

Davin St. Pierre

From: Wayne Pollard, Prof. <wayne.pollard@mcgill.ca>
Sent: August-26-16 8:43 PM
To: Davin St. Pierre
Subject: RE: NIRB 07YN019 - Information Request Follow-Up

Hello Davin

The active layer probing is done primarily with a 1.5 m steel rod with a T-handle. The standard method is to lay out a 10 m grid and push the probe as deep as it will go (assuming resistance occurs when it hits the top of permafrost). This survey will be repeated 2-3 times over the study period to determine the rate of thaw penetration. A second tool used to survey the active layer is ground penetrating radar. Using 500 mHZ transceivers the GPR sends a radio frequency pulse into the ground and measures the time it takes for reflected signals to return (in nanoseconds). At this frequency the main returns (reflections) will be the active layer, bedrock and large boulders. GPR is entirely passive in that the system is on wheels and is moved over the ground surface causing absolutely no disturbance. The radio waves are completely harmless to people and wildlife. GPR has become one of the most widely used tools in engineering to detect subsurface objects.

I hope this helps.

Regards

Wayne

-----Original Message-----

From: Davin St. Pierre [mailto:dstpierre@nirb.ca]
Sent: Thursday, August 25, 2016 12:54 PM
To: Wayne Pollard, Prof.
Subject: RE: NIRB 07YN019 - Information Request Follow-Up

Hi Wayne,

Apologies for the additional questions - I was just wondering if you could elaborate on what equipment is needed to conduct active layer probing activities as mentioned within the non-technical summary. If any additional equipment required comes to mind please feel free to elaborate.

Thanks,

Davin St. Pierre, M.REM
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-----Original Message-----

From: Wayne Pollard, Prof. [mailto:wayne.pollard@mcgill.ca]
Sent: August-25-16 8:43 AM
To: Davin St. Pierre
Subject: RE: NIRB 07YN019 - Information Request Follow-Up

Hi Davin

You are correct - however please be remember that this amendment is specifically for the inclusion of a training component based in Resolute Bay. All the basic science activities based on Axel Heiberg and Ellesmere Islands described in my research licence remain unchanged.

I will probably need to give you a call sometime in the fall to discuss the broader relationship between the training part of my research program and the science. For now I would like to proceed with the current application so we can start making plans for next year.

Regards

Wayne

-----Original Message-----

From: Davin St. Pierre [mailto:dstpierre@nirb.ca]
Sent: Thursday, August 25, 2016 10:34 AM
To: Wayne Pollard, Prof.
Subject: RE: NIRB 07YN019 - Information Request Follow-Up

Hi Wayne,

Not a problem, I just wanted to confirm the temporal boundaries of the project. Would it be accurate to detail these boundaries as seasonal activities from 2016-2019 during the months of August and September, or do you plan on having activities during other months?

Thanks,

Davin St. Pierre, M.REM
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-----Original Message-----

From: Wayne Pollard, Prof. [mailto:wayne.pollard@mcgill.ca]
Sent: August-24-16 6:08 PM
To: Davin St. Pierre
Subject: RE: NIRB 07YN019 - Information Request Follow-Up

Hello Davin

Initially when I contacted NRI back in June about modifying my research licence I was hoping to have approval in place in time for this year. I realize this is not possible so we are currently hoping for approval for the subsequent years (2017, 2018 and 2019). I left 2016 on my form because it was on my original correspondence and I did not want to appear inconsistent. I hope this makes sense.

Regards

Wayne

From: Davin St. Pierre [dstpierre@nirb.ca]
Sent: Wednesday, August 24, 2016 6:27 PM
To: Wayne Pollard, Prof.
Subject: RE: NIRB 07YN019 - Information Request Follow-Up

Hi Wayne,

Sorry for the delay I was on leave for the last week and just returned back in office today. I'd just like to clarify a component of your application - your proposed period of operation is from August 15 - September 8, 2016. As the NIRB won't be able to issue its screening decision for the application in time for this season, does your proposed term of authorization mean to include yearly activities from 2016-2019 during the months of August and September?

Thanks,

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From: Wayne Pollard, Prof. [mailto:wayne.pollard@mcgill.ca]
Sent: August-16-16 9:43 PM
To: Davin St. Pierre
Cc: info@nirb.ca
Subject: RE: NIRB 07YN019 - Information Request Follow-Up

Hello Davin,

I managed to finally obtain a copy of NTS Map58F/11, as per the NIRB update request I plotted the location of the Polar Continental Shelf Program (PCSP) base where we will be based and where most of my training activities will take place (note that since the work based in Resolute does not include a camp the associated issues pertaining to waste and water usage are incorporated into the PCSP facility). I have also plotted the location of 2 sites where I would like to show the students different aspects of permafrost mapping.

