



NIRB File No.: 25YN016

NPC File No.: 150616

May 1, 2025

Stephen Grasby
Geological Survey of Canada
3303 33 St. NW
Calgary, AB T2L 2A7

Sent via email: steve.grasby@canada.ca

Re: Notice of Screening for Geological Survey of Canada's "Resolute Bay Geothermal Potential" Project Proposal

Dear Stephen Grasby:

On March 19, 2025 the Nunavut Impact Review Board (NIRB) received a referral to screen Geological Survey of Canada (GSC)'s "Resolute Bay Geothermal Potential" project proposal from the Nunavut Planning Commission (Commission), with an accompanying positive conformity determination with the North Baffin Regional Land Use Plan. On April 4, 2025 the NIRB received the complete application from the Proponent.

Pursuant to 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), the NIRB has commenced screening this project proposal and has assigned it file number 25YN016 - please reference this file number in all future related correspondence.

PROJECT OVERVIEW

Project Scope:

All documents received and pertaining to this project proposal can be accessed from the NIRB's online public registry at www.nirb.ca/project/126163.

Project:	Resolute Bay Geothermal Potential				
Region:	Qikiqtani (North Baffin) Region				
Location:	Central Dome, Eleanor Lake, and Cape Manning on Cornwallis Island; Burrow Harbour and Lyall River on Devon Island				
Closest Community:	Resolute Bay	Distance (approximate)	52 to 250 kilometres (km)	Direction	North

Summary of Project Description:	The Proponent intends to investigate the geological features at a site on Cornwallis Island and at a site on Devon Island, to assess the geothermal resource potential at Resolute Bay.
Project Proposed Timeline:	July 1 to July 15, 2025

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

- Examination of rock outcrops at Cape Manning, Eleanor Lake, and Central Dome on Cornwallis Island, and Borrow Harbour and Lyall River on Devon Island:
 - Basic examination and measurements of rocks;
 - Characterization of the rocks;
 - Collection of small hand size rock samples (~ 100 kilogram in total);
- Establishment of temporary five (5) person tent camps at each location;
- Use of helicopter and/or Twin Otter for transport of personnel to and from field sites from Resolute Bay;
- Collection of water for human consumption from streams or snow pack;
- Disposal of black and grey water in a pit;
- Removal of all wastes to Resolute Bay for disposal;
- Use of accommodations, and facilities and hiring local wildlife monitors; and
- Presentation of results to community members in Resolute Bay and Iqaluit.

Inclusion or Exclusion of Scoping List

At this time, 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

All documents received can be accessed from the NIRB's online public registry at www.nirb.ca/project/126163 and include:

- *Commission Conformity Determination*
- *Commission Application*
- *NIRB Application in English*
- *Non-technical Summary in English, French and Inuktitut*
- *Project Map with Research Sites*

The NIRB will copy you on screening process related correspondence and upload related documents to the NIRB's online registry for public access. The NIRB may request additional information at any time during the process.

The NIRB is copying parties and municipalities potentially affected by GSC project proposal with this letter, and we invite interested parties to comment directly to the NIRB by **May 12, 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 your comments to the NIRB via email at 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/126163.

If you have any questions or require clarification, feel free to contact the undersigned at (867) 983-4619 or kgillard@nirb.ca.

Sincerely,



Kelli Gillard
Manager, Impact Assessment
Nunavut Impact Review Board

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

Enclosures (2): 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
Richard Dwyer, Nunavut Water Board
Mosha Cote, Nunavut Research Institute
Tracey McCaie, Crown-Indigenous Relations and Northern Affairs Canada
Caroline Whittle, Department of Culture and Heritage – Government of Nunavut
Sylvie LeBlanc, Department of Culture and Heritage – Government of Nunavut

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. Geological Survey of Canada (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.: 150616), and the NIRB (Online Application Form, April 4, 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 ensure that water extraction from any fish-bearing waterbody is done with appropriate care and caution. Small lakes or streams should not be used for water withdrawal unless approved by the appropriate authorizing agency.

