contingency planning. For most applicants, this will be in the form of a Spill Contingency Plan (SCP), developed in accordance with the INAC [Guidelines for Spill Contingency Planning](#), and licences and permits will include standard conditions regarding compliance with the Plan, as approved by the Board.

The Licensee included a SCP in the Applications.²⁴ The Board considered this Plan as part of the Application Package.

The Board has approved the SCP, Version 1 because it meets the requirements of the Guidelines and is appropriate for the Project activities.

6.10 Part I: Conditions Applying to Closure and Reclamation

Part I of the Licence contains a condition applying to closure and reclamation, including progressive reclamation of the Project.

For the scale and duration of this Project, the Board decided that a stand-alone Closure and Reclamation Plan was not required, and the management and monitoring practices outlined in the Waste Management Plan, Monitoring Plan and Spill Contingency Plan were sufficient. The Licence includes a Condition regarding Closure and Reclamation; the PROGRESSIVE RECLAMATION Condition is similar to that issued for a similar Project (MV2019L8-0014).

²⁴ See MVLWB Online Registry for [Hay River Harbour Spill Contingency Plan – Apr4 23](#).

6.11 Attachment A: Concordance Table of Submissions

Attachment A of the Licence contains a table that summarizes the submissions required by the Licence conditions.

6.12 Attachment B: Revision History Table

Attachment B of the Licence contains a table which identifies updates and tracks changes made to the Licence. This table is currently blank because this is a new Licence, but it will be updated throughout the life of the Licence.

7.0 Conclusion

Subject to the scopes, definitions, conditions, and terms set out in the Licence, and for the reasons expressed herein, the MVLWB is of the opinion that the activities, waste disposal associated with the Project can be completed by the Government of the Northwest Territories – Department of Infrastructure while providing for the conservation, development, and utilization of waters in a manner that will provide the optimum benefit for all Canadians and in particular for the residents of the Mackenzie Valley.

Water Licence MV2023L8-0005 contains provisions that the Board deems necessary to ensure and monitor compliance with the MVRMA, *Waters Act*, and the Regulations made thereunder, and to provide appropriate safeguards in respect of Government of the Northwest Territories – Department of Infrastructure’s use of the water as authorized by the Licence.

SIGNATURE



Tanya MacIntosh, Chair
Mackenzie Valley Land and Water Board

June 27, 2023

Date

Reviewer Comments and Proponent Responses

Project: HR Harbour

Board: Mackenzie Valley Land and Water Board

Organization: GNWT-INF (Infrastructure)

No.	Topic	Reviewer Comment	Reviewer Recommendation	Proponent Response	Board Decision
Katloodeeche First Nation (KFN) - Peter Redvers					
1	Traditional fishery	KFN harvesters are concerned about the project interfering with the whitefish spawn in late August / September as they traditionally harvest actively from late August through September.	Start the dredging earlier, in late June and dredge at the mouth of the river first to avoid the spawning time.	See response to ID 2, below. In addition, GNWT-INF will endeavor to sequence the work such that dredging in the outfall area is prioritized for completion by early September, and focus dredging in the three Fingers in the remaining window until mid-September.	Noted.
2	General	Please see recommendation	Do not carry out any main channel dredging after the third week in August, as it may affect the passage of whitefish into upstream spawning grounds, but KFN would support the dredging starting as early as mid-June to in order to minimize work in the early fall. Dredging in the side channels on the west side of the East Channel can continue into early September, however, with appropriate monitoring.	Impacts to the whitefish spawning migration are unlikely to occur during the proposed dredging timeline (mid-July to mid-September) for the following reasons: - Dredging in the Hay River will occur within a side channel and mooring channels (called the Fingers). The Fingers are not connected to the Hay River at the upstream extent and cannot be used for upstream fish passage. Therefore, fish passage through the main channel of the Hay River will not be impacted by dredging in these areas. - Dredging of the emergency navigation channel at the outfall of the River will occur where the mouth of the Hay River is approximately 1 km wide and will extend 1 km into Great Slave Lake. The local in-water disturbance area of an excavator operating from a barge (i.e., the excavator bucket) represents a fraction of the total area for fish movement. Fish movement around dredging operations is expected to be unimpeded. - Dredging operations will occur during normal daytime operating hours and halt	Noted.

