

Nunavut Impact Review Board

MMG 2025-2028 Izok Corridor Project - Exploration

May 9, 2025

Prepared for:
MMG

Prepared by:
Nunami Stantec Ltd

Project/File:
123515328



Project Description

The Izok Corridor has been explored by various groups since its discovery in the 1950's and is currently held by MMG, who acquired the project in 2009. Following extensive work around feasibility for potential development, the project has remained on standby awaiting more favourable economic conditions, primarily related to arctic infrastructure. With the acquisition of CIRNAC mineral claims, MMG intends to resume mineral exploration activities.

The High Lake area is south of Gray's Bay. The nearest community to the High Lake area is Kugluktuk, approximately 150 km to the west. The Izok Lake area is approximately 210 km southeast of Kugluktuk, near Contwoyto Lake, and extends into the Northwest Territories, though currently, work is only planned in Nunavut. See Figure 1, below.

Part of this Project has been previously reviewed by the NPC for mineral exploration activities that have been undertaken in this area, including on portions of MMG's mineral claims by previous proponents (NPC 148636: Izok Lake Project; 148606: High Lake). Overlapping exploration activities have been subject to Nunavut Impact Review Board (NIRB) screenings (primarily NIRB File # 12MN043, but also #'s 12YA007, 07YN055, 07YN056, 06EN048, 08EN067, 06EN066, 04YN073, 03EN053, 01WN021, 02EN039, 06MN082).

MMG acquired 63 CIRNAC mineral claims in the Izok Corridor Project Area in February 2023, and an additional 5 CIRNAC mineral claims in July and September 2024. MMG's CIRNAC Mining Leases and the CIRNAC Surface Leases in the Project area predate the Nunavut Land Claim Agreement (NLCA). Where land use is administered by the Kitikmeot Inuit Association (KIA), MMG will work with the KIA for appropriate right of access agreements (see Figure 1, below). The geographical extents of two CIRNAC LUPs and NWB Water Licences must be amended to encompass the CIRNAC mineral claims. In the High Lake area, the western extent of the LUP and Water Licence must be extended to include 16 CIRNAC mineral claims. In the Izok area, the northern extent must be extended to include 5 CIRNAC mineral claims. Proposed extents of each area are identified in Figure 1, below.

To advance the potential mine development, further mineral exploration activities are planned, starting in 2025 and continuing to 2028 on the Izok Lake CIRNAC mining lease sites, the High Lake CIRNAC mining lease sites, and CIRNAC mineral claims acquired by MMG. MMG plans to conduct geophysical surveys (including EM and IP surveys) and diamond drilling programs starting in April 2025. Exploration activities may occur during summer, fall and/or winter seasons. Exploration drilling will be carried out with the use of diamond drills and reverse circulation drills. Other activities related to exploration may include aerial or ground-based surveys, geophysical surveys, mapping, sampling, staking, environmental monitoring or baseline studies, and archaeological studies.

MMG will preferentially source Project personnel, materials and services from Kitikmeot communities and offer on-the-job training as required. Initially, MMG's exploration team will be based at Bluestar Gold's Ulu Camp until the Izok Lake Camp (at Ham Lake) and High Lake Camp can be prepared for seasonal occupation. Small fly camps may also be used periodically to support limited remote seasonal exploration activities. Any temporary fly camps will be located on dry durable ground near areas of mineralogical

Nunavut Impact Review Board

interest, where exploration drilling may occur. These camps would utilize temporary, tent-based infrastructure and establishment of these camps will be preceded by archaeological surveys and implementation of measures to avoid disturbance of archaeological sites.

Water will be withdrawn per the existing NWB Type B Water Licences (2BE-IZO2328 and 2BE-HIG2328) for use of 100 m³/day (per Licence) to support exploration activities and camp operations. Both Type B Water Licences were renewed in 2023 with conditions that the total camp water use shall not exceed 15 cubic metres per day, and the total volume of water for all purposes shall not exceed 100 cubic metres per day.

Permit conditions included in the existing CIRNAC LUPs and NWB Water Licences, and conditions included in anticipated KIA LUPs will be employed in new areas encompassed in the requested extent amendments. These conditions include measures to mitigate impacts to wildlife, including caribou, birds and carnivores. In the High Lake area of the Project, the Dolphin and Union caribou herds are present, and in the Izok area, the Bathurst caribou herd is present.

The High Lake exploration site is located approximately 50 km south of Grays Bay and has been in care and maintenance since 2015. The High Lake camp can be accessed by fixed-wing aircraft on floats using High Lake. A helicopter is normally stationed on site during camp occupancy. During field exploration programs, the camp occupancy will vary depending on the activities occurring in the area, including the number of drills operating and other activities (e.g. stakeholder tours) to the maximum capacity of 30 people.

The Izok Lake camp is located approximately 300 km southwest of High Lake and has been in care and maintenance since 2015. During field exploration programs, the camp occupancy will vary depending on the activities occurring in the area, including the number of drills operating and other activities (e.g. stakeholder tours) to the maximum capacity of 30 people. Izok Lake Camp can be accessed by fixed-wing aircraft, using the 760 m gravel air strip located approximately one kilometer from camp.

Transportation between camp sites and exploration targets is primarily via helicopter with limited use of snowmobiles in winter. ATVs are used in the summer/fall within the camp region to move equipment and supplies between the airstrip and the various camp buildings.

