

PO Box 32, Wekweeti NT X0E 1W0 Tel: 867-713-2500 Fax: 867-713-2502

#1-4905 48th Street, Yellowknife NT X1A 3S3 Tel: 867-765-4592 Fax: 867-765-4593

www.wlwb.ca

April 3, 2024 File: W2024C0002

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: North Arrow Minerals Inc. – Notice of Preliminary Screening Determination – Renewal Application for Land Use Permit – Diamond Drilling and Fuel Storage – Lac de Gras, NT

The Wek'èezhìi Land and Water Board (Board) met on April 3, 2024 and considered the Application Package from North Arrow Minerals Inc. (North Arrow) for Land Use Permit (Permit) W2024C0002 for the Loki Diamond Project (Project) in accordance with the *Mackenzie Valley Resource Management Act* (MVRMA).

The Board conducted a preliminary screening based on the public record for the proceeding. 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 changes to the Project to environmental 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 W2024C0002 on **Monday, April 15, 2024**.

The Board and staff look forward to continued communications throughout the pause period. Please contact Ryan Fequet via <a href="mailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:emailto:email

Yours sincerely,

Mason Mantla

Chair, Wek'èezhìı Land and Water Board

BCC'd to: Wek'èezhìı Distribution List

Nick Thomas – North Arrow

Attached: Preliminary Screening Determination and Reasons for Decision



PO Box 32, Wekweètì NT X0E 1W0 Tel: 867-713-2500 Fax: 867-713-2502

#1-4905 48th Street, Yellowknife NT X1A 3S3 Tel: 867-765-4592 Fax: 867-765-4593

www.wlwb.ca

Preliminary Screening Determination and Reasons for Decision

Land Use Permit Renewal Application		
File Number	W2024C0002	
Company	North Arrow Minerals Inc.	
Project	Loki Diamond Project	
Location	Lac de Gras, NT	
Activity	Diamond Drilling and Fuel Storage	
Date of Decision	April 3, 2024	

1.0 Decision

In accordance with subsection 124(1) of the <u>Mackenzie Valley Resource Management Act</u> (MVRMA), the Wek'èezhìı Land and Water Board (WLWB or Board) met on April 3, 2024 to make a preliminary screening determination on the renewal Application from North Arrow Minerals Inc. (North Arrow; the Applicant) for Land Use Permit W2024C0002 (Permit)¹ for the Loki Diamond Project at Lac de Gras, NT (Project).²

The Board has determined that some Project areas are exempt from preliminary screening because they were previously screened or underwent an Environmental Assessment (EA). The Applicant has proposed new Project activities and/or areas, however, the Board has decided not to refer the proposed changes to the Project to the Mackenzie Valley Environmental Impact Review Board (the Review Board) for

¹See WLWB Online Registry for <u>Loki Diamond Project - Land Use Permit Application - Cover Letter and Application Form - Feb</u> 20 24

² The Project is **Loki Diamond Project**, which is the proposed development, where "development" is defined in Part 5 of the MVRMA as:

[&]quot;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."

Environmental Assessment because, based on the evidence, it is the Board's opinion that the proposed changes to the Project will not have a significant adverse impact on the environment or be a cause of public concern.

The Board's determination, including reasons for its decision, are detailed in sections 3.0 and 4.0.

2.0 Background and Scope of Screening

On February 20, 2024, North Arrow applied to renew its Type A Permit for the Loki Diamond Project, for the purpose of diamond drilling (including diamond core and reverse circulation drilling) and the use and storage of fuel. North Arrow requested a Permit term of five years.

North Arrow has been exploring for diamond-bearing kimberlites at the Loki Diamond Project since 2017 under permit W2017C0001. The Loki Project mineral claims are located in the Lac de Gras region of the Northwest Territories (NWT) southwest of the west side of the lake and approximately 290 kilometers (km) northeast of Yellowknife. Permit W2017C0001 was issued on March 2, 2017,³ amended on November 24, 2017,⁴ amended again on July 27, 2019, ⁵ and extended on February 9, 2022.⁶ The permit expired on March 4, 2024.