No.	Topic	Reviewer Comment	Reviewer Recommendation	Proponent Response	Board Decision
				overnight. This will give fish a window of time to move through the Hay River without disturbance. - No instream activities will occur in the West Channel, providing a secondary fish passage corridor. Despite our analysis indicating impacts to whitefish spawning migration are unlikely to occur, INF will endeavor to sequence the work such that dredging in the outfall area is prioritized for completion by early September, as discussed during our consultation sessions. INF will focus dredging in the three Fingers in the remaining window until mid-September.	
3	Economic Benefits	KFN is concerned that this work will be done without direct economic benefit to KFN entities and members.	Break project down into manageable economic units; notify KFN well in advance of any tendering; require First Nation involvement in tender submissions; allow KFN right of refusal to dredged materials, including possible storage of material on KFN Reserve lands.	Discussions have occurred between GNWT and KFN about this topic and are ongoing. The GNWT-INF understands that this topic is outside the LWB process for a water licence application.	Noted.
4	General	Please see recommendation	KFN expects to be involved in aquatic monitoring during the dredging operation given its concerns about the potential impact on the traditional fishery that takes place in August and September just upstream and offshore of the mouth of the Hay River.	Discussions have occurred between GNWT and KFN about this topic and are ongoing. The GNWT-INF understands that this topic is outside the LWB process for a water licence application.	Noted.
5	Environmental Monitoring	KFN is concerned about operational impacts on the environment.	Engage KFN directly in project monitoring activities.	GNWT has engaged and consulted KFN about this topic and will continue to do so.	Noted.
6	General	Please see recommendation	KFN expects to have economic involvement in the project and is	Discussions have occurred between GNWT and KFN about this topic and are ongoing. The	Noted.

No.	Topic	Reviewer Comment	Reviewer Recommendation	Proponent Response	Board Decision
			seeking reasonable commitments from the Department of Infrastructure regarding KFN involvement, which may include access to the dredged materials.	GNWT-INF understands that this topic is outside the LWB process for a water licence application.	
MVLWB - Heather Scott					
1	Sediment and Erosion Control Plan, Control Measures	Both the DFO Measures to Avoid Causing Harm to Fish and Fish Habitat and Code of Practice: Routine Maintenance Dredging for Navigation recommend installing/maintaining effective erosion and sediment control measures for this type of work. The Sediment and Erosion Control Plan does not indicate that any screens or curtains will be used while dredging material from the lakebed. The Plan indicates that fine sediment will largely be filtered during passive dewatering on the barge, but that a curtain is not considered essential for dredging these areas. Foreseeably, fine sediment will be released to the lake during lake dredging without a physical partition in place.	Has DFO approved GNWT-INF's decision and rationale to not use curtains for dredging?	Based on the strong currents, lower water levels, and high ground, curtains are not expected to be effective and would likely cause more turbidity due to dragging along the bottom of the riverbed. Using turbidity curtains in an area with currents results in the curtain being pushed into the dredging area. In addition, based on the narrow transportation channel in Area B, the curtain would disrupt boat traffic. The considerations for not using a curtain for dredging are discussed in Section 3 of the SECP. DFO will provide their Letter of Advice following the decision of the LWB, but has been engaged regarding INF's construction approach.	Noted.
2	Sediment and Erosion Control Plan, Control Measures	Page 12 indicates that silt fencing or berms will be installed "as necessary to protect riparian areas, watercourses, and other sensitive habitat along the transportation route".	Can GNWT-INF be more specific about what areas/operations will use fencing or berms? How will GNWT-INF decide if an area requires silt fencing or berms?	The sediment transportation route begins on the water, to the offloading point, along the trucking route, and terminates at the stockpile properties. Silt fencing will be installed in areas where sediment or erosion potential may occur and deposit in water. Competent environmental monitors will assess and adapt as required to minimize environmental impacts. This is described further in Table 2-1 of the SECP. Barges will have geotextile for filtration around the perimeter to mitigate additional TSS from entering the water during	Noted. The Board requires GNWT-INF to update the SECP to include additional information provided in response.

