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## [Licensing] Followup for 1BR-CLI0914 and 1BR-LOR0813

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Mon, Jul 27, 2015 at 2:01 PM

To: Brady MacCarl <brady.maccarl@nwb-oen.ca>

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

Hi Brady,

Please find below responses related to the water license renewal applications for 1BR-CLI0914 and 1BR-LOR0813.

The water licenses were originally issued to conduct remediation works that are now complete. As such, the requirements outlined in the above licenses relate to activities that are no longer ongoing at these sites. Long term monitoring activities have been initiated and are ongoing at these sites.

### **1BR-CLI0914 PIN-B**

#### Question 1

*Pursuant to Section K, Item 2 of the Licence, and Items G and H of the Annual Report requirements, a tabular summary of all sampling results are required from the monitoring program locations. Did any water and soil quality sampling occur at the DEW site in 2009 and 2010?*

PIN-1: Freshwater from "Freshwater Supply Lake" north of camp was used for camp activities such as washing, cleaning, showering, and watering the roads. Drinking water was flown into site. In 2009, daily water use for camp activities was 2.58 m<sup>3</sup>/day for a total of 77.5 m<sup>3</sup> from the Freshwater Supply Lake. In 2010, daily water use for camp activities was 7.5 m<sup>3</sup>/day for a total of 472.5 m<sup>3</sup> from the Freshwater Supply Lake.

PIN-2a and PIN-2b: During the course of the 2009 program sewage lagoons were installed and no effluent was discharged. At the end of the construction season, the sewage lagoon system was made into a slurry through a backfill process. The water in the lagoons was not discharged.

PIN-3: No water was discharged from the landfarm. The soil treatment area was utilized during the 2010 construction season. Soils in the treatment area were remediated to TPH levels below 2500 ppm.

PIN-4: In 2010, sampling was conducted at the non-hazardous waste landfill. Sampling results were below the discharge limits outlined in the water licence (see attached analytical results as presented in the PIN-B Completion Report).

### **1BR-LOR0813 Cape Christian**

#### Question 1

*A tabular summary and discussion of results from sampling locations (LOR-1 to LOR-7) are missing from the Annual Reports, pursuant to Part K, Item 1 of the Licence. Although the Remediation Closure Report (2011) provides several hundred pages of lab analysis reports covering samples taken in 2009, and 2010, there is no proper analysis of these results highlighting exceedances and areas for concern. Did this analysis occur?*

LOR-1: On average, daily water use was 6.3 m<sup>3</sup> for a total of 1,210 m<sup>3</sup>. Water use did not exceed the maximum daily water use rate of 15 m<sup>3</sup>.

LOR-2: Please find attached water sampling results.

Water sampling results were reviewed for compliance with Water License criteria prior to land discharge.

LOR-3: Water sampling results to follow.

Implementing on-site water treatment avoided the need to ship over 1,700 drums of phenols-impacted water off-site as hazardous waste. Some wastes that were generated during the water treatment process included oily sediments and sludges originating from the vacuum truck used to remove water from the barrels, and these wastes were shipped off-site for disposal. Hazardous phenols-contaminated water was collected during 2009 and 2010 and was treated on-site to meet the Nunavut Water Board Water License discharge criteria prior to discharge.

LOR-4: Please find attached water sampling results.

Water sampling results were reviewed for compliance with Water License criteria prior to discharge.

LOR-5: Please find attached water sampling results.

Water sampling results were reviewed for compliance with Water License criteria prior to discharge.

LOR-6 and LOR-7: No contaminated soil was stored in the landfarm over winter and soils placed in the landfarm were treated in the same season. As such, no monitoring wells were installed at the landfarm.

#### Question 2

*No sampling results are provided for LOR-6 and LOR-7 (Monitoring wells down and up-gradient to the landfarm), and in the Closure Report, the contractor indicates that these locations were not included in their scope of work. However, it is understood that groundwater monitoring wells (MW-1 to MW-4) were installed in the vicinity of the landfarm in 2009. Clarification should be provided on the relationship between the wells mentioned in the Licence (LOR-6 and LOR-7) and the wells installed by the contractor.*

No monitoring wells were installed at the landfarm. The four groundwater monitoring wells (MW-1 to MW-4) were installed around the landfill and have no relationship to the landfarm.

#### Question 3

*What is the current status of the landfarm facility? The Closure Report states that contaminated soils have been remediated. Does this mean the landfarm facility has been properly decommissioned ie. closure report?*

The landfarm facility was properly decommissioned on August 15, 2010.

#### Question 4

*Part K, Item 9 of the Licence states that the Licensee must submit for approval a QA/QC Plan supported by a certified lab (CALA) 30 days prior to any discharge. This was never submitted. It is recognized that the 2011 and 2013 Monitoring Reports are both comprehensive and appear to have utilized accredited labs for all soil and water analyses, but if a QA/QC exists it should be submitted.*

Please find attached the Analytical Sampling Plan for the remediation work at Cape Christian as found in Appendix E of the Remediation Closure Report for Cape Christian.

Please do not hesitate to contact me should you have any questions.

Regards,  
Lilianne

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>>> Brady MacCarl <[brady.maccarl@nwb-oen.ca](mailto:brady.maccarl@nwb-oen.ca)> 7/22/2015 1:14 PM >>>

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### 3 attachments



**IQALUIT-#930585-v1-1BR-CLI0914\_PIN-B\_NHWL\_WATER\_SAMPLING\_2010.PDF**

946K



**IQALUIT-#930586-v1-1BR-LOR0813\_CAPE\_CHRISTIAN\_WATER\_SAMPLING\_RESULTS\_2009-2010.**

**XLSX**

25K



**IQALUIT-#930584-v1-1BR-LOR0813\_CAPE\_CHRISTIAN\_REMEDIATION\_ANALYTICAL\_SAMPLING\_PLAN\_2009.PDF**

214K