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December 22, 2022

File: MV2022C0021
MV2022L8-0008
MV2022L8-0009

Mark Cliffe-Phillips
Mackenzie Valley Review Board
200 Scotia Centre
Box 938, 5102-50th Avenue
Yellowknife NT X1A 2N7

Sent by email

Dear Mark Cliffe-Phillips,

Re: Yellowknife Lithium Project – Notice of Preliminary Screening Determination – Applications for Land Use Permit and Water Licences – Mining Exploration – Yellowknife, NT

The Mackenzie Valley Land and Water Board (Board) met on December 21, 2022 and considered the Application Packages from EREX International Ltd. (EREX) for Land Use Permit (Permit) MV2022C0021, Water Licence MV2022L8-0008, and Water Licence MV2022L8-0009 for the Yellowknife Lithium Project (Project) in accordance with the *Mackenzie Valley Resource Management Act* (MVRMA).

Based on the evidence provided, the Board is satisfied the screening has been completed according to section 125 of the MVRMA and has decided **not to refer** the Project for additional assessment. The Board's Preliminary Screening Determination and Reasons for Decision, as required by section 121 of the MVRMA, is attached.

If the Board does not receive notice of referral to environmental assessment, it can proceed with issuance of Permit MV2022C0021, Licence MV2022L8-0008, and Licence MV2022L8-0009 on **Tuesday January 3, 2023**.

The Board and staff look forward to continued communications throughout the pause period. Please contact [Shelagh Montgomery](#) via email or at (867) 766-7457 with any questions or concerns regarding this letter.

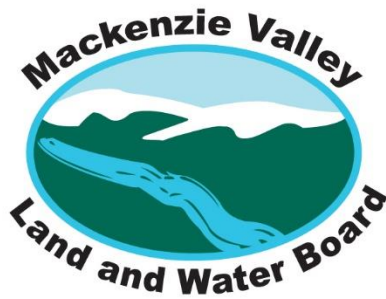
Yours sincerely,



Mavis Cli-Michaud
Chair, Mackenzie Valley Land and Water Board

BCC'd to: Akaitcho Distribution List
Carl Verley, EREX
Denise Lockett, EREX

Attached: Preliminary Screening Determination and Reasons for Decision



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Preliminary Screening Determination and Reasons for Decision

Water Licence and Land Use Permit Applications	
File Number	MV2022C0021, MV2022L8-0008, MV2022L8-0009
Company	EREX International Ltd.
Project	Yellowknife Lithium Project
Location	Yellowknife, NT
Activity	Mining Exploration
Date of Decision	December 21, 2022

1.0 Decision

In accordance with subsection 124(1) of the *Mackenzie Valley Resource Management Act* (MVRMA), the Mackenzie Valley Land and Water Board (MVLWB or Board) met on December 21, 2022 to make a preliminary screening determination on the Applications from EREX International Ltd. (EREX) (Applicant) for Land Use Permit MV2022C0021 (Permit)¹, Water Licence MV2022L8-0008², and Water Licence MV2022L8-0009³ for the Yellowknife Lithium Project (Project).

The Board has decided not to refer the proposed Project to the Mackenzie Valley Environmental Impact Review Board (the Review Board) for Environmental Assessment because, based on the evidence, it is the Board's opinion that the proposed Project will not have a significant adverse impact on the environment or be a cause of public concern.

The Board's determinations, including reasons for its decisions, are detailed in sections [3.0](#) and [4.0](#).

¹See MVLWB Online Registry www.mvlwb.com for [EREX – Permit Application – Application Form – Nov 8 22](#).

² See MVLWB Online Registry [EREX – Licence Application – Non-Federal Application Form – Nov 8 22](#).

³ See MVLWB Online Registry [EREX – Licence Application – Federal Application Form – Nov 14 22](#).

2.0 List of Defined Terms and Acronyms

Applicant	EREX International Ltd.
Applications	The complete application package submitted by the Applicant for Water Licence MV2022L8-0008, Water Licence MV2022L8-0009, and Land Use Permit MV2022C0021
Board	Mackenzie Valley Land and Water Board
DFO	Department of Fisheries and Oceans
DKFN	Denínu Kúé First Nation
FRMG	Fort Resolution Métis Government
GNWT	Government of the Northwest Territories
GNWT-ENR	Government of the Northwest Territories – Environment and Natural Resources
GNWT-Lands	Government of the Northwest Territories – Lands
LKFN	łutselk’e First Nation
MVLWB	Mackenzie Valley Land and Water Board
MVRMA	<i>Mackenzie Valley Resource Management Act</i>
NSMA	North Slave Métis Alliance
NWTMN	NWT Métis Nation
ORS	Online Review System (www.new.onlinereviewssystem.ca)
Project	Yellowknife Lithium Project, which is the proposed development (as defined in Part 5 of the MVRMA). ⁴
Review Board	Mackenzie Valley Environmental Impact Review Board
Standard Licence Conditions	MVLWB Standard Water Licence Conditions Template
Standard Permit Conditions	MVLWB Standard Land Use Permit Conditions Template
TG	Tłıchq Government
YKDFN	Yellowknives Dene First Nation