The Project is considered 'early-stage diamond exploration', which consists of drilling, ground geophysics, and till sampling. Each drill site measures approximately 20 meters x 20 meters (400 m²). Upon the completion of each drill hole the metal casings will be removed or cut-off at ground level, and all materials (including empty fuel drums) will be removed from the drill site area. The total number of areas targeted over the permit will be dependent upon results, however up to 8-15 drill site locations could be utilized per drill program. A limited crew consisting of approximately 11 personnel will be required. No camp is required for this project – personnel will stay the Harry Winston Camp, which is located approximately 50 km east of the Project and permitted under MV2019C0031.⁷ Project activities are seasonal and take place between March and October.

The purpose of renewal Application W2024C0002 is to continue the previously approved land use activities at Lac de Gras, NT. The Application states that the scope and general location of the Project will be the same as those authorized by Permit W2017C0001, but with the addition of six new mineral claims.

Under Part 1, Schedule 1, section 2.1 of the Exemption List Regulations to the MVRMA, project areas and activities that have already been subject to Part 5 of the MVRMA are exempt from preliminary screening. The new Project activities require screening by the Board in accordance with subsection 124(1) of the MVRMA.

³ See WLWB (www.wlwb.ca) Online Registry for W2017C0001 - North Arrow - Land Use Permit - Issuance Letter - Mar 2 17

⁴ See WLWB Online Registry for W2017C0001 - North Arrow - Land Use Permit - Amendment - Nov 24 17

⁵ See WLWB Online Registry for W2017C0001 - North Arrow - Land Use Permit - Jul 27 19

⁶ See WLWB Online Registry for W2017C0001 - North Arrow - Land Use Permit - Extension - Feb 9 22

⁷ See MVLBW Online Registry for North Arrow – Amendment – Dec7 23

In accordance with paragraph 125(1)(a) of the MVRMA, the Board must conduct a preliminary screening of the proposed changes to the Project to determine and report to the Review Board whether, in its opinion, the proposed changes to the 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 Board completed preliminary screenings of the Project on March 2, 2017,8 November 24, 2017,9 and July 16, 2019.10

Previously Screened Activities

The scope of Permit W2024C0002 is the same as W2017C0001. The principal activities and development components have not changed.

Previously Screened Areas:

The Board has determined that some Project areas are exempt from preliminary screening because they were previously screened.

The following mineral claims were previously screened under W2017C0001: M10231, M10232, M10233, M10234, M10235, M10236, M10237, K16978, M10044, M10045, M10046, M10116, M10117, M10118, M10119, M11002, M11003, M11004, M11005, M11006, and M11007.

New Areas:

The following six new mineral claims are the subject of this screening: M11764, M11765, M11766, M11767, M11768, and M11769 11

3.2 Public Record and Regulatory Proceeding

To assist the Board in its preliminary screening determination for the Project, Board staff distributed the Application and a draft Permit for public review on February 21, 2024, inviting reviewers to provide comments and recommendations on the Application and the preliminary screening (e.g., on impacts and mitigation measures) using the Online Review System (ORS). Comments and recommendations were received by the deadline of March 14, 2024 from the following parties:

- the Tłycho Government (TG);
- the Wek'èezhìi Renewable Resources Board (WRRB);
- the Government of the Northwest Territories Department of Environment and Climate Change (GNWT-ECC) Regulatory Analyst;

⁸ See WLWB Online Registry for W2017C0001 - North Arrow - Preliminary Screening - Mar 2 17

⁹ See WLWB Online Registry for <u>W2017C0001</u> - <u>North Arrow - LUP Amendment - Preliminary Screening - Nov 24 17</u>

¹⁰ See WLWB Online Registry for <u>W2017C0001 - North Arrow - Land Use Permit - Amendment - Preliminary Screening Notification and Determination - Jul 16 19</u>

¹¹ See WLWB Online Registry for Figure 2 Loki Diamond Project - Land Use Permit Application - Project Summary - Feb 20 24

- GNWT-ECC Lands Inspector;
- GNWT- ECE Prince of Wales Northern Heritage Centre (PWNHC);
- Environment and Climate Change Canada (ECCC); and
- Fisheries and Oceans Canada (DFO).