No.	Topic	Reviewer Comment	Reviewer Recommendation	Proponent Response	Board Decision
				passive dewatering. -The offloading point will have silt fencing to allow the movement of water while mitigating sediment from entering the water -The truck transportation route is expected to have negligible impacts because the truck beds will be sealed, so that water will not flow out the back during transportation (SECP Section 4.3.1). -The perimeter of all the stockpiles will be bermed to contain any potential water runoff.	
3	Sediment and Erosion Control Plan, Control Measures	Page 12 also indicates that silt fencing or berms will be installed "as necessary to trap sediment-laden water and prevent it from re-entering watercourses while sediment is offloaded by excavator from the barge to haul truck located on the shore".	Can GNWT-INF be more specific about what areas/operations will use fencing or berms? How will GNWT-INF decide if an area requires silt fencing or berms?	See response to ID 2, above.	Noted. The Board requires GNWT-INF to update SECP to include additional information provided in response.
4	Table 2-1, Sediment and Erosion Control Plan	Regarding action levels, Table 2-1 is never specific about what level of turbidity at what location constitutes low, medium and high action levels.	Can GNWT-INF be more specific about their determination of signs of sedimentation/turbidity as "minor" versus "present" outside working areas versus "uncontained" sedimentation/turbidity levels? Where will these measurements be conducted?	Determining signs of sedimentation/turbidity will be conducted as follows: - control points for sediment and turbidity are on the barge, the offloading point, and the stockpile properties. These will be visually inspected and monitored as per Section 2.5 of the SECP, which will inform the levels of containment. -monitoring will be conducted in the receiving waters, and the response framework is outlined in Section 4.1 of the Monitoring Plan.	Noted
5	Table 2-1, Sediment and Erosion Control Plan	As above.	Can GNWT-INF be more specific in Table 2-1 and relate the action levels to the turbidity monitoring proposed in the Restoration Monitoring Plan?	The response framework for turbidity monitoring in the receiving waters is presented in Section 4.1 of the Monitoring Plan. This particular monitoring represents one of the SEC points in the project, as referenced in ID 4. INF will add reference to this in Table 2-1 of the SECP.	The Board requires GNWT-INF to update the SECP to include additional information provided in response
6	Sediment and Erosion	Section 4.0 states that once the dredged material is deposited at a storage site, it will no longer be considered sediment.	To align the Plan (and all other Plans submitted by the Project) with the definitions in the Water	All of the plans describe the material as sediment that is dredged. Once removed from the river, it is classified as soil. The	Noted.

No.	Topic	Reviewer Comment	Reviewer Recommendation	Proponent Response	Board Decision
	Control Plan, Dredged Material		Licence, can GNWT-INF refer to this material as dredged material until it is deemed appropriate for use elsewhere?	rationale is to compare the results of the analysis to soil criteria rather than sediment criteria, given the pathways and receptors on-land are different than those below water and which are important determinants for establishing criteria. INF can change the terminology in the Management Plans to refer to it as 'dredged material', though will continue to apply soil criteria for sampling purposes.	
7	Restoration Monitoring Plan, TSS-Turbidity Correlation Curve	Section 3.1.2 states: Before dredging, two 20 L grab samples will need to be collected at each location to create a TSS-turbidity correlation curve following the standard operating procedures outlined in Appendix B. Samples will be collected by an environmental monitor at least 2 weeks before the start of dredging to allow for adequate time for analysis at locations A1 and B1 (sites will be representative of Dredge Area A and Dredge Area B, respectively). This curve is required as standard industry sensors record only provide turbidity units, while historical data (historical locations are shown in Figure 3-1) and guidelines for TSS were reported in milligrams per litre. Board staff understand that this will be important information should Inspectors wish to observe on-site activities and operational turbidity monitoring.	Can GNWT-INF submit the TSS-turbidity curve to the Board for posting on the public registry, once derived?	The TSS-turbidity curve can be sent to the LWB for posting on the public registry when it is derived.	Noted. The Board requires GNWT-INF to submit a TSS-turbidity curve for posting on MVLWB Registry.
8	Operational and SNP Monitoring, Hydrocarbons	Section 3.3.2 of the proposed Restoration Monitoring Plan states that the dredged materials will be tested for polycyclic aromatic hydrocarbons, whereas Table 3-3 lists the testing of "hydrocarbons" for several locations, including the sumps. In	Can GNWT-INF comment on the proposed requirement for SNP monitoring of hydrocarbons in the sumps in the draft Water Licence? Are all parameters appropriate? Why or why not?	The monitoring and management of soil and water on the stockpile properties are captured in both the SECP and the Monitoring Plan, but we see that some clarifications and edits are required, which are presented below. The soil (dredged material) placed in	Noted. The Board requires GNWT-INF to update the Monitoring Plan with the information provided in the response.