3.0 Background and Scope of Screening

On November 14, 2022, the Applicant submitted complete applications for a new Licence MV2022L8-0008, a new Licence MV2022L8-0009, and a new Permit MV2022C0021 (the Applications).^{5 6 7} The Applications are to conduct mineral exploration activities to estimate lithium resources in pegmatite dykes on 13 mineral leases east of Yellowknife, known as the Yellowknife Lithium Project (the Project).

Specific activities that are proposed for the Project include diamond core and reverse circulation drilling, saw-cut channel sampling, trenching and use of explosives.⁸ EREX intends to open and maintain the existing Thompson-Lundmark winter access road north of Hidden Lake and use a camp previously used

⁴ “development” is defined in Part 5 of the MVRMA as:

“any undertaking, or any part or extension of an undertaking, that is carried out on land or water and includes an acquisition of lands pursuant to the *Historic Sites and Monuments Act* and measures carried out by a department or agency of government leading to the establishment of a park subject to the *Canada National Parks Act* or the establishment of a park under a territorial law.”

⁵ See MVLWB Online Registry (www.mvlwb.com) for [EREX – Licence Application – Non-Federal Application Form – Nov 8 22](#).

⁶ See MVLWB Online Registry for [EREX – Licence Application – Federal Application Form – Nov 14 22](#).

⁷ See MVLWB Online Registry for [EREX – Permit Application –Application Form – Nov 8 22](#).

⁸ See MVLWB Online Registry for [EREX – Permit and Licence Application –Updated Project Description – Nov 17 22](#).

for reclamation work at Hidden Lake Gold Mine as the main Project camp for a drilling program on mineral leases north of Hidden Lake. Diesel and jet fuel will be stored in bulk fuel systems consisting of double-walled steel tanks, and will be transferred into smaller containers for local transport to drill sites, the generator shack, helicopter pad, or directly into vehicles. EREX has received an access agreement for the Hidden Lake camp site with Crown Indigenous Relations and Northern Affairs Canada (CIRNAC).

Additionally, EREX plans to establish and maintain other temporary access roads over the winter program. A smaller drill program in the Bighill Lake area will include drill crews commuting from Yellowknife to staging points along the Ingraham Trail, followed by use of snow machines in winter to access drill sites on the leases, and helicopter use for drill mobilization. A third drill program located approximately 110 km east of Yellowknife near Tanco Lake may result in the construction, operation, and maintenance of a satellite camp, including establishment of a fuel cache.

EREX intends to use helicopters and float-equipped fixed wing aircraft during summer operations to access the Project leases. Water will be used for drilling and camp consumption. These activities are located within non-federal and federal areas of the Akaitcho Region.

An [Engagement Log](#)⁹ and [Engagement Plan](#)¹⁰ were included in the Application. EREX engaged with the following Parties:

- Tłı̨chǫ Government (TG)
- Akaitcho Dene First Nation (IMA Screening Board)
- Yellowknives Dene First Nation (YKDFN)
- Denínu Kúé First Nation (DKFN)
- Łutselk'e First Nation (LKFN)
- North Slave Métis Alliance (NSMA)
- NWT Métis Nation (NWTMN)
- Fort Resolution Métis Government (FRMG)
- Pontoon Lake/Ingraham Trail Cabin Owners

As evidenced through the Engagement Log, EREX began engaging with Parties on August 26, 2022, including sending all Parties information about the project. Issues discussed through engagement included employment and contracting opportunities, impacts to wildlife, archaeological sites within the project area, waste management details, poaching and vandalism due to winter road access, and that some leases were near popular hiking and fishing sites. EREX's responses to engagement, as demonstrated through the Engagement Log, indicate a willingness to work with Parties to alleviate concerns and consider the Parties recommendations.

In accordance with paragraph 125(1)(a) of the MVRMA, the Board must conduct a preliminary screening of the proposed Project to determine and report to the Review Board whether, in its opinion, the

⁹ See MVLWB Online Registry for [EREX – Permit and Licence Application – Pre-Engagement Log – Nov 8 22](#).

