



**NIRB File No.: 16YN010**

NPC File No.: 149020

*Related to NPC File Nos.: 148222, 148582 and 148671*

March 19, 2019

Gifford Miller  
University of Colorado  
4001 Discovery Drive  
Boulder CO 80303-0450

*Sent via email: [gmillers@colorado.edu](mailto:gmillers@colorado.edu)*

**Re: Notice of Screening for University of Colorado's "Ancient DNA in Lake Sediment" Project Proposal**

Dear Gifford Miller:

On January 22, 2019 the Nunavut Impact Review Board (NIRB or Board) received a referral to screen University of Colorado's "Ancient DNA in Lake Sediment" project proposal from the Nunavut Planning Commission (NPC or Commission), with an accompanying positive conformity determination with the North Baffin Regional Land Use Plan. The NPC noted that the previous conformity determination issued on February 24, 2017 and December 19, 2017 for the activities associated with the current proposal continues to apply and has determined that the project proposal is a significant modification to the project because it includes a new lake near Pond Inlet.

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 section 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. Due to the proposal containing activities that are sufficiently related to previously assessed activities under NIRB file number **16YN010**, the NIRB views this project proposal as an amendment to the previously screened project and has assigned this proposal with this previous file number. Please reference this file number in all future related correspondence. A summary of the previously screened project activities can be found in [Appendix A](#).

#### INFORMATION REQUEST

On January 22, 2019 the NIRB requested that the Proponent complete the online application form through the NIRB's public registry system and ensure, pursuant to s. 144(1) of the *NuPPAA*, that the information provided be sufficient to determine the scope of the project activities being

proposed and that sufficient information has been provided to commence screening. On February 7, 2019 and on February 26, 2019 the NIRB followed up with the Proponent requesting an online application, which was received on March 7, 2019. Following a preliminary completeness check of the proposal as submitted, the NIRB determined that the proposal did not contain the necessary information for the NIRB to carry out its screening and on March 8, 2019 requested that the Proponent provide the Board with the additional information in order to carry out the screening of the project proposal.

On March 14, 2019 the NIRB received the required additional information and commenced the screening pursuant to Part 3 of the *NuPPAA*.

## PROJECT OVERVIEW

### ***Project Scope:***

The “Ancient DNA in Lake Sediment” project activities as previously screened by the NIRB (File No. 16YN010) included taking lake sediment samples from lakes near Iqaluit, Clyde River and Qikiqtarjuaq to analyze for ancient DNA to reconstruct past vegetation types, and species diversity and reveal past summer temperatures. A complete description of the scope of activities previously approved has been included within [Appendix A](#).

University of Colorado is currently proposing to amend the “Ancient DNA in Lake Sediment” project; which would be located in the Qikiqtani Region in the same areas as previously approved, in addition to one (1) new location 35 km southwest of Pond Inlet. The program is proposed to take place from May to August 2019.

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

- Use of All-Terrain Vehicles (ATVs), snowmobiles and boats to transport research personnel and equipment to sampling sites;
- Use of tents to provide accommodation for research personnel during fieldwork
- Undertake sampling and research activities in two (2) natural lakes:
  - Use of ice auger to drill through lake ice to collect water and lake-bottom sediment samples;
  - Mapping of vegetation around the lakes;
  - Installation of thermometers to record air, soil and water temperatures;
- Use and storage of 180 litres of gasoline to support snowmobile operations and cooking;
- Burial of sewage generated from the camp; and
- Hiring of local community members for logistical support.

### ***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 and pertaining to this project proposal can be accessed from the NIRB's online public registry at [www.nirb.ca/project/125447](http://www.nirb.ca/project/125447).

The documents received include:

- *NPC Screening Referral and Conformity Determination*
- *NPC Application and Conformity Questionnaire*
- *NIRB's Online Application Form*
- *Non-technical Project Proposal summary in English and Inuktitut*
- *Maps noting sampling sites and camping area*
- *Equipment list*
- *Supplemental Information*

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 University of Colorado's project proposal with this letter, and we invite interested parties to comment directly to the NIRB by **March 29, 2019**.

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 B**).

## CONTACT INFORMATION

Please send your 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/125447](http://www.nirb.ca/project/125447).

If you have any questions or require clarification, feel free to contact the undersigned at (867) 983-4622 or at [motokiak@nirb.ca](mailto:motokiak@nirb.ca).

