



NIRB File No.: 25YN078

NIRB Public Registry Link: [www.nirb.ca/project/126244](http://www.nirb.ca/project/126244)

NPC File No.: 150932

November 19, 2025

Tom Meijeraan  
 Arctic Reflections  
 Paardenmarkt 1  
 Delft Zuid Holland 2611 PA The Netherlands

Sent via email: [tom@arcticreflections.earth](mailto:tom@arcticreflections.earth)

**Re: Notice of Screening and Comment Request**

Dear Tom Meijeraan:

The Nunavut Impact Review Board (NIRB) received a referral to screen Arctic Reflections’ “Arctic Ice Thickening Field Test Qikiqtarjuaq” project proposal:

- October 17, 2025, the Nunavut Planning Commission noted that this project is outside of an applicable regional land use plan, and
- October 21, 2025, the NIRB received a complete application and assigned it file number **25YN078** - please reference this file number in all future related correspondence.

The NIRB has commenced screening the project proposal pursuant to the *Nunavut Agreement* and *Nunavut Planning and Project Assessment Act*<sup>1</sup> and by copy of this letter, **invites interested parties and municipalities potentially affected by the proposal to comment directly to the Nunavut Impact Review Board.**

SCOPE OF PROPOSED PROJECT

<b>Location</b>	Qikiqtani region, within 10 km of Qikiqtarjuaq
<b>Objective</b>	The Proponent intends to conduct a field test of Arctic Ice Thickening by pumping seawater onto the sea ice surface to increase ice thickness, and to measure whether the method is effective under Nunavut conditions, how long the thickened ice persists, and whether there are environmental or wildlife impacts.
<b>Timeline</b>	February 2026 to July 2027. Field operations occur for 4–5 weeks in February of each year, with monitoring continuing into summer

<sup>1</sup> Article 12, Sections 12.4.1 and 12.4.4 of the *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada (Nunavut Agreement)* and s. 87 of the *Nunavut Planning and Project Assessment Act*, S.C. 2013, c. 14, s. 2 (*NuPPAA*)

According to the project proposal, the scope of the project includes the following undertakings, works or activities:

- Use of three (3) snowmobiles for transportation to project site;
- Use of three (3) sleds to carry equipment to project site;
- Use of three (3) drills to drill holes in the ice to allow the pump to extract water;
- Use of three (3) gasoline powered water pumps to pump seawater from below the ice on to the ice to thicken the ice;
- Use of two (2) Smart buoy to measure ice thickness and solar reflection;
- Use of two (2) SAMS SIMBA to measure snow, ice thickness and water, and air temperatures;
- Use of a Anemometer to measure wind speed, wind direction, and air temperature;
- Use of two (2) data loggers to store and transfer data from anemometer and radiometers;
- Use of two (2) radiometers to measure incoming and outgoing shortwave and longwave radiation to measure reflection of solar energy by the ice;
- Use of two (2) timelapse cameras to take pictures every x hour to see how the ice melts during the melting season and to visually validate and explain the data coming from the instruments;
- Use of two (2) floating platforms to keep scientific instruments floating when the ice starts to melt in summer;
- Use of a Mark II Kovacs Ice Corer to collect ice core samples to measure ice thickness, temperature, and salinity; and
- Use of 2,500 L gasoline for pumps (125 × 20 L jerrycans) 200 L gasoline for snowmobiles (10 × 20 L jerrycans) Total = 2,700 L

### ***Inclusion or Exclusion of Scoping List***

The NIRB has identified no additional works or activities in relation to the project proposal. As a result, the NIRB will proceed with screening the project based on the scope as described above.

## REQUEST FOR COMMENTS

Documents received and describing the proposal can be accessed from the NIRB's online public registry at [www.nirb.ca/project/126244](http://www.nirb.ca/project/126244) including:

- *Commission Conformity Determination*
- *NIRB Application*

The NIRB may request additional information at any time during the process.

By copy of this letter, the NIRB is inviting interested parties and municipalities potentially affected by the project proposal to comment directly to the NIRB by **December 1, 2025**.

The NIRB would like parties to provide comments regarding:

- Whether the project proposal is likely to arouse significant public concern; and if so, why;
- Whether the project proposal is likely to cause significant adverse eco-systemic or socio-economic effects; and if so, why;

- Whether the project proposal is likely to cause significant adverse impacts on wildlife habitat or Inuit harvest activities; and if so, why;
- Whether the project proposal is of a type where the potential adverse effects are highly predictable and mitigable with known technology, (and providing any recommended mitigation measures); and
- Any matter of importance to the Party related to the project proposal.

Please note that *proposed* project-specific terms and conditions, should the project proceed, have been attached for consideration and comment ([Appendix A](#)).

