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

TC Response to Comments re: 1BR-MDR1721 PERFORMANCE & LONG TERM MONITORING PLAN (LTM), FORMER METAL DUMP AND COMMUNITY LANDFILL

Barker, Jackie < Jackie.Barker@tc.gc.ca> To: Richard Dwyer <richard.dwyer@nwb-oen.ca> Cc: "licensing@nwb-oen.ca" < licensing@nwb-oen.ca> Tue, Sep 12, 2017 at 1:43 PM

Good Afternoon,

Transport Canada's remediation project at the Former Igaluit Metal Dump continues to progress ahead of schedule and it is anticipated that the site work (other than long-term monitoring) may be complete within the next three weeks. There is metal debris and contaminated sediment remaining in the stream bed that runs through the site. Removal of this debris and sediment is on hold pending NWB approval of TC's detailed monitoring plan. If TC does not receive approval within the next two weeks, it is likely that we'll have to leave that contamination in place and it is unclear if or when TC will be in a position to complete that portion of the work as the funding for this project is only approved for this year.

I realize that your office has not formally requested that Transport Canada provide a response to ECCC's letter of comment dated August 31, 2017. However, due to the urgency of this approval, I requested that our consultant, Arcadis, prepare a response. Please see below. We'd be happy to address any further comments and would very much appreciate if you could provide an update regarding the status of the approval.

Sincerely,

Jackie Barker

Environmental Officer, Prairie and Northern Region

Transport Canada / Government of Canada

jackie.barker@tc.gc.ca / Tel: 204-979-1739 / TTY: 1-888-675-6863

Agent en environnement, Région des Prairies et du Nord

Transports Canada / Gouvernement du Canada

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The following Table 1 outlines the ECCC comments and Arcadis response.

Table 1: Responses to ECCC Comments on the Performance and Long Term Monitoring Plan

ECCC Comments

Arcadis Response

ECCC Comments

During the active remediation there will be ongoing performance monitoring to ensure that mitigation measures to reduce additional impacts are performing as anticipated. The proposed monitoring parameters are temperatures, turbidity and total dissolved solids using afield instrumentation. ECCC notes that the potential contaminants that have been identified at the site are not included in the monitoring plan (metals, PHCs, PAHs, etc). During active remediation, especially in close proximity to water bodies, there is potential for contaminants to be remobilized and enter a water body. Additional parameters which are identified as potential contaminants should be included in the monitoring program.

ECCC recommends that the Proponent included identified potential contaminants (metals, PHCs, PAHs, etc.) as monitored parameters submitted for analysis.

Arcadis Response

LTM stations 1 through 7 will be monitored once every two weeks for surface water for PHCs, metals, PAHs, VOCs, Pesticides and PCBs.

Section 6.1.1.2 – Monitoring Plan: Visual Monitoring

The Performance and Long Term Monitoring Plan states that regular visual inspections will be conducted to check the physical integrity of the isolation cover and to look for evidence of erosion, frost action, animal burrows, vegetation, staining, seepage points, exposed debris, breeches in the cover, condition of monitoring instruments and condition of warning signs. No specifics are provided on what frequency constitutes "regular" monitoring.

ECCC recommends that the Proponent provide a monitoring schedule that includes the frequency of visual monitoring to provided.

A detailed Long Term Monitoring Schedule was provided as part of the Long Term Monitoring Plan as Chapter 7.

"The long term monitoring at the site would begin in 2018. The Phase I monitoring activities would take place in 2018, 2020, and 2022. Each of the monitoring activities discussed above (See Section 6.0) will be conducted during each of the three site monitoring events (i.e., visual inspection, surface water monitoring, sediment monitoring, and natural environment monitoring – with the possibility of seepage monitoring and/or soil monitoring on an as needed basis). A site monitoring event would be conducted once per highlighted calendar year between the dates of July 15th and September 1st to account for the maximum permafrost thaw conditions. An evaluation and review of the monitoring data will be conducted at the end of 2022 to confirm whether or not additional monitoring would be required."

ECCC Comments

Section 6.1.4.2 – Monitoring Plan: Surface Water Sampling, Section 6.1.5.2 – Monitoring Plan: Sediment Sampling

The surface water sampling and sediment sampling sections indicate location of sampling but do not indicate frequency of sampling schedule.

ECCC recommends that the Proponent provide specifics on the surface water and sediment monitoring schedule.