¹⁰ See MVLWB Online Registry for [EREX – Permit and Licence Application – Engagement Plan – Nov 8 22](#).

proposed Project might have a significant adverse impact on the environment, or might be a cause of public concern. The details of the Board's analysis are set out in section [4.0](#) below.

3.1 Scope of Screening:

The area impacted by the Project is shown in Figure 1 of the Updated Project Description (Map outlining the Yellowknife Project area and EREX's leases).¹¹ Activities scoped for the Project include:

- Drilling, including diamond core and reverse circulation drilling;
- Saw-cut channel sampling;
- Trenching;
- Use of explosives;
- Use of equipment, vehicles, and machines;
- Use and storage of fuel;
- Construction, operation, and maintenance of winter roads;
- Construction, operation, and maintenance of camps;
- Withdrawal of water for drilling and camp consumption;
- Depositing of drill cuttings and Sewage into Sumps; and
- Progressive Reclamation and associated closure and reclamation activities.

EREX intends to drill 180 or more holes per year, initially focusing on leases closest to Yellowknife. Trenches at some sites may be blasted to obtain samples of less than one tonne; it is expected up to 10 tonnes of rock may be broken out of 10 trenches using explosives. Saw-cut channel sampling will result in channels about 7 centimetres wide by 10 centimetres deep. Drilling and other mineral exploration activities will occur over the winter and summer months. Mapping, prospecting, and surface sampling will also occur during summer programs. Equipment to support the Project generally includes drills, a bulldozer, water truck, water pumps, grader, snow cats, ATV's, snow machines, trucks, core saws, generators, oil heaters, an ice auger, and a jackhammer. A dual chambered incinerator is proposed for waste management. Drill cuttings will be deposited into sumps.

A camp north of Hidden Lake for approximately 49 people will be established at the Hidden Lake Gold Mine, and smaller satellite camps may also be established, such as a camp for approximately 16 people near Tanco Lake. A maximum of 109,965 litres of fuel will be stored for the Project. For activities around the main camp, bulk fuel systems consisting of double-walled steel tanks will be established and used on a lease located on non-federal lands north of Hidden Lake. The drilling program near Tanco Lake may result in a fuel cache with about 100 drums of Jet-B, diesel, and regular gasoline. The existing Thompson-Lundmark winter road will be used for the leases north of Hidden Lake, and additional access roads to drill sites will be established. Less than 299 m³/day of water will be withdrawn for camp and drilling use for the Project.

For reclamation, equipment, camp infrastructure, and fuel storage sites and caches will be removed, and any spills will be cleaned up. Drill holes will be capped or sealed with plugs and/or concrete.

¹¹ See MVLWB Online Registry for [EREX – Permit and Licence Application – Updated Project Description – Nov 17 22](#).

3.2 Public Record and Regulatory Proceeding

To assist the Board in its preliminary screening determination for the Project, the Board distributed the Applications and draft Licences and a Permit for public review on November 14, 2022, inviting reviewers to provide comments and recommendations on the Applications and the preliminary screening (e.g., on impacts and mitigation measures) using the Online Review System (ORS). Comments were due December 5, 2022 with responses from the Applicant due December 8, 2022. The Board received comments and recommendations from Government of the Northwest Territories – Prince of Wales Northern Heritage Centre (GNWT-PWNHC); Crown Indigenous Relations and Northern Affairs Canada (CIRNAC); GNWT – Department of Environment and Natural Resources (GNWT-ENR); GNWT – Department of Lands (GNWT-Lands); Environment and Climate Change Canada (ECCC); CIRNAC Inspector; YKDFN; A Member of the Public; the TG; Fisheries and Oceans Canada (DFO); and GNWT-Lands Inspector.¹² Board staff also submitted comments and questions for the purposes of clarification.

Since there were no requests to extend the reviewer comment deadline, the Board is satisfied that a reasonable period of notice was given to affected communities and First Nations, as required by subsection 63(2) of the MVRMA.

Pursuant to Schedule 4.1 of the Northwest Territory Métis Nation (NWTMN) Interim Measures Agreement, the Board determined that written notice was given to the NWTMN and that a reasonable period of time was allowed for NWTMN to make representations with respect to the Applications.

Pursuant to subsection 1.6, paragraphs (a) and (b) of the Akaitcho Territory Dene First Nations (ATDFN) Interim Measures Agreement, the Board determined that written notice was given to the ATDFN and that a reasonable period of time was allowed for ATDFN to make representations with respect to the Applications.