Sincerely,



Mia Otokiak  
Junior Technical Advisor  
Nunavut Impact Review Board

Attachments: Appendix A: Previously-Screened Project Proposals  
Appendix B: *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  
Joel Fortier, Qikiqtani Inuit Association  
Moshia Cote, Nunavut Research Institute

## APPENDIX A: PREVIOUSLY-SCREENED PROJECT PROPOSALS

The original project proposal (NIRB File No.: 16YN010), was received by the Nunavut Impact Review Board (NIRB or Board) from the Nunavut Planning Commission (NPC or Commission) on February 25, 2016, which noted that his project was located outside of an applicable regional land use plan. The project proposal was screened by the Board in accordance with Part 4, Article 12 of the *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada (Nunavut Agreement)* and Section 3 of the *Nunavut Planning and Project Assessment Act*, S.C. 2013, c. 14, s. 2 (*NuPPAA*). On April 18, 2016 the NIRB issued a screening decision pursuant to p. 92(2)(a) of the *NuPPAA* to the Minister Responsible for Nunavut Arctic College which indicated that the proposed project could proceed subject to the NIRB's recommended project-specific terms and conditions.

The University of Colorado's (Proponent) original "Ancient DNA in Lake Sediment" project was located in the Qikiqtani region, approximately 20 kilometres (km) southeast of Iqaluit. The Proponent indicated that it intended to conduct lake sediment sampling at three (3) separate study sites for testing of benthic organisms. The program was proposed to take place in April 2016.

According to the previously screened project proposal, the scope of the project included the following undertakings, works or activities:

- Extraction of six (6) (total) lake sediment core samples, six (6) centimetres in diameter and one (1) metre in length, from three (3) lake study sites using a mobile ice auger and a sediment corer;
- Disposal of waste and accommodations for two (2) personnel in Iqaluit;
- Transportation to and from study sites via snowmobile;
- Storage and use of five (5) litres of fuel for ice auger; and
- Hiring of a local community member for logistical support.

Additional authorization and amendment requests associated with the "Ancient DNA in Lake Sediment" project have also been reviewed by the NIRB following screening of the original project proposal (File No. 16YN010). In each instance, the NIRB re-issued the original terms and conditions recommended in the original April 18, 2016 Screening Decision Report and issued additional terms and conditions associated with the Project as per p. 92(2)(a) of the *NuPPAA*. The following is a summary of the previously screened project activities as received by the NIRB:

- 1) The scope of the activities and components associated with the March 31, 2017 amendment application included:
  - Use of all-terrain vehicles, inflatable boat, or on foot to transport three (3) personnel and equipment from Clyde River or Iqaluit to study sites in order to:
    - Extract lake sediment samples with steel coring device (eight (8) centimetres in diameter and one and a half (1.5) metres in length;
    - Aluminum tripod (half a metre (0.5) in diameter and (2) metres in length)
  - Use of fuel to operate the all-terrain vehicle or boat sourced locally;
  - Hiring of local guides to transport personnel to the project sites; and
  - Accommodations and use of local facilities for up to three (3) personnel in Clyde River and Iqaluit.

- 2) The scope of the activities and components associated with the February 6, 2018 amendment application included:
- Use of snowmobiles during winter season and boats during summer season to transport research personnel and equipment to sampling sites;
  - Use of a rental cabin or establishment of temporary camps to provide accommodation for research personnel during fieldwork;
  - Undertake sampling and research activities in three (3) natural lakes:
    - Use of ice auger to drill through lake ice to collect water and lake-bottom sediment samples;
    - Mapping of plants around the lakes;
    - Installation of thermometers to record air, soil and water temperatures;
  - Deployment of a weather station to collect weather data for one (1) year;
  - Transportation, storage and use of 100 litres of gasoline to support snowmobile and camp operations; and
  - Burial of sewage generated from the camp.

## **Appendix B**

### *Proposed Project Specific Terms and Conditions*

Terms and conditions were previously issued by the NIRB on April 18, 2016, July 14, 2017 and February 6, 2018 Screening Decision Reports for File No. **16YN010**, *and continue to apply to the Ancient DNA in Lake Sediment project*

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

#### **General**

1. (updated) The Proponent shall operate in accordance with all commitments stated in correspondence provided to the Nunavut Planning Commission (NPC File No.: 149020), and the NIRB (Online Application Form, March 14, 2019).