



NIRB File No. 12YN010

March 6, 2012

Gordon Osinski
Department of Earth Sciences
University of Western Ontario
London, ON N6A 5B7

Via email: gosinski@uwo.ca

Re: Notice of Part 4 Screening for the University of Western Ontario – Gordon Osinski’s “Analogue Mission to Discover the Genesis of Methane on Mars” project proposal

Dear Gordon Osinski:

On February 23, 2012 the Nunavut Impact Review Board (NIRB or Board) received the University of Western Ontario – Gordon Osinski’s “Analogue Mission to Discover the Genesis of Methane on Mars” project proposal from the Nunavut Research Institute (NRI). On February 27, 2012 the NIRB received a positive conformity determination (North Baffin Regional Land Use Plan) from the Nunavut Planning Commission. The NIRB has assigned this project proposal file number **12YN010** - please reference this file number in related future correspondence.

The project is located on Axel Heiberg Island in the North Baffin Region; the closest community to the proposed project is Grise Fiord, approximately 400 kilometres to the southeast. The program is proposed to take place from June to August, 2012 and the Proponent intends to collect methane and rock samples. A robotic rover outfitted with several sensors would first be set out to determine methane seepage, then methane samples and rocks would later be collected by hand for laboratory analysis.

The proposed project activities and components include:

- Use of a twin otter aircraft to transport equipment and personnel to Axel Heiberg Island
- Use of a helicopter to transport equipment and personnel to site from Strand Fiord
- Construction of a temporary camp for 12 people consisting of two longhouses and several small tents
- Use of a robotic rover equipped with sensors to locate methane seepage
- Use of Ground Penetrating Radar and Electromagnetic Induction to conduct shallow geophysical surveys
- Hand collection of methane and rock samples

All documents received and pertaining to this project proposal can be obtained from the NIRB's ftp site at <http://ftp.nirb.ca/01-SCREENINGS/ACTIVE%20SCREENINGS/> including:

- *NRI Scientific Research License Application in English*
- *Maps*
- *Non technical Project Proposal summary in English*
- *Non technical Project Proposal summary in Inuktitut*
- *NPC Conformity Determination*
- *Nunavut Water Board General Water License Application in English*

Pursuant to Part 4, Article 12 of the Nunavut Land Claims Agreement (NLCA), the NIRB shall proceed to screen this project proposal. The NIRB may request additional information at any time during the process. The NIRB will copy you on screening process related correspondence and upload related documents to the above ftp site for public access.

Be advised that the NIRB is copying parties and municipalities potentially affected by this project proposal. Interested parties are encouraged to comment directly to the NIRB by **March 16, 2012**.

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 and socio-economic effects; and if so, why;
- Whether the project is of a type where the potential adverse effects are highly predictable and mitigable with known technology, (please provide 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**).

Please send your comments to the NIRB at info@nirb.ca or via fax at **(867) 983-2594**.

If you have any questions or concerns, feel free to contact me directly at (867) 983-4603 or tbolt@nirb.ca.

Sincerely,



Tannis Bolt
Assistant Technical Advisor
Nunavut Impact Review Board

cc: Distribution List
Mosha Cote, NRI

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

Enclosures (2): Comment Forms (English and Inuktitut)

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. The University of Western Ontario – Gordon Osinski (the Proponent) shall maintain a copy of the Project Terms and Conditions at the site of operation at all times.
2. The Proponent shall forward copies of all permits obtained and required for this project to the Nunavut Impact Review Board (NIRB) prior to the commencement of the project.
3. The Proponent shall operate in accordance with all commitments stated in the NRI application, project proposal non-technical summary and the Nunavut Water Board application.
4. The Proponent shall operate the site in accordance with all applicable Acts, Regulations and Guidelines.

Water

5. The Proponent shall not extract water from any fish-bearing waterbody unless the water intake hose is equipped with a screen of appropriate mesh size to ensure that there is no entrapment of fish. Small lakes or streams shall not be used for water withdrawal.
6. The Proponent shall not use water, including constructing or disturbing any stream, lakebed or the banks of any definable water course unless approved by the Nunavut Water Board.

Waste

7. The Proponent shall incinerate all combustible wastes daily, and remove the ash from incineration activities and non-combustible wastes from the project site to an approved facility for disposal.
8. The Proponent shall keep all garbage and debris in bags placed in a covered metal container or equivalent until disposed of. All wastes shall be kept inaccessible to wildlife at all times.

Fuel and Chemical Storage

9. The Proponent shall locate all fuel and other hazardous materials a minimum of thirty-one (31) metres away from the high water mark of any water body and in such a manner as to prevent their release into the environment.
10. The Proponent shall store all chemicals in such a manner that they are inaccessible to wildlife.
11. The Proponent shall report all spills of fuel, or other deleterious materials immediately to the 24 hour Spill Line at (867) 920-8130.

Wildlife

12. The Proponent shall ensure that there is no damage to wildlife habitat in conducting this operation.

13. The Proponent shall not harass wildlife. This includes persistently worrying or chasing animals, or disturbing large groups of animals. The Proponent shall not hunt or fish, unless proper Nunavut authorizations have been acquired.
14. The Proponent shall restrict aircraft/helicopter activity related to the project to a minimum altitude of 610 metres above ground level unless there is a specific requirement for low-level flying, which does not disturb wildlife and migratory birds.
15. The Proponent shall ensure that aircraft maintain a vertical distance of 1000 metres and a horizontal distance of 1500 metres from any observed groups (colonies) of migratory birds.
16. The Proponent shall ensure that aircraft/helicopter do not, unless for emergency, touch-down in areas where wildlife are present.
17. The Proponent shall not disturb or destroy the nests or eggs of any birds. If active nests of any birds are discovered (i.e. with eggs or young), the Proponent shall avoid these areas until nesting is complete and the young have left the nest.
18. The Proponent shall cease activities that may interfere with migration or calving of caribou or muskox, until the caribou or muskox have passed or left the area.
19. The Proponent shall ensure all project staff are trained in appropriate bear/carnivore detection and deterrent techniques.

Physical Environment

20. The Proponent shall not move any equipment or vehicles unless the ground surface is in a state capable of fully supporting the equipment or vehicles without rutting or gouging. The Proponent shall suspend overland travel of equipment or vehicles if rutting occurs.
21. The Proponent shall ensure that the land use area is kept clean and tidy at all times.

Camp

22. The Proponent shall ensure that all camps are located on gravel, sand or other durable land.
23. The Proponent shall not erect camps or store material on the surface ice of lakes or streams.

Restoration

24. The Proponent shall remove all garbage, fuel and equipment upon abandonment.
25. The Proponent shall complete all clean-up and restoration of the lands used prior to the expiry date of the permit.

Other

26. The Proponent should, to the extent possible, hire local people and consult with local residents regarding their activities in the region.