4.0 Potential Impacts and Proposed Mitigations

Table 1 below summarizes:

- the potential impacts of the proposed Project;
- the concerns that were identified during the regulatory proceeding and how the Applicant addressed those concerns;
- the proposed and potential mitigations for the potential impacts; and
- the Board's analysis of the potential impacts and proposed mitigations.

¹² See MVWLB Online Review System for [EREX International Ltd. – New B Water Licences and Type A Permit Applications – Nov 14 22](#).

Table 1: Potential Impacts and Proposed Mitigations for the Proposed Project

Potential Impact	Activity	Proposed Mitigations <i>Description of measures to reduce potential impacts, including consideration of cumulative impacts and climate change.</i>	Board Analysis and Determination
Soil compaction, settling, and erosion	Drilling activities, use of equipment, camp establishment, and winter road construction	<ul style="list-style-type: none"> • The Applicant proposed the following mitigations: <ul style="list-style-type: none"> ○ Disturbed land will be re-vegetated and returned as close as possible to the original condition as possible. ○ EREX will ensure the ground is capable to support vehicle movement. ○ Sumps will be backfilled and restored to limit their potential for localized erosion. ○ EREX will remove or cut off and seal each drill casing at the ground level. ○ Adequate insulation of the ground surface beneath all camp structures will occur to prevent vegetation from being removed, permafrost from melting, and the ground from settling/eroding. ○ Reclamation to natural state will occur using Canadian Council of Ministers of the Environment (CCME) and industry best practices. EREX will employ progressive reclamation of disturbed areas.¹³ ○ Access roads to drill sites will be prepared in accordance with guidelines specified in the Northern Land Use Guidelines: Access Roads and Trails (GNWT, 2015). ○ Access roads to drill sites will be determined from recently completed LiDAR and orthophotography of the lease areas to locate the routes in areas having the least environmental impact. Existing or old trails will be used where possible. • The Board has standard permit conditions that are typically used to mitigate the identified potential impacts. These standard conditions include:¹⁴ <ul style="list-style-type: none"> ○ CAMP SETBACK ○ USE EXISTING CAMP ○ PARALLEL ROADS ○ USE APPROVED EQUIPMENT ○ MINERAL EXPLORATION DRILL CASINGS ○ WINTER ROADS 	<p>Based on the described mitigations, it is the Board’s opinion that the proposed activities will not have a significant adverse impact on the environment and will not be a cause of public concern.</p> <p>The proposed work involves drilling at several mineral leases, sometimes located up to 100 km apart. An existing camp will be used as the main camp for the Project, and the previously used Thompson-Lundmark winter road will be operated for the Project. The Board’s opinion is based on the relatively small size of each drilling site likely to be affected by the impacts and the small disturbance associated with the camps and winter roads. The use of existing technology, the reversibility of the impacts, and the reliability of the proposed mitigations and conditions were also considered by the Board for</p>

¹³ See MVWLB Online Review System for [EREX International Ltd. – New B Water Licences and Type A Permit Applications – Nov 14 22](#); TG, comment 6.

¹⁴ See the MVLWB Policies and Resources webpage to access the MVLWB [Standard Land Use Permit Conditions Template](#).

	<ul style="list-style-type: none"> ○ PERMAFROST PROTECTION ○ PROGRESSIVE EROSION CONTROL ○ OFF-ROAD VEHICLE TRAVEL ○ PREVENTION OF RUTTING ○ SUSPEND OVERLAND TRAVEL ○ VEHICLE MOVEMENT FREEZE-UP ○ MINIMIZE AREA CLEARED ○ FINAL CLEANUP AND RESTORATION ○ PROGRESSIVE RECLAMATION ○ TRAILS RESTORATION • The Board has standard licence conditions that are typically used to mitigate the identified potential impacts. These standard conditions include:¹⁵ <ul style="list-style-type: none"> ○ EROSION CONTROL ○ DRILL CUTTINGS – SUMPS ○ CLOSURE AND RECLAMATION PLAN ○ CLOSURE AND RECLAMATION PLAN – REVISED ○ CLOSURE AND RECLAMATION PLAN – FINAL ○ PROGRESSIVE RECLAMATION ○ PROGRESSIVE RECLAMATION – CARRY OUT AS APPROVED 	<p>this opinion.</p>
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¹⁵ See the MVLWB Policies and Resources webpage to access the MVLWB [Standard Water Licence Conditions Template](#).