Board staff also submitted comments and questions for the purposes of clarification. Applicant responses were received by the deadline of March 21, 2024. Reviewer comments and applicant responses can be viewed on the ORS.¹²

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.

The Board is also satisfied that notice of the Application was provided to the Tł_lcho Government (TG) and that a reasonable period of time was provided for the Tł_lcho Government to make representations to the Board in accordance with section 63 of the MVRMA.

4.0 Potential Impacts and Proposed Mitigations

Table 1 below summarizes:

- the potential impacts of the proposed changes to the 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 WLWB Online Review System for Loki Diamond Project - Land Use Permit Application - Feb21 24

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

Potential Impact	Activity	Proposed Mitigations Description of measures to reduce potential impacts, including consideration of cumulative impacts and climate change.	Board Analysis and Determination
Soil contamination and changes in water quality	Transfer, storage, and use of petroleum products and/or chemicals	 The Applicant has developed a spill contingency¹³ and a waste management plan;¹⁴ these plans are designed to prevent spills and waste contamination. The Board has standard permit conditions that are typically used to mitigate the potential impacts. These standard conditions include: SUMP SET BACK DRILLING NEAR WATER OR ON ICE DRILLING WASTE DRILLING WASTE DISPOSAL DRILLING WASTE CONTAINMENT WASTE CHEMICAL DISPOSAL CHEMICALS WASTE PETROLEUM DISPOSAL WASTE MANAGEMENT REPAIR LEAKS FUEL STORAGE SETBACK FUEL CACHE SECONDARY CONTAINMENT SECONDARY CONTAINMENT FUEL CONTAINMENT FUEL ON LAND MARK CONTAINERS AND TANKS 	No concerns were brought to the Board's attention during the application public review period. 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.
		MAXIMUM FUEL ON SITE	

¹³ See WLWB Online Registry for <u>Loki Diamond Project – Spill Contingency Plan - Version 4 - Feb 20 24</u>

¹⁴ See WLWB Online Registry for Loki Diamond Project - Waste Management Plan - Version 4 - Feb 20 24

		 SEAL OUTLET SPILL CONTINGENCY PLAN SPILL RESPONSE DRIP TRAYS CLEAN UP SPILLS REPORT SPILLS 	
Water use		 The Applicant estimated that daily water use would be between 30 and 60 m³ per day, which is below the threshold for a Type B Water Licence. Drawdowns could occur, but are expected to be temporary and negligible. The Applicant has committed to using fish screens to prevent the impingement of fish. During the public review, DFO recommended that the Applicant also include the water intake flow rate that will be utilized for the water withdrawal. The Applicant responded that it would commit to adhering to the maximum water intake flow rate of up to 0.150 m³/s, or 150 liters per second (L/s), as per DFO Interim Code of Practice. 	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.
Disturbance to ground, permafrost, vegetation	Use of Drills, helicopter	 Ground compaction from the use of drills and aircraft expected to be minimal and will be left as is. Permafrost will be removed in each hole drilled as a result of drilling. Drill hole diameter is expected to be approximately 4-5 cm. Following the completion of each drill hole, permafrost is expected to naturally reform by groundwater filling the excavated borehole and subsequently freezing. Drill setup locations with minimal vegetation will be given preference. Further mitigation will include removing small shrubs and mosses prior to placing the drill, and then replacing vegetation that was removed once drilling is finished and the 	No concerns were brought to the Board's attention during the application public review period. 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.