Arcadis Response

A detailed Long Term Monitoring Schedule was provided as part of the Long Term Monitoring Plan as Chapter 7.

"The long term monitoring at the site would begin in 2018. The Phase I monitoring activities would take place in 2018, 2020, and 2022. Each of the monitoring activities discussed above (See Section 6.0) will be conducted during each of the three site monitoring events (i.e., visual inspection, surface water monitoring, sediment monitoring, and natural environment monitoring – with the possibility of seepage monitoring and/or soil monitoring on an as needed basis). A site monitoring event would be conducted once per highlighted calendar year between the dates of July 15th and September 1st to account for the maximum permafrost thaw conditions. An evaluation and review of the monitoring data will be conducted at the end of 2022 to confirm whether or not additional monitoring would be required."

The following Table 2 represents the proposed Long Term Monitoring schedule.

Year	Years After Construction	Site Monitoring Event	Monitoring Phase
2017	0	Remediation and Landfill Construction	
2018	1	Х	Phase I
2019	2		
2020	3	Х	Phase I
2021	4		
2022	5	Х	Phase I
2023	6		
2024	7	Χ	Phase II (if required)
2025	8		
2026	9		
2027	10	Х	Phase II (if required)
2028	11		

Year	Years After Construction	Site Monitoring Event	Monitoring Phase
2029	12		
2030	13		
2031	14		
2032	15	Х	Phase II (if required)
2033	16		
2034	17		
2035	18		
2036	19		
2037	20		
2038	21		
2039	22		
2040	23		
2041	24		
2042	25	Х	Phase II (if required)

From: Richard Dwyer [mailto:richard.dwyer@nwb-oen.ca]

Sent: Wednesday, September 06, 2017 2:43 PM To: Barker, Jackie < Jackie. Barker@tc.gc.ca>

Cc: licensing@nwb-oen.ca

Subject: Re: 1BR-MDR1721 PERFORMANCE & LONG TERM MONITORING PLAN (LTM), FORMER METAL DUMP AND

COMMUNITY LANDFILL

Good afternoon Jackie below is the link to the comments received on the performance and long term monitoring plan. The tech advisor may contact you for additional information.

ftp://ftp.nwb-oen.ca/registry/1%20INDUSTRIAL/1B/1BR%20-%20Remediation/1BR-MDR1721% 20TC/3%20TECH/9%20MONITORING/

Regards,



Richard Dwyer- へ^cとって コムムくっ

Licence Administrator- Administratrice des permis

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On Wed, Sep 6, 2017 at 1:21 PM, Barker, Jackie Jackie.Barker@tc.gc.ca wrote:

Good Afternoon,

I'm wondering if any comments were received and, if so, if any of those comments will require a response from Transport Canada?

The project continues to progress ahead of schedule, however, one component is on hold until we receive the final approval from your office, therefore we look forward to receiving your approval as soon as possible so that work at the site can be completed within the next few weeks.

Thanks,

Jackie Barker

Environmental Officer, Prairie and Northern Region

Transport Canada / Government of Canada

jackie.barker@tc.gc.ca / Tel: 204-979-1739 / TTY: 1-888-675-6863

Agent en environnement, Région des Prairies et du Nord

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From: Richard Dwyer [mailto:richard.dwyer@nwb-oen.ca]

Sent: Friday, August 18, 2017 10:07 AM

To: Barker, Jackie < Jackie. Barker@tc.qc.ca>

Cc: Licensing Department < licensing@nwb-oen.ca>

Subject: 1BR-MDR1721 PERFORMANCE & LONG TERM MONITORING PLAN (LTM), FORMER METAL DUMP AND **COMMUNITY LANDFILL**

Good morning,

The Nunavut Water Board acknowledges receipt August 14, 2017 of PERFORMANCE & LONG TERM MONITORING PLAN (LTM), FORMER METAL DUMP AND COMMUNITY LANDFILL as required by Part K, Item 1 of 1BR-MDR1721, this document is available at the link below:

ftp://ftp.nwb-oen.ca/registry/1%20INDUSTRIAL/1B/1BR%20-%20Remediation/1BR-MDR1721% 20TC/3%20TECH/9%20MONITORING/

The Nunavut Water Board invites interested parties to submit comments on the performance and long term monitoring plan; comments due on or before September 1, 2017.

Regards,

Richard



Richard Dwyer- へ^cんって コムムくっ

Licence Administrator- Administratrice des permis C∆5CA2 <PCM2- Laisaligiyi Aulattiyi

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