<p>Contamination of soil, groundwater, and waterbodies</p>	<p>Drilling activities, fuel storage, use of explosives</p>	<ul style="list-style-type: none"> • The Applicant proposed the following mitigations: <ul style="list-style-type: none"> ○ The approved Spill Contingency Plan will be adhered to. ○ Spill kits and equipment will be in place and readily available. ○ There will be regular inspection of fuel caches and transfer areas. ○ Personnel will be trained in proper spill procedures. ○ Any drill holes that encounter artesian aquifers will be sealed. ○ The approved Waste Management Plan will be adhered to, and proper waste management practices will be abided by. ○ Secondary containment will be utilized for fuel caches. ○ Proper labeling and positioning of fuel drums will occur. ○ Drill-cuttings will be deposited in a natural depression/sump. Sumps will be located at least 100 m from the ordinary highwater mark of any watercourse to limit potential for contamination. ○ A licenced contractor with a valid blasting certificate will be retained to supply explosives and do the blasting. • The Board has standard permit conditions that are typically used to mitigate the identified potential impacts. These standard conditions include: <ul style="list-style-type: none"> ○ SUMP SETBACK ○ STORAGE ON ICE ○ FLOWING ARTESIAN WELL ○ DRILLING NEAR WATER OR ON ICE ○ DRILLING WASTE ○ DRILLING WASTE DISPOSAL ○ DRILLING WASTE CONTAINMENT ○ RECLAIM SUMPS ○ WASTE CHEMICAL DISPOSAL ○ WASTE PETROLEUM DISPOSAL ○ WASTE MANAGEMENT ○ FUEL STORAGE SETBACK ○ FUEL CACHE SECONDARY CONTAINMENT ○ SECONDARY CONTAINMENT – REFUELING ○ FUEL CONTAINMENT ○ FUEL ON LAND 	<p>Based on the described mitigations, it is the Board’s opinion that the proposed activities will not have a significant adverse impact on the environment and will not be a cause of public concern.</p> <p>The Board’s opinion is based on the relatively small size of each drilling site likely to be affected by the impacts and the small disturbance associated with the camps and winter roads. The size of the fuel storage infrastructure was also considered, as well as the extent of blasting that would be required for the proposed trenching. The reliability of the proposed mitigations and conditions were also considered by the Board for this opinion.</p>
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		<ul style="list-style-type: none"> ○ MARK FUEL LOCATION ○ SPILL CONTINGENCY PLAN ○ SPILL RESPONSE ○ DRIP TRAYS ○ CLEAN UP SPILLS ○ REPORT SPILLS ● The Board has standard licence conditions that are typically used to mitigate the identified potential impacts. These standard conditions include: <ul style="list-style-type: none"> ○ WASTE MANAGEMENT PLAN ○ EXPLOSIVES MANAGEMENT PLAN ○ DRILL CUTTINGS – SUMPS ○ REPORT ARTESIAN AQUIFER ○ SPILL CONTINGENCY PLAN ○ SPILL PREVENTION AND RESPONSE EQUIPMENT ○ CLEAN UP SPILLS ○ CLOSURE AND RECLAMATION PLAN ○ CLOSURE AND RECLAMATION PLAN – REVISED ○ CLOSURE AND RECLAMATION PLAN – FINAL ○ PROGRESSIVE RECLAMATION ○ PROGRESSIVE RECLAMATION – CARRY OUT AS APPROVED 	
Impacts to wildlife and fish habitat	Drilling activities, camp construction, fuel storage, use of explosives	<ul style="list-style-type: none"> ● The Applicant proposed the following mitigations: <ul style="list-style-type: none"> ○ EREX will abide by all applicable legislation to prevent damage to fish habitat and impacts to wildlife (Bathurst Caribou). ○ Wildlife will not be fed. ○ Erosion will be minimized. ○ Drilling waste will be managed properly (e.g., depositing drill waste in a sump at least 100 metres from the ordinary highwater mark). ○ Obstruction of natural drainage will be prevented. ○ Proper waste management practices will be deployed to not attract wildlife. Food and domestic waste, as well as greases, gasoline, and glycol-based antifreeze will 	<p>Based on the described mitigations, it is the Board’s opinion that the proposed activities will not have a significant adverse impact on the environment and will not be a cause of public concern.</p> <p>The Board’s opinion is based on the relatively small size of each drilling site likely to be affected by the impacts, and the small disturbances associated with the camps. The size of the fuel storage</p>