	drill has been removed from each location.	
	Fire prevention measures include Safety Plans and fire	
	extinguishers.	
	extinguishers.	
	The Board has standard permit conditions that are typically up to the standard permit conditions that are typically up to the standard permit conditions that are typically up to the standard permit conditions that are typically up to the standard permit conditions that are typically up to the standard permit conditions that are typically up to the standard permit conditions that are typically up to the standard permit conditions that are typically up to the standard permit conditions that are typically up to the standard permit conditions that are typically up to the standard permit conditions that are typically up to the standard permit conditions that are typically up to the standard permit conditions that are typically up to the standard permit conditions that are typically up to the standard permit conditions that are typically up to the standard permit conditions that are typically up to the standard permit conditions that are typically up to the standard permit conditions that are typically up to the standard permit conditions	sed
	to mitigate the potential impacts. These standard conditions	
	include:	
	MINERAL EXPLORATION DRILL CASINGS	
	MINIMIZE AREA CLEARED	
	FINAL CLEANUP AND RESTORATION	
Wildlife	The Applicant has developed a Wildlife, Archaeological, and	Based on the described mitigations, it is the
Disturbance	Environmental Awareness Plan ¹⁵	Board's opinion that the proposed activities will
		not have a significant adverse impact on the
	During the public review the WRRB and GNWT-ECC-	environment and will not be a cause of public
	submitted comments and recommendations regarding the	concern.
	protection of bird nests and habitat:	
	WORD assessment and the title WASNAD did not	
	WRRB commented that the WAEMP did not	:-
	"highlight that destruction of migratory bird nests	
	illegal under the Migratory Birds Act and wildlife o	iens
	and hibernacula are illegal under the Wildlife Act	
	(NWT)." WRRB recommended that "appropriate	-11
	legislation be highlighted in this section to ensure	all
	personnel on site are aware of the appropriate	
	legislation" (WRRB comment 1). WRRB also	
	recommended that a survey for nests (disturbed a	
	plus a 10 m buffer) be conducted shortly before d	rill

pads are constructed (WRRB comment 2), and that the Plan be updated to outline how nests will be surveyed for (WRRB comment 3).

The Applicant updated the plan to reflect the WRRB recommendations and submitted WAEMP V.1.1 to the Board as part of the comment responses.

GNWT-ECC commented that "Table 1 lists setback distances for short-eared owls (1.5 km) and migratory birds (10 m – 1 km). It is not clear whether "migratory birds" was also intended to include setback distances for other species of raptors than short-eared owls" (GNWT-ECC comment 2).

The Applicant updated the plan to reflect GNWT-ECC's recommendations and submitted WAEMP V.1.1 to the Board as part of the comment responses.

- Tłįcho Government, WRRB, and GNWT-ECC submitted comments and recommendations on caribou:
 - Tłįchǫ Government commented: "TG understands that measures undertaken by North Arrow to mitigate its impact on caribou are based on the most recent draft of the Mobile Caribou Conservation Measures Operational Guidance available from the GNWT Department of Environment and Natural

Resources (ENR; GNWT 2022). Hence, TG recommends that you continue to ensure that these mitigative measures are implemented" (TG comment 2).

The Applicant responded that it "will ensure best practice guidelines are followed to reduce the impact of our work in the area on the Ekwo" and "will engage with the Tłįchǫ regarding the Bathurst herd and whether they are typically in the area at the time planned for the drilling. If there is crossover we will first attempt to alter our schedule to avoid any impact."

GNWT-ECC commented that the WAEAP "does not describe how North Arrow will be monitoring the presence and number of caribou in the Early Warning Zone and Zone of Influence in order to determine when Level 1 or 2 thresholds for caribou presence are exceeded." GNWT-ECC recommended the plan be updated "to describe their methodology for monitoring caribou in the Early Warning Zone and Zone of Influence based on the Mobile Caribou Conservation Measures - Operational Guidance and that North Arrow "engage with ECC to arrange for the provision of regularly updated collar data maps showing the project location, Zone of Influence, and Early Warning Zone through a Data Release Agreement" (GNWT-ECC comment 3). GNWT-ECC recommended updating the plan to