No.	Topic	Reviewer Comment	Reviewer Recommendation	Proponent Response	Board Decision
		the draft Water Licence prepared by Board staff, hydrocarbons, including Fraction 1 (C1 – C10) Fraction 2 (>C10-C16), Fraction 3 (>C16-C34), Fraction 4 (>C34), and BTEX (Benzene, Toluene, Ethylbenzene, and Xylene), are required.		the stockpile properties will be sampled and analyzed for a full suite of parameters to inform end-use, for example for commercial or residential use for fill or as landfill capping material, etc. This will include geophysical parameters, and general chemistry, metals, PHCs, BTEX, PAHs for comparison to the GNWT Guideline for Contaminated Site Remediation. Action: Section 3.3.2 and Table 3-3 of the Monitoring Plan will be updated to include PHCs and BTEX to fully inform end-use options. The soil (dredged material) will be placed on the stockpile properties after dewatering on the barges for several hours. It is expected the material will have a low water content and will be the consistency of oatmeal by the time it is placed on the stockpile sites. The on-going dewatering processes at the stockpile properties will occur primarily through evaporation and infiltration to ground. GNWT-INF does not expect water to collect in the sumps as they are included in the project as a contingency measure in the event of high precipitation events. Excess water is not expected to collect on the sites; however, the stockpiles will be 30m or further from the river, and will be constructed with both berms and a sump as a management approach to contain any potential run-off and prevent potential TSS from re-entering the Hay River. Furthermore, preliminary chemical analysis of sediment samples from the dredge areas are within applicable criteria. - If water is present in the sumps, it will be collected weekly and monitored for a suite of parameters that will reflect the same parameters as those from the stockpile	

No.	Topic	Reviewer Comment	Reviewer Recommendation	Proponent Response	Board Decision
				<p>monitoring. It is possible that there will be insufficient water for monitoring purposes, however, if sufficient volumes are present for sampling, this information will be used for validation purposes only, as per Section 3.2.1 of the Monitoring Plan, to inform what is returning to source via infiltration and to inform adaptive management if required. Action: Section 3.2.2 and Table 3-3 of the Monitoring Plan will be updated to include PAHs, such that the suite aligns with the stockpile soil sampling. - If excessive water is found to be collecting in any of the stockpile sites resulting in sumps reaching capacity, from either significant precipitation events or slow infiltration, adaptive management measures will be enacted. This may include a temporary slow-down of new soil (dredged materials) being brought to site or redirection of new soil to alternate stockpile sites, until such time as the water infiltration rate has caught up and sump water levels have gone down. In the unlikely event that sump pump-off is required, then efforts will be made to ensure it is discharged to a vegetated area or is otherwise controlled so that no inadvertent run-off of TSS to the Hay River occurs. Any sump pump-off or discharge will be conducted with the approval and oversight of an Inspector. Action: Section 4 in general and specifically section 4.1.3 of the SECP will be updated to reflect the management approach for excessive water in a sump. - Monitoring turbidity levels in the sumps are currently captured in section 4.1.3 of the SECP. TSS levels in the sumps will only be relevant in the situation of excessive</p>	