		<p>be stored in animal proof containers/containment.¹⁶</p> <ul style="list-style-type: none"> ○ EREX will ensure that employees and contractors are made aware of plans and commitments related to storing, handling, and transporting petroleum products and other hazardous substances and take all necessary precautions to prevent spills.¹⁷ Spills will be responded to immediately. ○ Will not commence any drilling or movement of equipment within 500 m of any caribou. ○ Potential effects to wildlife and mitigations for noise generated from helicopters (including their flight lines to and from base), noise generated from camp construction, noise generated from drill rig operation and relocation, effects related to habitat disturbance from land clearing will be included under a Tier 1 Wildlife Management and Monitoring Plan (WMMP) to be submitted to GNWT-ENR.¹⁸ ○ A site-specific description of how clad lichens will be avoided or protected, or mitigation measures if they cannot be protected, will be included under a Tier 1 WMMP to be submitted to GNWT-ENR.¹⁹ ○ Species at risk in the Northwest Territories will be considered when developing the Tier 1 WMMP to be submitted to GNWT-ENR.²⁰ This will include monitoring wildlife and species at risk and developing strategies for recovery and action plans in support of species at risk. EREX will use applicable species at risk Recovery Strategies and Action Plans or Management Plans developed by ECCC to prepare the WMMP.²¹ ○ EREX will use the Guidelines to Reduce Risk to Migratory Birds when preparing the WMMP to address concerns raised with respect to working during migratory and nesting periods for birds. Winter drilling will also reduce impacts in wetland areas as wetlands will be frozen during drilling, but will be drill free during migratory 	<p>infrastructure was also considered, as well as the extent of blasting that would be required for the proposed trenching. The Board did consider the Project's location which borders the North Arm, Great Slave Lake important bird area (IBA).²⁷ The Project will also result in impacts to habitat used by the Bathurst Caribou herd. The Board's final opinion is based on the limited duration and magnitude of the impacts, and the reliability of the proposed mitigations and conditions.</p>
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¹⁶ See MVWLB Online Review System for [EREX International Ltd. – New B Water Licences and Type A Permit Applications – Nov 14 22](#); ECCC, comment 5.

¹⁷ See MVWLB Online Review System for [EREX International Ltd. – New B Water Licences and Type A Permit Applications – Nov 14 22](#); ECCC, comment 6.

¹⁸ See MVWLB Online Review System for [EREX International Ltd. – New B Water Licences and Type A Permit Applications – Nov 14 22](#); GNWT-ENR, comment 4.

¹⁹ *Ibid.*

²⁰ See MVWLB Online Review System for [EREX International Ltd. – New B Water Licences and Type A Permit Applications – Nov 14 22](#); ECCC, comment 2.

²¹ See MVWLB Online Review System for [EREX International Ltd. – New B Water Licences and Type A Permit Applications – Nov 14 22](#); ECCC, comment 3.

²⁷ See MVWLB Online Review System for [EREX International Ltd. – New B Water Licences and Type A Permit Applications – Nov 14 22](#); ECCC, comment 7.

		<p>periods.²²</p> <ul style="list-style-type: none"> ○ Individual trenches that require explosives will be small (2.5 m x 0.5 m x 0.3 m) and will not require large quantities of explosives to crack the rock. Mats will be placed over trenches before blasting to muffle sound. Pre-blasting survey of areas to be blasted will be undertaken to determine if nesting birds are in the area. in which case blasting will be delayed or moved to another site.²³ ○ An airborne geophysical survey that will involve low level flights over Bighill Lake and northeast of Hidden Lake will be scheduled for mid- to late- January so as to not impact areas of high bird concentrations.²⁴ ○ EREX will contact GNWT-ENR to discuss mobile ekwo (Caribou) protection measures.²⁵ ○ EREX will require drilling contractors, winter road construction contractors, and camp maintenance personnel to adhere to Fisheries and Oceans Canada (DFO) Code of Practice to prevent the injury or death of fish from suction through water pumps to drills, water trucks, and camp water supply including core cutting saws. EREX will require winter road construction and maintenance crews adhere to the Code of Practice for ice bridges and snow fills.²⁶ • The Board has standard permit conditions that are typically used to mitigate the identified potential impacts. These standard conditions include: <ul style="list-style-type: none"> ○ HABITAT DAMAGE ○ MIGRATORY BIRD NEST DISTURBANCE • The Board has standard licence conditions that are typically used to mitigate the identified potential impacts. These standard conditions include: <ul style="list-style-type: none"> ○ WATER SOURCE AND MAXIMUM VOLUME ○ MAXIMUM UNDER-ICE WATER WITHDRAWAL VOLUME 	
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²² See MVWLB Online Review System for [EREX International Ltd. – New B Water Licences and Type A Permit Applications – Nov 14 22](#); ECCC, comment 4.

²³ See MVWLB Online Review System for [EREX International Ltd. – New B Water Licences and Type A Permit Applications – Nov 14 22](#); ECCC, comment 7.

²⁴ See MVWLB Online Review System for [EREX International Ltd. – New B Water Licences and Type A Permit Applications – Nov 14 22](#); ECCC, comment 8.