Fuel at all sites will be stored in secondary containment and will include diesel, aviation fuel, gasoline and propane. Spill prevention measures and spill contingency plans will be implemented. Drill and core cutting waste will be deposited in natural depressions or dug sumps, as will camp greywater from the kitchen, sinks, and showers, and any outhouse blackwater (should pit outhouses be used). Either pits, incinerating, or outhouse-type pit toilets will be used. An incinerator may be used to incinerate suitable wastes, and suitable materials such as untreated wood, cardboard, and paper may be open burnt. All other wastes will be backhauled to Yellowknife to an approved waste management facility.

Nunavut Impact Review Board

The potential environmental impacts and proposed mitigation measures for the Project are outlined in Table 1, below.

Table 1. Potential environmental impacts and proposed mitigation measures for the Izok Corridor Project.

Resource	Potential Impact	Proposed Mitigation
Tundra / Permafrost	<p>Overburden drilling may cause minor disturbance to immediate drilling areas.</p> <p>Contamination of terrain/permafrost and, surface and ground water due to fuel spills.</p> <p>Accidental fuel spills.</p>	<p>Drill rigs will be heli-portable and will not traverse the tundra surface.</p> <p>Site will be left in a stable state.</p> <p>Proper storage of fuel containers and use of drip pans and secondary containment. Spill Contingency Plan will be implemented as required.</p>
Hydrology	Water removal required from local water bodies for geotechnical drilling.	Chilled brine will be kept in closed circulation by the drill, minimizing the amount of water used. Additional water will be required if downhole circulation is lost. Lost circulation is un-common, and amounts are expected to be minimal.
Hydrology	Water quality changes to groundwater if artesian well is encountered during drilling.	If an artesian well is encountered, drilling will stop, the hole will be plugged, and the location will be recorded and reported.
Surface Water Quality	Sedimentation in water bodies.	Minimum 30 m distance from surface water bodies enforced for all activities. Use of sumps for depositing settled fines for drill return.
Fish and Fish Habitat	Entrainment of fish and other aquatic life with extraction of water for drilling and domestic camp purposes.	Use of screens over pump intake pipe to prevent entrainment.

<p>Vegetation</p>	<p>Spilled brine during drilling may result in minor damage in immediate vicinity of drill site</p> <p>Minor compaction of vegetation caused by drill.</p>	<p>Implementation of field protocols to ensure there is no brine spillage. Closed system on drill water return. Spill Contingency Plan will be implemented as required.</p> <p>Drill-rig will be heli-portable and will not traverse the ground surface. Drilling will be completed from a constructed temporary plank floor to prevent compaction and disturbance of vegetation.</p>
<p>Wildlife and Wildlife Habitat</p>	<p>Wildlife: short-term aircraft and drilling noise, human interaction.</p> <p>Habitat: Minor disturbance to vegetation in drilling areas by compaction.</p>	<p>Personnel will receive training on wildlife-human interaction/encounters.</p> <p>Pre-drilling reconnaissance site visit prior to drilling activities will assist in identifying sensitive wildlife habitat.</p> <p>Operations will be modified or suspended if found to be affecting seasonal migration or nesting activities.</p> <p>Site will be left in a stable state, promoting vegetation re-establishment.</p> <p>Conditions of applicable LUPs and Water Licences will be followed, including:</p> <ul style="list-style-type: none"> - Prior to significant operational movements, a high-altitude aerial reconnaissance will be undertaken with the assistance of an independent wildlife monitor to determine whether caribou cows and calves are present within a 20 km radius of the camp or drill sites, or if caribou are migrating close by. If caribou are observed the monitor will instruct the proponent to suspend any activities within 10 km of the sightings.

		<p>- No drilling, camp operation or petroleum storage within 5 km of any paths or crossings known to be frequented by caribou</p> <p>Refer to the attached Wildlife Management Plan for additional details on mitigation measures regarding wildlife.</p>
Wildlife and Wildlife Habitat	Disturbance of wildlife from low-level aircraft activities.	<p>Low-level fixed wing aircraft activity will be restricted to take off and landing. Helicopter flight will be restricted to the necessary slinging of drill equipment and takeoff and landing.</p> <p>Refer to the attached Wildlife Management Plan for additional details on mitigation measures regarding wildlife.</p>
Socio-economics	Positive impacts. Local employment and training. Continued employment opportunities for field personnel from the local communities, with the possibility of expansion in the future.	Local employment provides jobs, employment benefits and income to individuals and families in isolated communities and contributes to the local economy.
Archaeology / Cultural Sites	Minor disturbance to immediate drilling areas.	<p>Pre-drilling terrain mapping and reconnaissance site visit will assist in identifying potential archaeological sites for avoidance.</p> <p>Personnel training on archaeological resource identification.</p> <p>Standard notification procedures will be followed if archaeological artifacts are encountered, and operations modified or suspended.</p>

Nunavut Impact Review Board

<p>Archaeology / Cultural Sites</p>	<p>Disturbance, removal and/or destruction of archaeological specimens or sites.</p>	<p>Project activities that encounter or are found to be impacting an archaeological site or specimen shall be stopped, and the proper regulatory authorities shall be immediately notified.</p> <p>All persons working on site will be made aware of this mitigation procedure and any permit conditions.</p> <p>Archaeological specimens or sites shall not knowingly be removed, disturbed, or displaced.</p>
-----------------------------------------	--------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

