

### Phyllis Beaulieu <phyllis.beaulieu@nwb-oen.ca>

# Re: CAM-A Water Licence 1BR-STU1318/TR

1 message

**Dele Morakinyo** <Dele.Morakinyo@aandc-aadnc.gc.ca> Wed, Jul 23, 2014 at 9:00 AM To: Phyllis Beaulieu licensing@nunavutwaterboard.org>, Sean.joseph@nunavutwaterboard.org, Phyllis Beaulieu <phyllis.beaulieu@nwb-oen.ca>

Dear Ms Beaulieu / Mr. Joseph,

In response to your letter dated May 28, 2014, Ref Number: 1BR-STU1318/TR, our site resident engineer has provided the additional details below. Copies of your letter and the licence and other supporting documents are attached. Hopefully the response below addresses your concerns.

Thanks

Dele Morakinyo, PhD., P.Eng. Project Manager, Contaminated Sites Program (NRO); Department of Aboriginal Affairs and Northern Development Canada (AANDC), Government of Canada

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>>> "Fedorak, Barry" <Barry.Fedorak@aecom.com> Friday, June 20, 2014 1:27 PM >>>

Matt, Dele,

On February 19, 2014 Aboriginal Affairs and Northern Development Canada (AANDC) submitted a request to modify specific terms and conditions in Water License 1BR-STU1318, issued to the CAM-A Sturt Point DEW Line Site Remediation Project. On May 28, 2014, the Nunavut Water Board (NWB) provided the findings of their review of the proposed modifications. The review determined that some of the proposed changes are unlikely to substantively alter the intent and requirements of the respective terms and conditions in the license to necessitate an amendment; consequently, the NWB has not made any changes to the license terms and conditions.

This email presents a summary of the unresolved issues related to the CAM-A Water License, an interpretation of the relevant clauses of the NWB Response Report and AECOM's position on these issues. The applicable documents have been attached to this e-mail.

## Soil Treatment Facility Groundwater Monitoring Requirements

The license currently states:

"... install ground water monitoring wells, at least one up-gradient and two down-gradient of the Non-Hazardous Waste Landfill, Landfarm Facility and ...".

A modification was requested to remove the requirement to install groundwater monitoring wells. The following response was given:

"While the Board might partly agree that the duration of monitoring requirements related to the Landfarm Facility might be lesser than anticipated, the Board believes the extent of the monitoring requirements is quite reasonable and consistent with that of similar type licenses and the Board's goal of protecting the receiving environment during the treatment process for Type "B" soil. Therefore the Board has not made any changes to the monitoring requirements for the Landfarm Facility in the license."

#### AECOM's position:

The wording in the license and response refers to a landfarm which is very different from a Soil Treatment Facility, which will be provided at CAM-A. Treatment soils at a landfarm are typically spread thin and tilled at regular intervals to allow for exposure, aeration and volatilization of lighter end hydrocarbon fractions. Landfarm treatment operations can often take months or years to reach the desired criteria. For CAM-A, the contractor has proposed mechanical aeration with an "Allu Bucket" to speed up the treatment process for the hydrocarbon soils for this performance based contract item. It is expected that the treatment areas will only be active for 5 weeks at the beginning of the construction season when the seasonal active layer is primarily frozen. Based on the short term duration of operation of this facility, it is very likely that if any groundwater is captured in a monitoring well during the soil treatment activities, it is unlikely that this groundwater would be representative of conditions resulting from the operation of the soil treatment facility.

AECOM still contends that baseline and confirmatory soil sampling and analysis would facilitate suitable monitoring for the CAM-A Soil Treatment Facility. If a groundwater sample is required during treatment activities, this could be facilitated with simple testpits excavated up-gradient and down-gradient of the Soil Treatment Facility. This would provide samples and analytical data at a similar level of reliability as those received from a monitoring well under these conditions. This method will be very easy to implement at CAM-A and could satisfy the intent of the license as it stands.

Demonstrating	Aggregate	Materials Do	Not Possess	Acid Generating	or Metals	Leaching	<b>Properties</b>

The license currently states:

"The Licensee shall use aggregates for construction from approved sources that have been demonstrated to not possess acid generating or metal leaching properties."

A memo was prepared by AECOM that provided geochemical rationale supporting the unlikelihood of acid generating or metal leaching aggregate being present at Sturt Point, NU. The following response was given:

"Although the NWB might concur with aspects of the information provided to support the Licensee's position, the context of Part E, Item 2 in the license does not necessarily include or exclude the requirement for testing aggregate sources. Furthermore, if the Board were to amend Part E, Item 2, of the license so as to remove any implied requirements to test aggregate sources prior to use, an Inspector may still request that such tests be conducted. The Board has therefore left this term and condition unchanged."

AECOM's position:

AECOM believes the previously submitted memo adequately demonstrated that the aggregate sources that will be used at CAM-A have little to no risk of possessing acid generating or metal leaching properties. AECOM can, however, provide representative sampling and testing of granular materials for acid generating or metal leaching properties, if required or requested by an Inspector.

We trust this meets with your current requirements.

Best Regards,

Barry Fedorak, P.Eng.

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### 4 attachments



CAM A (Sturt Point) - Water License.pdf 236K



M-McElwaine Lee-2014-02-14-BorrowSource Geochemistry-60300481.pdf



60300481 - NWB WL and LUPModification Supplement - 2014-02-24.pdf



140528 1BR-STU1318 NWBs Responseto AANDC Modification Request-OSJE.pdf 67K