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.
8. The Proponent shall incinerate all combustible wastes as needed and dispose of as required by the appropriate authorizing agencies. All non-combustible wastes from the project site shall be removed to an approved facility for disposal.

Wildlife – General

9. 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.
10. 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.

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

Migratory Birds and Raptors Disturbance

12. The Proponent shall carry out all phases of the project in a manner that protects migratory birds and avoids harming, killing or disturbing migratory birds or destroying, disturbing or taking their nests or eggs. In this regard, the Proponent shall take into account Environment and Climate Change Canada's *Avoidance Guidelines*. The Proponent's actions in applying the *Avoidance Guidelines* shall be in compliance with the *Migratory Birds Convention Act, 1994* and with the *Species at Risk Act*.

13. The Proponent shall not disturb or destroy the nests or eggs of any birds. If active nests of any birds are discovered or located (i.e., with eggs or young), the Proponent shall avoid these areas until nesting is complete and the young have naturally left the vicinity of the nest by establishing a protection buffer zone¹ appropriate for the species and the surrounding habitat.

Aircraft Flight Restrictions

14. The Proponent shall not alter flight paths to approach wildlife and avoid flying directly over animals.

15. The Proponent shall plan flight paths that minimize flights over known habitat likely to have birds or concentrations of wildlife. Aircraft should avoid critical and sensitive wildlife areas at all times by choosing alternate flight corridors.

16. The Proponent shall restrict aircraft/helicopter activity related to the project to a minimum flight altitude of 610 metres (2,100 ft) above ground level except during landing, take-off or if there is a specific requirement for low-level flying, which does not disturb wildlife or migratory birds.

17. The Proponent shall avoid known concentrations of birds (e.g., bird colonies, moulting areas) by a lateral distance of 1.5 kilometre. If avoidance is not possible maintain a minimum flight altitude of 1,100 metres (3,500 feet) over these areas.

18. The Proponent shall ensure that aircraft/helicopter do not, unless for emergency, touch-down in areas where wildlife are present.

19. The Proponent shall advise all pilots of relevant flight restrictions and enforce their application over the project area, including flight paths to/from the project area.

Caribou and Muskoxen Disturbance

20. The Proponent shall avoid interfering with any paths or crossings known to be frequented by caribou during periods of migration as identified by current land use plans in place and/or by Inuit Qaujimaningit.

21. The Proponent shall not locate any operation or undertake activities that could block or cause any diversion to migration of caribou.

22. The Proponent shall immediately cease activities likely to interfere with the migration or calving of caribou until such time as the caribou have passed.

¹ Recommended setback distances to define buffer zones have been established by Environment and Climate Change Canada for different bird groups nesting in tundra habitat and can be found at www.ec.gc.ca/paom-itmb.

Land Use and Restoration of Disturbed Areas

- 23. The Proponent shall use existing trails where possible during project activities on the land.
- 24. The Proponent shall ensure that the land use area is kept clean and tidy at all times.
- 25. The Proponent shall remove all garbage, fuel and equipment at the end of each field season and/or upon completion of work and/or upon abandonment.

Camps

- 26. The Proponent shall ensure that all camps are located durable surfaces, such as gravel or sand that is consolidated and can withstand repeated, heavy use. Measures shall be put in place to prevent erosion, trail formation and damage to the ground.
- 27. The Proponent shall not erect camps or store materials on the surface ice of lakes or streams, except that which is for immediate use.

Heritage Sites

- 28. The Proponent shall ensure that archaeological and paleontological sites are not purposely or inadvertently disturbed by clients or staff as a result of project activities.
- 29. The Proponent shall ensure that all clients and staff are aware of the Proponent's responsibilities and requirements regarding archaeological or palaeontological sites that are encountered during land-based activities. This should include briefings explaining the prohibitions regarding removal of artifacts, and defacing or writing on rocks and infrastructure.

Other

- 30. The Proponent should consult with local residents regarding their activities in the area and solicit available Inuit Qaujimaningit and information that can inform project activities.
- 31. The Proponent shall ensure that project activities do not interfere with Inuit wildlife harvesting or traditional land use activities.
- 32. The Proponent should, to the extent possible, hire local people and access local services where possible.