



# CIRNAC Comments to NIRB

Re: Notice of Screening for NASA Ames Research Center's "Mars Exploration through Analog-site Drilling" Project Proposal



Nunavut Regional Office  
918 Sivumugiaq Street  
Iqaluit, NU, X0A 3H0

Your file - Votre référence  
25YN017  
Our file - Notre référence  
GCdocs#136154159

May 12, 2025

Kelli Gillard, PAg, CTAJ  
Manager, Impact Assessment  
Nunavut Impact Review Board  
P.O. Box 1360  
Cambridge Bay, NU, X0B 0C0  
via NIRB public registry

**Re: Notice of Screening and Comment Request for NASA Ames Research Center's "Mars Exploration through Analog-site Drilling" Project Proposal**

Dear Kelli Gillard,

On April 29, 2025, the Nunavut Impact Review Board (NIRB) invited parties to comment on NASA Ames Research Center's "Mars Exploration through Analog-site Drilling" project proposal. Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) appreciates the opportunity to provide comments and offers the responses below as it pertains to the NIRB's request:

**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).**

**CIRNAC #1: Best Management Practices Related to Spill Prevention**

CIRNAC is of the view that the potential impacts of the proposed Project can be mitigated with known practices or technology.

Further to indicated mitigation measures, CIRNAC recommends that the Proponent consider implementing other best management practices to aid in mitigation of potential impacts that might arise from the use of fuels and waste in the proposed activities, including:

- Using secondary containment for fuels and lubricants;
- Adapting controlled fuel-handling procedures such as drip pans and adsorbent pads during refueling events;
- Having spill-response equipment and clean-up materials readily available;
- Ensure that any hazardous materials are stored a minimum of thirty-one (31) meters away from the ordinary high-water mark (OHWM) of any waterbody, in such a way to prevent their release into the environment.



- Ensure that greywater sumps must be situated at least thirty-one (31) meters away from OHWM.
- Make sure that all personnel are properly trained in on-site spill response; and,
- Perform daily inspections of fuel caches, containment berms, and waste-storage areas.

### **CIRNAC #2: Unspecified drill-battery TRIDENT drill**

The Proponent does not identify the power source for the TRIDENT drill. If high-energy batteries (e.g. lithium-ion) are used, cold-weather charging or physical damage could trigger thermal-runaway fire and toxic-fume release in a remote tent camp. CIRNAC recommends that the Proponent clarify, as applicable;

- If a battery will be used and include it in the hazardous-material inventory;
- How the relevant batteries will be shipped;
- How the relevant batteries will be stored and charged; and,
- if there will be fire extinguishers readily available.

### **Any matter of importance to the Party related to the project proposal**

### **CIRNAC #3 Consultation with Interest Parties**

CIRNAC recommends that the Proponent consult with the municipalities of Grise Fiord and Resolute Bay, the Iviq Hunters and Trappers Organization, the Resolute Bay Hunters and Trappers Association, and any other relevant organizations or individuals regarding its project proposal. As part of any consultation activities, several issues should be considered, including, but not limited to:

- Incorporation of Inuit Qaujimajatuqangit into project activities;
- Mitigation measures designed to prevent any disturbance to wildlife and the environment;
- The experience of community members who participate in traditional harvesting activities within or in close proximity to the project area;
- Mitigation measures designed to prevent disturbance to sites with cultural, archaeological, and/or environmental significance;
- Training and employment opportunities for Inuit and community members;
- Procurement opportunities for local and Inuit-owned businesses; and
- Regular updates on the status of project activities.

CIRNAC appreciates the opportunity to provide comments. Should you have any questions, please contact Muhammad Arslan by e-mail at [muhammad.arslan@rcaanc-cirnac.gc.ca](mailto:muhammad.arslan@rcaanc-cirnac.gc.ca) or David Abernethy by email at [david.abernethy@canada.ca](mailto:david.abernethy@canada.ca).

Sincerely,



Richard Bingley  
Manager, Impact Assessment

