



National Defence

National Defence Headquarters  
Ottawa, Ontario  
K1A 0K2

Défense nationale

Quartier général de la Défense nationale  
Ottawa, Ontario  
K1A 0K2

NWB File Nos.:	<b>1BR-BYR1320</b>	<b>1BR-GLA1531</b>
	<b>1BR-CAM0520</b>	<b>1BR-HAL1533</b>
	<b>1BR-CAP1623</b>	<b>1BR-JEN1323</b>
	<b>1BR-DYE1623</b>	<b>1BR-LON1422</b>
	<b>1BR-FOD1320</b>	<b>1BR-MAC1323</b>
	<b>1BR-FOX1523</b>	<b>1BR-PEL1833</b>
	<b>1BR-FRA1730</b>	<b>1BR-QIK1320</b>
		<b>1BR-SHE1733</b>

7 November 2019

Sergey Kuflevskiy  
Technical Advisor  
Nunavut Water Board  
P.O. Box 119  
Gjoa Haven, NU  
X0B 1J0

E-mail: [sergey.kuflevskiy@nwb-oen.ca](mailto:sergey.kuflevskiy@nwb-oen.ca)

Re: DND Response to NWB Letter Dated September 27, 2019: “NWB Technical Review of Annual Reports for Water Licences for DND DEW Line Site Post-Remediation Long-Term Monitoring Programs

Dear Mr. Kuflevskiy,

DND has reviewed the above-referenced letter from the NWB, and respectfully provides the following responses herein.

The associated attachments to this letter will be sent to you on a DVD via courier.

Canada 

## **1. Monitoring Reports Listed as “Not Submitted” in Summary Table on Pages 1-2**

In the summary table on pages 1 and 2 of the above-referenced letter, the following monitoring reports from 2016 are listed as “Not Submitted”:

- CAM-M (1BR-CAM0520);
- CAM-2 (1BR-GLA1531);
- CAM-5 (1BR-MAC1323); and,
- FOX-M (1BR-HAL1533).

These four sites were not monitored in 2016, and neither was PIN-3 (1BR-FRA1730); therefore, no monitoring reports were generated.

Please refer to the letter dated June 8, 2017 from Defence Construction Canada (DCC) to the NWB (**Attachment #1**).

## **2. Outstanding Submissions – Updated Spill Contingency Plans**

In the summary table on page 2 of the above-referenced letter, the updated spill contingency plans for the following sites are listed as outstanding:

- PIN-2 (1BR-CAP1623 / Part I, Item 2);
- PIN-4 (1BR-BYR1320 / Part H, Item 2);
- CAM-2 (1BR-GLA1531 / Part I, Item 2);
- CAM-3 (1BR-SHE1733 / Part I, Item 2);
- FOX-2 (1BR-LON1422 / Part G, Item 1);
- FOX-4 (1BR-FOX1523 / Part I, Item 2); and,
- FOX-5 (1BR-QIK1320 / Part H, Item 2).

Please find updated spill contingency plans for all of these sites in **Attachments #2-#8**.

### **3. Outstanding Submissions – QA/QC Plans**

In the summary table on page 2 of the above-referenced letter, the environmental sampling quality assurance/quality control (QA/QC) plans for the following sites are listed as outstanding:

- PIN-2 (1BR-CAP1623 / Part K, Item 10);
- CAM-3 (1BR-SHE1733 / Part K, Item 4); and,
- FOX-4 (1BR-FOX1523 / Part K, Item 10).

As the NWB is aware, DND hires contractors to conduct the long-term monitoring events at the DEW Line sites. Under the contracts for completing this work, DND stipulates environmental sampling QA/QC requirements in the project Terms of Reference (TOR), and the monitoring contractors must develop detailed environmental sampling QA/QC procedures as part of their logistics and work plans prior to going in the field. These documents are reviewed thoroughly by DND before acceptance.

Under these monitoring contract TORs, all environmental sampling techniques must conform to the most recent Canadian Council of Ministers of the Environment (CCME) guidance and/or industry best practices, whichever is more stringent. Consequently, the QA/QC procedures that are developed by the monitoring consultants conform to the guidance document *“Quality Assurance (QA) and Quality Control (QC) Guidelines For Use by Class “B” Licensees in Collecting Representative Water Samples in the Field and for Submission of a QA/QC Plan”* (DIAND [now CIRNAC], 1996), as required for PIN-2 (1BR-CAP1623 / Part K, Item 10) and FOX-4 (1BR-FOX1523 / Part K, Item 10).

Under these TOR requirements for QA/QC procedures, all samples must be submitted for analysis to laboratories that are ISO 17025 certified for each parameter in each media type (soil/water). The monitoring contractors must submit proof of the labs’ current ISO 17025 certifications to DND.

Given these stringent requirements for development of QA/QC procedures by the monitoring contractors under the DND DEW Line monitoring contracts, DND respectfully requests that the requirement for *“...a cover letter from the accredited laboratory, under Part K, Item 9, confirming acceptance of the Plan for analyses to be performed under this Licence”* not be enforced for the DND DEW Line water use licences.

Please find the most recent QA/QC-related TOR requirements for these three sites in **Attachments #9-#11** (key components are highlighted in yellow for easy reference).

#### **4. Outstanding Submissions – CAM-1 (1BR-JEN1323 / Part J, Item 2)**

In the summary table on page 2 of the above-referenced letter, responses to the following public review comments for CAM-1 (1BR-JEN1323 / Part J, Item 2) are listed as outstanding:

- Inconsistencies noted by AANDC (now CIRNAC) and missing information under section 2 of the monitoring plan document.