#### CONTACT INFORMATION

Please send comments to the NIRB via email at [info@nirb.ca](mailto:info@nirb.ca), via fax at (867) 983-2594 or via the individual project dashboard for this assessment on the NIRB's online public registry at [www.nirb.ca/project/126244](http://www.nirb.ca/project/126244). Questions should be directed to the undersigned at 1-866-233-3033 or [femingak@nirb.ca](mailto:femingak@nirb.ca).

Sincerely,



Francis Emingak  
Screening Officer  
Nunavut Impact Review Board

Attachments: Appendix A: *Proposed* Project Specific Terms and Conditions

Enclosures (4): Public Notice of Screening (English, and Inuktitut)  
Comment Forms (English, and Inuktitut)

cc: Distribution List  
Jared Ottenhof, Qikiqtani Inuit Association  
Chris Spencer, Qikiqtani Inuit Association  
Conor Goddard, Qikiqtani Inuit Association  
Joel Fortier, Qikiqtani Inuit Association  
Assol Kubeisinova, Qikiqtani Inuit Association  
Justin Buller, Government of Nunavut  
Dianne Lapierre, Government of Nunavut  
Sean Joseph, Government of Nunavut  
Mosha Cote, Nunavut Research Institute  
Hamlet of Qikiqtarjuaq  
Nattivak Hunters and Trappers Organization

## Appendix A: Proposed Project Specific Terms and Conditions

The following is a list of project-specific terms and conditions which, should the project proceed, may be recommended to be attached to any approval.

### General

1. Arctic Reflections (the Proponent) shall maintain a copy of the Project Terms and Conditions at the site of operation at all times and make it accessible to enforcement officers upon request.
2. The Proponent shall operate in accordance with all commitments stated in correspondence provided to the Nunavut Planning Commission (NPC File No.: 150932, and the NIRB (Online Application Form, October 21, 2025. This information should be accessible to enforcement officers upon request.
3. The Proponent shall operate the site in accordance with all applicable Acts, Regulations and Guidelines.
4. The Proponent shall ensure that it meets the standards and/or limits as set out in the authorizing agencies' permits or licences as required for this project.
5. The Proponent shall ensure that all personnel, staff and contractors are adequately trained prior to commencement of all project activities, and shall be made aware of all operational plans, management plans, guidelines and Proponent commitments relating to the project.

### Water courses/Water bodies (including fresh and marine waters)

6. The Proponent shall not deposit, nor permit the deposit of any fuel, chemicals, wastes (including wastewater) or sediment into any water body. The Proponent should have in place an Emergency Spill Response Plan that is approved by the appropriate authorizing agency(ies).

### Waste Management

7. The Proponent shall manage all hazardous and non-hazardous waste including food, domestic wastes, debris and petroleum-based chemicals (e.g., greases, gasoline, glycol-based antifreeze) in such a manner to avoid release into the environment and access to wildlife at all times until disposed of appropriately or at an approved facility.

### Fuel and Chemical Storage

8. The Proponent shall have a Spill Contingency Plan in place at all fuel storage or transfer locations and shall ensure that appropriate spill response equipment and clean-up materials (e.g., shovels, pumps, barrels, drip pans, and absorbents) are readily available.
9. The Proponent shall follow the authorizing agencies' direction for management and removal of hazardous materials and wastes (e.g., contaminated soils, sediment and waste oil).
10. The Proponent shall ensure that wildlife deterrent systems are utilized at the time of a spill incident in order to avoid wildlife (terrestrial or marine) and migratory birds from being contaminated.

11. The Proponent shall ensure that all spills of fuel or other deleterious materials of 100 litres or more must be reported immediately to the 24-hour Spill Line at (867) 920-8130.

### **Air Quality**

12. The Proponent shall eliminate unnecessary idling to reduce greenhouse gas emissions as much as possible.

### **Wildlife – General**

13. The Proponent shall not substantially alter or damage or destroy any wildlife habitat in conducting this operation unless otherwise authorized by the appropriate authorizing agencies.

14. The Proponent shall not chase, weary, harass or molest wildlife. This includes persistently circling, chasing, hovering over, pursuing or in any other way harass wildlife, or disturbing large groups of animals.

15. The Proponent shall not hunt or fish, unless proper Nunavut authorizations have been acquired.

16. The Proponent shall ensure that all wildlife have the right-of-way on any roads or trails. Vehicles are required to slow down or stop and wait to permit the free and unrestricted movement of wildlife across roads or trails at any location.

### **Other**

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

18. The Proponent shall ensure that project activities do not interfere with Inuit wildlife harvesting or traditional land use activities.

19. The Proponent should, to the extent possible, hire local people and access local services where possible.