	reflect that the project area was not in the calving or	
	post-calving range of Bathurst caribou and	
	· · · · · · · · · · · · · · · · · · ·	
	recommended specific wording be added to the plan	
	(GNWT-ECC comment 3)	
	The Applicant updated the plan to reflect GNWT-	
	ECC's recommendations and submitted WAEMP	
	V.1.1 to the Board as part of the comment	
	·	
	responses. The Applicant further committed to	
	implementing the NWT Standard Mobile Measures	
	document if it was available at the time of project	
	commencement, or to developing its own Wildlife	
	Protocol document for the project. It also confirmed	
	that it would contact GNWT-ECC for collar data maps	
	once drill locations and project timing were finalized.	
	The Board has standard permit conditions that are typically used	
	to mitigate the potential impacts. These standard conditions	
	include:	
	HABITAT DAMAGE	
	GARBAGE CONTAINER	
Heritage	The Applicant has developed a Wildlife, Archaeological, and	
Resources	Environmental Awareness Plan	Based on the described mitigations, it is the
	During the public review, PWNHC commented that the	Board's opinion that the proposed activities will
	proposed activities may place recorded and unrecorded	not have a significant adverse impact on the
	archaeological sites at risk of impact and recommended	environment and will not be a cause of public
	maintaining the AO and AIA – High Potential conditions	concern
	(PWNHC comment 1).	
	·	

The Tłıcho Government recommended that it also be notified upon discovery of heritage resources, and consulted prior to moving any artifacts or disturbing any ground within 150 m of a burial site (TG comment 1)

The Applicant updated the plan to reflect these recommendations and submitted WAEMP V.1.1 to the Board as part of the comment responses.

- The Board has standard permit conditions that are typically used to mitigate the potential impacts. These standard conditions include:
 - ARCHAEOLOGICAL BUFFER
 - SITE DISTURBANCE
 - SITE DISCOVERY AND NOTIFICATION
 - ARCHAEOLOGICAL OVERVIEW
 - AIA HIGH POTENTIAL

4.1 Consideration of Potential Impacts

Based on the potential impacts and proposed mitigations identified above in Table 1, the Board considered whether the changes to the Project might have a significant adverse impact on the environment. In general, impacts of the changes to the Project on the environment can be mitigated through the use of permit conditions of two general types:

- 1. conditions in the existing Permit, including requirements for management and monitoring plans, with revisions where necessary; and
- 2. new or unique conditions that may be needed to mitigate potential impacts of the changes to the Project that may not be addressed by the conditions in the existing Permit, and which may be from the Board's standard conditions list or established by the Board as per the LWB <u>Standard Process for Creating New Conditions</u>.

These conditions may include requirements for management and monitoring plans that provide detailed information regarding the implementation of mitigation measures and the evaluation of their effectiveness.

A draft Permit was 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.

4.2 Consideration of Public Concern

In addition to considering the potential impacts of the changes to the Project, the Board considered whether the changes to 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 completed preliminary screenings of the Project on March 2, 2017,¹⁶ November 24, 2017,¹⁷ and July 16, 2019,¹⁸ however, the Application includes proposed changes to the Project area. Accordingly, the Board has determined that Project activities that have already been subject to Part 5 of the MVRMA are exempt from preliminary screening under Part 1, Schedule 1, section 2.1 of the Exemption List Regulations to the MVRMA. The Board has conducted a preliminary screening of the proposed changes to the Project. The Board has reviewed all the evidence received during the regulatory process with respect to the Preliminary Screening of the proposed changes to the Project. Based on the evidence, it is the Board's opinion that the proposed changes to the 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 changes to the Project to Environmental Assessment. If

¹⁶ See WLWB Online Registry for W2017C0001 - North Arrow - Preliminary Screening - Mar 2 17

¹⁷ See WLWB Online Registry for W2017C0001 - North Arrow - LUP Amendment - Preliminary Screening - Nov 24 17

¹⁸ See WLWB Online Registry for W2017C0001 - North Arrow - Land Use Permit - Amendment - Preliminary Screening Notification and Determination - Jul 16 19

April 3, 2024	Mason Mantla, Chair	Date	
My My		April 3, 2024	
	My/my/		

the Board does not receive a notice of referral to environmental assessment by April 13, 2024, the Board

Mason Mantla, Chair Wek'èezhìı Land and Water Board

can issue the Permit on Monday, April 15, 2024.