No.	Topic	Reviewer Comment	Reviewer Recommendation	Proponent Response	Board Decision
				water levels in the sumps, and the unlikely event of pursuing sump pump-off, as the Inspector may wish to understand this information prior to discharge. Action: Update section 4.1.3 of the SECP to capture TSS monitoring as and when for adaptive management purposes.	
9	Operational and SNP Monitoring, Hydrocarbons	As above.	Can GNWT-INF indicate what hydrocarbons will be monitored, being more specific for each location in Table 3-3?	See response to ID 8, above. We will update Table 3-3 to reflect this.	Noted. The Board requires GNWT-INF to update and submit Monitoring Plan according to response.
10	Restoration Monitoring Plan, Response Framework	Section 4.1 indicates that a maximum increase of 25 mg/L from background concentrations when background concentrations are between 25 and 250 mg/L; and a maximum increase of 10% of background levels when background is >250 mg/L. It further explains what response actions will take place should an exceedance be detected.	How do these action levels and responses relate to the low, medium and high action levels proposed in the Sediment and Erosion Control Plan?	The action levels discussed associated with TSS in the Response Framework in the Monitoring Plan are the same as the "high" action level responses in the SECP. The SECP states that "high" action level occurs when sediment control measures have failed. The detection of an increase of TSS, as described in Section 4.1 of the Monitoring Plan would indicate that the sediment control has failed. Additional text will be added to clarify action levels in the Monitoring Plan.	Noted. The Board requires GNWT-INF to update and submit Monitoring Plan according to response.
11	Restoration Monitoring Plan, Stickpile Monitoring	Section 4.3 states that the soil (dredged material) must meet applicable standards based on the GNWT's Guidelines for Contaminated Sites Remediation (GNWT 2003) for residential or parkland, and commercial land uses, but does not indicate how the dredged material will be sampled. Board staff note "Section 6.5 Removal of Treated Soil" from the Guideline for the Design, Operation, Monitoring, Maintenance and Closure of Petroleum Hydrocarbon-Contaminated	Can GNWT-INF clarify how the dredged material will be sampled?	The dredged material will be sampled based on the BC and Alberta Contaminated Sites regulations (CSR) field sampling guidance, whereby one composite soil sample consisting of 10 to 20 sub-samples is collected per 250 m3. Sub-samples will be taken throughout stockpiles at varying depths to assess whether any stratification of the constituents exists. Additional samples may need to be collected based on the results acquired throughout the program. This	Noted. The Board requires GNWT-INF to update and submit Monitoring Plan according to response.

No.	Topic	Reviewer Comment	Reviewer Recommendation	Proponent Response	Board Decision
		Soil Treatment Facilities in the Northwest Territories (2020). https://mvlwb.com/sites/default/files/guideline_for_petroleum_hydrocarbon_contaminated_soil_treatment_facilities_in_the_northwest_territories_-_final_-_jan_10_20.pdf		information will be added to the Monitoring Plan.	
12	Restoration Monitoring Plan, Sump Locations	As per the proposed Monitoring Plan, the draft Water Licence includes the monitoring of sumps.	For the purposes of providing locations in the SNP (Annex A) of the Water Licence, can GNWT-INF provide exact locations of the sumps?	The GNWT-INF can provide as-built locations for the sumps. Sumps will be determined during site preparation and before the soil is deposited. The sump location will be determined based on access for truck offloading of soil around the sumps at each stockpile location, and will depend on the natural grade of the property to also allow for the water to pool towards the sump. INF will provide these locations 10 days prior to the commencement of dredging.	Noted. The Board included the requirement for the information on the sumps be submitted to the Board 10 days prior to dredging.
Environment and Climate Change Canada (ECCC) - Eva Walker					
1	Hay River Harbour Restoration - Monitoring Plan Section 1.4 - Assumptions	The Monitoring Plan states: "Based on the short duration of the project and on the naturally high turbidity of the river, a sediment curtain is not considered essential for dredging in these areas. Due to the strong currents in the river and the large size of Dredge Area A, a sediment curtain would be ineffective and potentially unsafe. A sediment curtain also cannot be used in Dredge Area B due to the large size of the Hay River and the potential of disrupting ongoing boat traffic. Curtains in strong currents tend to drag along the bottom, which results in more sediment being released, rising the turbidity levels in the water."	ECCC recommends the proponent provide a discussion of possible mitigation measures that will be carried out during dredging.	As turbidity curtains have been deemed to be ineffective for use in this project, adaptive measures such as: real time monitoring of TSS around the work areas, stoppages when TSS is detected to increase, and changing dredging techniques to prevent turbidity, will be used to monitor and prevent turbidity around the worksite. These adaptive measures and how they will be implemented are discussed in Section 4.1 of the Monitoring Plan.	Noted.

