

From: [Shannon Allerston](#)
To: "Hoos, Rick"; "Oke, Nick"
Cc: [Morton, Tim \(AADNC/AANDC\)](#); [Penney2, Devin \(AADNC/AANDC\)](#); [Tyree Mullaney](#)
Subject: RE: Updated Type "A" Land Use Permit Application for Site Remediation of the Former Fort Reliance, NT Weather Station
Date: March-22-19 3:10:00 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)

Hi Rick,

Yes, the application was received in full. There are many outstanding questions remaining, however. I was going to draft an e-mail outlining some questions on the application before another incomplete letter but I can identify some of them now.

One of the main issues is about risk to water using and storing the hydrogen peroxide so close to the Lake. The Application requires details that are likely provided in the RAP and/or Risk Assessment which were not provided. The Inspectors have previously identified their concern with respect to this activity to TetraTech, and so too has the LKDFN during the engagement meetings. If ECCC can demonstrate that there is no risk to water, then perhaps the Board, reviewers, and the Inspectors will be confident that conditions of a WL are not required to mitigate those risks. Risks of using the hydrogen peroxide are identified in the information submitted with the application, one of which being the potential for the program to expand the contaminant plume it aims to treat. These potential issues (and other factors identified as recommended screening criteria such as soil permeability and composition, chemical constituents of the contaminated soil and/or groundwater, oxidizing effects, etc.) should be identified and addressed, especially given the vicinity of the program to GSL. This should include any potential mitigation measures that could be required (if an impact is detected or if the treatment method is unsuccessful). That said, the use and storage of hydrogen peroxide is not mentioned at all in within the Spill Contingency Plan or Waste Management Plan, and should be. There are risks to implementing the hydrogen peroxide treatment method in the vicinity of fuel. These risks should be identified and addressed in these plans. The SCP should also include relevant MSDS to support any argument that the hydrogen peroxide becomes inert if spilled or deposited.

Similarly, more information on the barge landing and water use for the camp should be provided. If a WL is not being sought for this undertaking, ECCC must demonstrate that none of the triggers for a WL will be hit, that there will be no deposit of waste, that a barge landing will not involve any bank alterations, training or erosion control, and that water use will be less than 100m³/day.

The application also brings up many questions about the final destination for wastes being shipped off-site. If hazardous wastes are going to an approved facility in Alberta somewhere, that should be made explicitly clear. If non-hazardous wastes are meant to go to local landfills, ECCC must demonstrate that there is an established plan for the acceptance of that waste. Lutselk'e does not have a regulated landfill and Fort Resolution, Hay River and Fort Providence landfills are not in a position or authorized to accept large volumes of waste from Industrial contractors.

Next, the only place I found any information on the potential borrow source is in the presentations given to LKDFN. This information should be provided in the Project description with an explanation

of why it is an appropriate and suitable source. The Application does not identify the final remediation criteria for soils or groundwater. It mentions future use of the area as park/reserve. But it does not explicitly identify the final site conditions that ECCC aim to achieve. If the end goal is parkland criteria, how does leaving contaminated soils in place support that goal? The very monitoring program that will be completed to confirm the success of the remediation program is not identified, neither are any contingency plans. All we know is that the hydrogen peroxide will go down existing monitoring wells and then soil and groundwater will be monitored for 25 years. Existing monitoring wells are not identified in the application anywhere. Further, these existing wells will not be appropriate for evaluating system performance because they will represent only the localized effects of the treatment program if they were used for delivering the hydrogen peroxide. If additional monitoring stations will be required, new drill locations and appropriate equipment should be identified. Either way, a plan for the application of treatment and the monitoring, including all constituents and frequency of sampling should be better developed.

There is also some contradictory information in the application regarding historic resources identified during the AIA. The Application proper says a plan to protect heritage/historic resources will be identified during a formal plan for remediation (which the application should represent) but the presentation to the LKDFN indicated that there was no resources needing management. This should be clarified and confirmed. Additionally, ECCC committed to the LKDFN that it would complete a radiation survey while at the site this summer. No information on this radiation survey or any potential impacts it might have on the remediation program are identified in the application.

As mentioned above, the Figure map in the application does not show the potential borrow source location. It also makes reference to several other figures that are not in the application. I assume these maps come from either the RAP or the Risk Assessment.

Finally, the previously issued incomplete letter requested information on land tenure for the site, this has not been provided. Has the quarry permit been applied for/issued?

I suspect some of the information I'm asking for might be found in the RAP and Risk Assessment. Please submit those documents as part of the Application. Once I have had the time to review those documents, I can follow up again if questions remain. In the meantime, you can work to address some of the other concerns that have been addressed above. I will follow up next week about whether or not I need to issue an Incomplete Letter.

Thanks,
Shannon

From: Hoos, Rick <Rick.Hoos@tetrattech.com>

Sent: March-22-19 10:51 AM

To: Shannon Allerston <sallerston@mvlwb.com>

Cc: Tyree Mullaney <tyree@mvlwb.com>; Oke, Nick <Nick.Oke@tetrattech.com>

Subject: RE: Updated Type "A" Land Use Permit Application for Site Remediation of the Former Fort Reliance, NT Weather Station

Folks:

Can you please confirm that you have received our two emails containing our updated Type "A" Land Use Permit Application and supporting information for the Fort Reliance Remediation Program.

Thanks very much,

Rick

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From: Hoos, Rick

Sent: Thursday, March 21, 2019 2:13 PM

To: 'sallerston@mvlwb.com' <sallerston@mvlwb.com>

Cc: 'Tyree Mullaney' <tyree@mvlwb.com>; 'deniz.baykal@canada.ca' <deniz.baykal@canada.ca>; 'Claudia Simonato' <Claudia.Simonato@pwgsc-tpsgc.gc.ca>; Oke, Nick <Nick.Oke@tetrattech.com>

Subject: FW: Updated Type "A" Land Use Permit Application for Site Remediation of the Former Fort Reliance, NT Weather Station

Shannon:

Further to our previous email, attached are the remaining supporting documents for the proposed remediation and building decommissioning work that ECCC is planning to carry out this coming summer at the former weather station at Fort Reliance, NT.

Please confirm receipt of the complete set of documentation. We look forward to continuing to work through the review of this interesting project with the MVLWB and the potentially affected parties.

Regards,

Rick

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