



NWB Tools

Richard Dwyer <richard.dwyer@nwb-oen.ca>

Query regarding NWB Application process?

Glass, Brian J. (ARC-TI) <brian.glass@nasa.gov>

Fri, Feb 21, 2025 at 12:12 PM

To: Richard Dwyer <richard.dwyer@nwb-oen.ca>

Good morning Richard,

Our lunar/Mars prototype drill is a low power (200W) hammer drill with a stroke of 1m. The drill bit and shaft are 26mm diameter, and external auger fluting brings up pulverized cuttings to the surface (these are then sampled and fed to instruments.

No drilling fluids or lubricants are used, this is both dry-drilling and shallow depth, comparable to something like a handheld Hilti drill (except lower powered) . There is no coring and the only wastes are the 100-200 g of pulverized cuttings adjacent to a hole.

Warm regards,
Brian

From: Richard Dwyer <richard.dwyer@nwb-oen.ca>

Sent: Friday, February 21, 2025 7:50 AM

To: Glass, Brian J. (ARC-TI) <brian.glass@nasa.gov>

Subject: Re: [EXTERNAL] Re: Query regarding NWB Application process?

CAUTION: This email originated from outside of NASA. Please take care when clicking links or opening attachments. Use the "Report Message" button to report suspicious messages to the NASA SOC.

Good morning Brian,

Please provide more details on what type of drilling will be done and what wastes will it generate?

Thanks,

Richard



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NUNAVUT WATER BOARD - OFFICE DES EAUX DU NUNAVUT
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 Merci de penser à l'environnement avant d'imprimer ce courriel / Thank you for thinking of the environment before printing this email

Brian

Subject: [EXTERNAL] Re: Query regarding NWB Application process?

CAUTION: This email originated from outside of NASA. Please take care when clicking links or opening attachments. Use the "Report Message" button to report suspicious messages to the NASA SOC.

Good afternoon Brian Glass,

Please submit the application and all project details as soon as possible, the for approval for the use of waters and/or deposit of waste without a licence only applies if the waste is sewage deposited to a sump, any other type of waste will require a Type B application.

Regards,

Richard

 Image removed by sender.

On Thu, Feb 20, 2025 at 12:22 PM Glass, Brian J. (ARC-TI) <brian.glass@nasa.gov> wrote:

Dear Mr. Dwyer,

I have recently been awarded a NASA project (Mars Exploration through Analog-site Drilling, or MEAD) to use Mars-like reaches of the Canadian Arctic (specifically, Haughton Crater on Devon Island) to improve our science and methods for future Mars life detection and shallow (<1m) imaging and sampling. We hope to conduct research from a campsite in early August 2025 in the Haughton River Valley, previously used by my colleague Prof. Gordon Osinski and his students from Western. In November I filed a request for Summer 2025 logistics assistance with Polar Shelf, and on 11 February 2025 filed an online application for an NPC conformance request (NPC #150680).

To facilitate timely review and consideration of a Nunavut Water Board application (for approval for the use of waters and/or deposit of waste without a licence), would it be recommended to submit an application with supporting information soon (with notes in block 14 "Yes, submitted" for NPC land use conformance and "Yes, pending review" for the NIRB) or table the NWB application until those offices have completed their reviews?

Thank you for your guidance.

Brian Glass

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