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		ECCC notes turbidity curtains are often used as a standard mitigation to control the extent of sedimentation, but in their absence, the Proponent has not described any potential mitigation measures that could be implemented to control sediment impacts. Without turbidity curtains to control the extent of sedimentation, monitoring and adaptive management will be a key component in managing potential impacts to water quality from dredging activities.			
2	ECCC Cover Letter	ECCC Cover Letter	NA	No response required.	N/A
3	Hay River Harbour Restoration - Monitoring Plan - Section 3.0 - Monitoring Plan Hay River Emergency Dredging Recommendation Report - Section 6.5 - Dredge Sequencing	The Monitoring Plan provides information on the proposed monitoring locations and includes two reference stations, one upstream of Area B (B-REF), and another downstream of Area B, but upstream of Area A (A-REF). However, as noted in the Emergency Dredging Recommendation Report, dredging in Area A and Area B is proposed to occur concurrently. ECCC notes while REF-B is a true reference and is unimpacted by the dredging project, REF-A is downstream of Area B dredging, but upstream of Area A dredging. The REF-A site is therefore impacted by the dredging project, and does not provide a true reference station to quantify the change in total suspended solids (TSS)/turbidity. Given that TSS/turbidity monitoring is assessed as a change from background conditions, the use of REF-A as a reference stations introduces confounding factors and is not	ECCC recommends the Proponent use Station B-REF as the overall reference site for the dredging project. Comparison to this location will quantify the overall change in water quality as a result of the project.	The proposed changed REF-B will serve as the overall reference site. This will be updated in the Monitoring Plan. If the dredging is not occurring concurrently, then REF-A would still be evaluated for due diligence.	Noted. The Board requires GNWT-INF to updated Monitoring Plan according to their response.

No.	Topic	Reviewer Comment	Reviewer Recommendation	Proponent Response	Board Decision
		representative of the true background conditions. If monitoring results from the Dredge Area A downstream monitoring stations are compared to REF-A, the "background" TSS/turbidity will already be inflated due to the Area B dredging. Therefore, the "change from background" will only represent the incremental change between Dredge Area A and Dredge Area B, and not the overall increase in TSS/turbidity experienced as a result of the dredging. Based on this, and given the dredging is to be completed concurrently, it may be more appropriate to use REF-B as the overall reference for the Project.			
4	Hay River Harbour Restoration - Monitoring Plan Section 3.0 - Monitoring Plan	The Restoration Monitoring Plan identifies the requirement for water quality samples to monitor water quality for dewatering of the pile when on land. The plan also states that while the sediment remains on the barge (prior to land storage) it will passively dewater and return to the Hay River, but no periodic monitoring of this runoff is proposed. It is acknowledged that any sediment inputs not retained by the engineered filter would be captured through the real-time TSS monitoring, but this monitoring would not capture the potential for release of other contaminants (i.e. metals, hydrocarbons) by disruption of the sediment.	ECCC recommends the Proponent provide a discussion on the potential to monitor water quality of the runoff from the barge during dredging.	The water coming off the barges will not be channeled, but rather, will percolate off the barge after passing through the geo-fabric along the perimeter of the receiving barge to control TSS, the parameter of concern from this operation. This is unfortunately not a feasible situation for in-situ, real-time monitoring. It is also a difficult situation from which to collect representative samples for handheld (field-scale) TSS analysis. For this reason, real-time monitoring and response planning has been proposed for the receiving environment, as per 4.1 of the Monitoring Plan.	Noted.
5	Sediment and Erosion Control Plan	The Sediment and Erosion Control Plan notes that, "Turbidity of water in the sump shall be monitored weekly and compared to applicable guidelines. Clean water from the sump may be pumped and discharged over vegetate land (if necessary)."	ECCC recommends the Proponent: - clarify the proposed water quality criteria for any discharges from sumps to the surrounding environment	See response to ID 8 (from MVLWB), above.	Noted. The Board require GNWT-ING to update the Monitoring Plan with the information provided in the response.

No.	Topic	Reviewer Comment	Reviewer Recommendation	Proponent Response	Board Decision
	- Section 4.1.3 - Sumps	ECCC notes only the Sediment and Erosion Control Plan includes references to discharge of sump water and that a similar statement is not included in the Restoration Monitoring Plan. In addition, the Sediment and Erosion Control Plan speaks only to turbidity and broadly states "clean water" rather than describing criteria for discharge. Given that these statements are only included in the Sediment and Erosion Control Plan, is it unclear whether it is the intention that water quality meet all guidelines prior to discharge from the sumps, or just turbidity. The Restoration Monitoring Plan should be updated to describe any potential discharges from the sumps to the surrounding environment, and clearly define what is intended by clean water (i.e. water quality meets guidelines).	- update the Restoration Monitoring Plan to describe any potential discharges from sumps, including relevant criteria.		