Based on the letter from AANDC dated March 20, 2013 (saved as *130320 1BR-JEN0712 AANDC Comments-IAAE* on the NWB Public Registry), the inconsistencies and missing information are located on page 6 of the monitoring plan document.

Please note that the monitoring requirements for the Main Landfill are not missing from Table 3 on page 6, they are combined with those for the Station East Landfill, as these two landfills are located in close proximity to each other and are monitored together.

Please find a corrected version of page 6 of the monitoring plan document in **Attachment #12**.

In the summary table on page 2 of the above-referenced letter, responses to the following public review comments for CAM-1 (1BR-JEN1323 / Part J, Item 2) are also listed as outstanding:

- Inclusion of criteria and limits to be included in the monitoring plan as recommended by AANDC (now CIRNAC).

Please find a summary of the landfill monitoring criteria for CAM-1 in **Attachment #13**.

## **5. Outstanding Submission – FOX-5 (1BR-QIK1320 / Part J, Item 1)**

In the summary table on page 2 of the above-referenced letter, a response to the following WUL requirement for FOX-5 (1BR-QIK1320 / Part J, Item 1) is listed as outstanding:

- *“The Licensee shall monitoring the Waste Disposal Facilities in accordance with the post-construction landfill monitoring program filed with the Board as on February 14, 2013 and as outlined in the provisions and requirements of the Agreement between the Department of National Defence and the Nunavut Tunngavik Incorporated.”*

DND monitors the Waste Disposal Facilities at FOX-5 in accordance with the post-construction landfill monitoring program filed with the NWB on February 14, 2013 and as outlined in the provisions and requirements of the Agreements between DND and NTI. Since the February 2013 monitoring program was submitted to the NWB, FOX-5 has been monitored three times:

- 2014 (monitoring report posted to NWB Public Registry at: <ftp://ftp.nwb-oen.ca/registry/1%20INDUSTRIAL/1B/1BR%20-%20Remediation/1BR-QIK1320%20FOX%205/3%20TECH/J%20MONITORING/160215%201BR-QIK1320%20FOX-5%20LFM%20Report%202014-ILAE.pdf>);
- 2016 (monitoring report posted to NWB Public Registry at: <ftp://ftp.nwb-oen.ca/registry/1%20INDUSTRIAL/1B/1BR%20-%20Remediation/1BR-QIK1320%20FOX%205/3%20TECH/J%20MONITORING/2016%20Monitoring%20Report/>); and,
- 2018 (monitoring report sent to NWB via DVD in May/June 2019; uploading to the NWB Public Registry is in progress).

Additional monitoring events are scheduled at FOX-5 in 2021 and 2031, and will be conducted in accordance with the post-construction landfill monitoring program filed with the NWB and as outlined in the provisions and requirements of the Agreements between DND and NTI.

## **6. Outstanding Submissions – DYE-M (1BR-DYE1623 / Part K, Items 2 and 12)**

In the summary table on page 2 of the above-referenced letter, the following submission for DYE-M (1BR-DYE1623) is listed outstanding:

- Part K, Item 2: final as-built drawings.

Please find a copy of the final DYE-M as-built drawings in **Attachment #14**.

In the summary table on page 2 of the above-referenced letter, the following submission for DYE-M (1BR-DYE1623) is also listed outstanding:

- Part K, Item 12: an updated letter of acceptance confirming that the *Quality Assurance (QA) and Quality Control (QC) Plan for the Collection of Effluent Samples at the DYE-M, (Cape Dyer) DEW Line Site* (revised September 2005) is acceptable for the monitoring program requirements.

Please note that the *Quality Assurance (QA) and Quality Control (QC) Plan for the Collection of Effluent Samples at the DYE-M, (Cape Dyer) DEW Line Site* (revised September 2005) was applicable during the active remediation program undertaken at the site, when sewage effluent and wastewater were actively being generated by the remediation camp and its associated activities. However, this effluent sampling QA/QC plan is no longer applicable to the DYE-M water use licence, as all active remediation activities were completed at the site in 2013, and there are no sources of sewage effluent or wastewater associated with the long-term landfill monitoring program.

Please note that **Attachment #11**, the most current QA/QC Plan TOR requirements for environmental sampling at FOX-4 (1BR-FOX1523), also applies to DYE-M (1BR-DYE1623).

Should you have any questions regarding the information contained within this letter or its attachments, please do not hesitate to contact me at [alison.street@forces.gc.ca](mailto:alison.street@forces.gc.ca) or at (613) 995-8603.

Regards,



Alison Street, P.Eng.  
Project Engineer, DEW Line Long-Term Monitoring, DND

**Attachments (Submitted on DVD):**

1. Letter re: Reporting Information for NWB 2016
2. Updated Spill Contingency Plan: PIN-2 (1BR-CAP1623)
3. Updated Spill Contingency Plan: PIN-4 (1BR-BYR1320)
4. Updated Spill Contingency Plan: CAM-2 (1BR-GLA1531)
5. Updated Spill Contingency Plan: CAM-3 (1BR-SHE1733)
6. Updated Spill Contingency Plan: FOX-2 (1BR-LON1422)
7. Updated Spill Contingency Plan: FOX-4 (1BR-FOX1523)
8. Updated Spill Contingency Plan: FOX-5 (1BR-QIK1320)
9. QA/QC Plan TOR Requirements: PIN-2 (1BR-CAP1623)
10. QA/QC Plan TOR Requirements: CAM-3 (1BR-SHE1733)
11. QA/QC Plan TOR Requirements: FOX-4 (1BR-FOX1523)
12. Corrected Monitoring Plan Page 6: CAM-1 (1BR-JEN1323)
13. Landfill Monitoring Criteria: CAM-1 (1BR-JEN1323)
14. Final As-Built Drawings: DYE-M (1BR-DYE1623)