²⁵ See MVWLB Online Review System for [EREX International Ltd. – New B Water Licences and Type A Permit Applications – Nov 14 22](#); TG, comment 2.

²⁶ See MVWLB Online Review System for [EREX International Ltd. – New B Water Licences and Type A Permit Applications – Nov 14 22](#); DFO, comment 1.

<p>Damage to vegetation</p>	<p>Drilling activities, including use of equipment, camp establishment, and winter road construction</p>	<ul style="list-style-type: none"> • The Applicant proposed the following mitigations: <ul style="list-style-type: none"> ○ During the winter portion of the land-use operation EREX will ensure there is adequate snowpack to support vehicle movements so that vegetation is not disturbed. ○ Any campsites will be located on durable land or another previously cleared area to limit the amount of vegetation disturbed. ○ • The Board has standard permit conditions that are typically used to mitigate the identified potential impacts. These standard conditions include: <ul style="list-style-type: none"> ○ CAMP SETBACK ○ USE EXISTING CAMP ○ USE APPROVED EQUIPMENT ○ WINTER ROADS ○ PERMAFROST PROTECTION ○ OFF-ROAD VEHICLE TRAVEL ○ MINIMIZE AREA CLEARED ○ FINAL CLEANUP AND RESTORATION ○ NATURAL VEGETATION ○ PROGRESSIVE RECLAMATION • The Board has standard licence conditions that are typically used to mitigate the identified potential impacts. These standard conditions include: <ul style="list-style-type: none"> ○ CLOSURE AND RECLAMATION PLAN ○ CLOSURE AND RECLAMATION PLAN – REVISED ○ CLOSURE AND RECLAMATION PLAN – FINAL ○ PROGRESSIVE RECLAMATION ○ PROGRESSIVE RECLAMATION – CARRY OUT AS APPROVED 	<p>Based on the described mitigations, it is the Board’s opinion that the proposed activities will not have a significant adverse impact on the environment and will not be a cause of public concern.</p> <p>The Board’s opinion is based on the relatively small size of each drilling site likely to be affected by the impacts and the small disturbance associated with the camps and winter roads. The use of existing technology, the reversibility of the impacts, and the reliability of the proposed mitigations and conditions were also considered by the Board for this opinion.</p>
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Disturbances to archaeological sites	Drilling activities, camp establishment, and winter road construction	<ul style="list-style-type: none"> • The Applicant proposed the following mitigations: <ul style="list-style-type: none"> ○ Workers will be made aware of what to do if they suspect they have encountered an archaeological site through the <i>Change Archaeological Find Procedure</i> document. ○ EREX will continue working with government bodies that have documented archaeological and cultural heritage sites and ensure they are being avoided. • The Board has standard permit conditions that are typically used to mitigate the identified potential impacts. These standard conditions include: <ul style="list-style-type: none"> ○ ARCHAEOLOGICAL BUFFER ○ SITE DISTURBANCE ○ SITE DISCOVERY AND NOTIFICATION ○ ARCHAEOLOGICAL OVERVIEW ○ AIA – HIGH POTENTIAL ○ ENGAGEMENT PLAN 	<p>Based on the described mitigations, it is the Board’s opinion that the proposed activities will not have a significant adverse impact on the environment and will not be a cause of public concern.</p> <p>The Board’s opinion is based on the relatively small size of each drilling site likely to be affected by the impact and the small disturbance associated with the camps and winter roads. The Board acknowledges that there is historical, cultural, and archaeological significance of the proposed Project area. In forming the Board’s opinion, the Board considered EREX’s willingness to further engage and collaborate with the YKDFN and TG with respect to archaeological investigations, including a willingness to incorporate Traditional Knowledge into the Project planning to understand sensitive areas that should be avoided.²⁸ The reliability of the proposed mitigations and conditions were also considered by the Board for this opinion.</p>
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²⁸ See MVWLB Online Review System for [EREX International Ltd. – New B Water Licences and Type A Permit Applications – Nov 14 22](#); YKDFN, comment 1; TG, comment 4.