Following your instructions I have uploaded this map, as well as a cropped portion of the map focusing on the Resolute area. I have also uploaded copies of form 140422 in both Inuktitut and English. Since I do not read Inuktitut I have to trust that my translator has completed the Inuktitut form correctly.

I apologize for the delay.

Sincerely

Wayne Pollard

From: Davin St. Pierre [mailto:dstpierre@nirb.ca]
Sent: Tuesday, August 16, 2016 1:22 PM
To: Wayne Pollard, Prof.
Subject: RE: NIRB 07YN019 - Information Request #2 Follow-Up

Hi Wayne,

Thank you for the update. Would you be able to provide an approximate date that you anticipate submitting the update information? In your reply please cc info@nirb.ca<mailto:info@nirb.ca> as they manage all file documentation and internal tracking.

Many thanks,

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From: Wayne Pollard, Prof. [mailto:wayne.pollard@mcgill.ca]
Sent: August-16-16 10:16 AM
To: Davin St. Pierre
Subject: RE: NIRB 07YN019 - Information Request #2 Follow-Up

Hi Davin

I have the 140422 form in both English and Inuktitut. My current delay is the map, since there are no digital copies of NTS 58F11 (1:50000 map for Resolute) online I have had to purchase it through "Yellow Maps" and I am wait for delivery. The request for additional information clearly asked for the 1:50,000 NTS map with my study sites, do you have any suggestions.

Hopefully I can finish the update very soon.

Sorry for the continued delay.

Regards

Wayne

From: Davin St. Pierre [mailto:dstpierre@nirb.ca]
Sent: Tuesday, August 16, 2016 11:59 AM

To: Wayne Pollard, Prof.
Subject: NIRB 07YN019 - Information Request #2 Follow-Up

Hello Dr. Pollard,

I hope this message finds you well. I just wanted to follow up to see if you have an updated anticipated date of submission for the IR documentation requested on July 21, 2016. For tracking purposes please correspond with your anticipated date of submission by August 23, 2016.

I will be out of the office on leave for the next week but if you require immediate attention please feel free to contact our Manager of Project Monitoring, Kelli Gillard, at kgillard@nirb.ca - please cc me on all correspondence. For administrative/technical assistance feel free to contact our administrators at info@nirb.ca.

Best regards,

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From: Wayne Pollard, Prof. [<mailto:wayne.pollard@mcgill.ca>]
Sent: August-09-16 9:08 AM
To: Davin St. Pierre
Subject: RE: NIRB 07YN019 - Information Request #1 Follow-Up

Davin

Thank you for your prompt and very helpful reply.

Regards

Wayne

From: Davin St. Pierre [<mailto:dstpierre@nirb.ca>]
Sent: Tuesday, August 09, 2016 11:06 AM
To: Wayne Pollard, Prof.
Subject: RE: NIRB 07YN019 - Information Request #1 Follow-Up

Hi Wayne,

[CONTENT REMOVED by Davin St. Pierre August 29, 2016]

Regarding the requested project information, the online application has been returned to you so that you can attach the supplemental documents to your online file. I would recommend waiting until all information is ready before submitting your most updated version. The documents can be uploaded under the "Material Use and Waste" tab within

the "Predicted environmental impacts of undertaking and proposed mitigation measures:" section. My apologies for the confusion, we are still working through some operational quirks with our new online application portal, so your patience is much appreciated.

Should you have any additional questions please feel free to contact myself or our administrators at your convenience.

Best regards,

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From: Wayne Pollard, Prof. [mailto:wayne.pollard@mcgill.ca]
Sent: August-09-16 8:52 AM
To: Davin St. Pierre
Subject: RE: NIRB 07YN019 - Information Request #1 Follow-Up

Hello Davin

Thank you for your email - [CONTENT REMOVED by Davin St. Pierre August 29, 2016]

However, I have completed the 140422 form in English (see attached) and am waiting for the person who does my translation to complete the Inuktitut Form. Since the Resolute top map (58F11) is not readily available on line I am still trying to obtain a digital version to be able to complete the second part of the update.

I am not quite sure where to post it on my project application on the NIRB website. Hopefully I will have my translation soon and should be able to provide all the requested information by August 15-16.

Again my sincere apologies.

Regards

Wayne

From: Davin St. Pierre [mailto:dstpierre@nirb.ca]
Sent: Monday, August 08, 2016 6:49 PM
To: Wayne Pollard, Prof.
Subject: NIRB 07YN019 - Information Request #1 Follow-Up

Hello Mr. Pollard,

I hope this message finds you well. I just wanted to follow up on my July 21, 2016 Information Request letter for your amendments to "An Investigation of the Sensitivity of High Arctic Permafrost to Climate Change" project proposal to see if you have an estimated date of submission for the outstanding information. If you have any questions or concerns please feel free to contact me at your convenience.

Best regards,

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