Noise level increases	Drilling activities, establishment of camp, use of explosives	<ul style="list-style-type: none"> • The Applicant proposed the following mitigations: <ul style="list-style-type: none"> ○ Potential effects to wildlife and mitigations for noise generated from helicopters (including their flight lines to and from base), noise generated from camp construction, and noise generated from drill rig operation and relocation will be included under a Tier 1 WMMP to be submitted to GNWT-ENR.²⁹ ○ Individual trenches that require explosives will be small (2.5 m x 0.5 m x 0.3 m) and will not require large quantities of explosives to crack the rock. Mats will be placed over trenches before blasting to muffle sound.³⁰ • The Project will be discontinuous, short term, and limited to small individual areas. 	<p>Based on the described mitigations, it is the Board’s opinion that the proposed activities will not have a significant adverse impact on the environment and will not be a cause of public concern.</p> <p>The Board’s opinion is based on the duration and frequency of the impact. The reliability of the proposed mitigations was also considered by the Board for this opinion.</p>
Emissions	Drilling activities and operation of a camp	<ul style="list-style-type: none"> • In the early stage of exploration, EREX’s camp generators, heaters, and diamond drilling use drills powered by diesel engines that emit CO₂, nitrous oxides, and other emissions. Due to the size of the Project, no mitigation is proposed at this time. EREX hopes that if the Project advances to mine development is can consider renewable energy sources. 	<p>Based on the described mitigations, it is the Board’s opinion that the proposed activities will not have a significant adverse impact on the environment and will not be a cause of public concern.</p> <p>The Board’s opinion is based on the magnitude of the impact.</p>

²⁹ See MVWLB Online Review System for [EREX International Ltd. – New B Water Licences and Type A Permit Applications – Nov 14 22](#); GNWT-ENR, comment 4.

³⁰ See MVWLB Online Review System for [EREX International Ltd. – New B Water Licences and Type A Permit Applications – Nov 14 22](#); ECCC, comment 7.

<p>Impairment of the recreational uses of the land or water</p>	<p>Drilling at, and winter road access to, Bighill Lake</p>	<ul style="list-style-type: none"> • The Applicant proposed the following mitigations: <ul style="list-style-type: none"> ○ EREX will alter the drilling plans so that includes drill holes from land can be used to test the target pegmatite dykes that may occur under part of Bighill Lake, thereby avoiding drill set-ups on the lake itself.³¹ ○ EREX will work with the Pontoon Cabin Owners to attempt to find ways to mitigate the impacts of access across Pontoon Lake.³² ○ The Board has a standard permit and licence condition (ENGAGEMENT PLAN) that could mitigate the identified potential impacts. 	<p>Based on the described mitigations, it is the Board’s opinion that the proposed activities will not have a significant adverse impact on the environment and will not be a cause of public concern.</p> <p>The Board’s opinion is based on the duration and frequency of the impact. EREX’s agreement to alter their drill plans to address concerns, and eagerness to work with the Cabin Owners to attempt to find a solution was also considered by the Board in establishing the opinion.</p>
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³¹ See MVWLB Online Review System for [EREX International Ltd. – New B Water Licences and Type A Permit Applications – Nov 14 22](#); A Member of the Public, comment 1.

³² *Ibid.*

4.1 Consideration of Potential Impacts

Based on the potential impacts and proposed mitigations identified above in Table 1, the Board considered whether the Project might have a significant adverse impact on the environment. In general, impacts of the Project on the environment can be mitigated through the use of standard permit and licence conditions. These conditions include requirements for management and monitoring plans that provide detailed information regarding the implementation of mitigation measures and the evaluation of their effectiveness.

Two draft Licences (for federal and non-federal areas) and a Permit were circulated for review during the regulatory proceeding, and all Parties were given the opportunity to provide comments and recommendations on the draft conditions. In finalizing the conditions, the Board will consider all of the evidence provided through the regulatory proceeding.

The Board received several comments about impacts to wildlife and fish habitat from the Project. In response to a comment from GNWT-ENR, EREX agreed to develop a WMMP. As requirements for WMMPs are under the jurisdiction of the GNWT through the *Wildlife Act*, the Board expects EREX to submit their WMMP to the GNWT-ENR.

4.2 Consideration of Public Concern

In addition to considering the potential impacts of the Project, the Board considered whether the Project might be a cause of public concern.

Based on the evidence provided during the regulatory proceeding, the Board did not identify any comments or issues that indicate that the Project is a cause of public concern.

5.0 Conclusion

The Board has reviewed all the evidence received during the regulatory process with respect to the Preliminary Screening of the proposed Project. Based on the evidence, it is the Board's opinion that the proposed Project will not have a significant adverse impact on the environment or be a cause of public concern, as set out in paragraph 125(1)(a) of the MVRMA. The Board has therefore decided not to refer the proposed Project to Environmental Assessment. If the Board does not receive a notice of referral to environmental assessment by January 2, 2023, the Board can issue the Permit and Licences on January 3, 2023.

SIGNATURE



Mavis Cli-Michaud, Chair
Mackenzie Valley Land and Water Board

December 22, 2022

Date

