

March 22, 2010

Via: Email

Mr. Wayne Thistle, C.E.T.
Regional Projects Manager
Department of Community & Government Services
Kivalliq Region, Government of Nunavut
PO Bag 002
Rankin Inlet, NU X0C 0G0

Dear Mr. Thistle:

Re: Response to Questions

Renewal Application for Type "B" Water License NWB 3 RAN 0207

Hamlet of Rankin Inlet File No.: N-O148500

1.0 Introduction

In a letter dated December 14, 2009, to the Hamlet of Rankin Inlet, the Nunavut Water Board (NWB) requested clarification of several items in the application.

This letter addresses these issues based on the information currently available.

2.0 Land Farm

As outlined in the 2008 Annual Report for License NWB 3 RAN 0207, a small land farm was constructed by Dillon Consultants Inc. in 2005. The site is located on the road to the new landfill site, approximately 400 m north of the site. Documents relating to the construction and operation of the land farm include:

- Letter report from Dillon Consulting to Mr. Manasie Oingonn of the Government of Nunavut (GN) dated September 29, 2006, which outlines activities at the land farm and includes reference to a report entitled "Preliminary Environmental Investigation and Remedial Excavation PPD Fuel Dispensing Facility, Rankin Inlet Airport, Rankin Inlet, Nunavut", dated 2005. A copy of the 2005 report was not available for review.
- Letter report from EBA Engineering Consultants Ltd. to Mr. Wayne Thistle of the GN dated September 9, 2008 which outlines an assessment of the land farm.

The facility was constructed in 2005 without an amendment application for the existing license or an application for a new license.

In 2008, the GN applied to the NWB for a water license for a new land farm facility to be constructed in 2009. This was approved under License IBR-RAN0914. The facility was to be constructed on the west side of the road to the new landfill site. It does not include the existing land farm located slightly further north on the east side of the road. The two facilities appear to be independent.

It has never been clarified if the existing land farm was constructed and operated by the GN on behalf of the Hamlet, or if it was intended to be a GN facility.

The existing land farm was included in the O&M Plan for the new Solid Waste Management Facility (landfill), on the assumption that it was a Hamlet owned and operated land farm and would be part of the new facility.

3.0 Fuel Spill and Fill

In a letter report prepared by EBA Engineering Consultants Ltd. addressed to Mr. Wayne Thistle of the GN dated September 10, 2008 entitled "Nipissar Lake Fuel Spill, Assessment and Remediation," it was indicated that approximately 235 m³ of impacted soil was excavated and remained from the spill site and taken to the landfill. The report included the recommendation, "Impacted soils from the excavation activities which were placed in the landfill should be relocated to a controlled environment to prevent further leaching of impacts."

There is no documentation available to indicate the fate of the impacted soil after it went to the landfill. We assume the soil remains in the landfill and will be addressed as part of the Abandonment and Restoration Plan for the existing landfill.

4.0 Solid Waste Management Facility

Based on the information currently available, no additional design and/or construction activities have been undertaken with regard to the new Solid Waste Management Facility (landfill site). In Section 2.1 of the O&M Plan the following recommendations were made:

"Before commissioning of the landfill, the following should be completed:

- Background sampling of soil and water quality of the site should be completed
- Effective drainage of water surrounding the landfill should be designed and constructed
- A hazardous waste storage area should be constructed
- Topsoil in the fill area should be removed and piled to be used as cover material."

In addition to the recommendations in Section 2.1 of the O&M Plan, there was also the following recommendation in Section 3.2: "An expert in bird hazards to aircraft safety should review the operations plans to ensure there are no further safety hazards."

A report entitled "Assessment of Potential Bird Hazards to Aircraft Safety Associated with the Proposed New Solid Waste Site – Rankin Inlet, Nunavut" was prepared by LGL Limited, dated September 16, 2002 prior to construction of the facility.

The report recommended "mitigation measures" that were subsequently included in the O&M Plan for the facility.

There is no information to indicate that the recommendation to have the O&M Plan reviewed by an expert in bird hazards to aircraft has been completed.

As outlined in the O&M Plan signed/stamped as-built record drawings were not available for the facility. We recommend that this be done after the completion of all proposed site alterations.

We recommend that "Conditions" be added to the license requiring that the recommendations in the O&M Plan be fully completed prior to commissioning the site.

5.0 Other Issues

The NWB noted that they had not received agency comments regarding the Abandonment and Restoration Plan (AECOM July 2009) for the existing landfill site. We recommend that the agencies also be alerted to the recommendation not to commission the new landfill site until the recommendations in the O&M Plan have been addressed. This may impact the timeline for closure of the old site.

6.0 Summary

As discussed herein, there are a number of issues related to the new Solid Waste Management Facility (landfill) that cannot be resolved at this time. Consideration should be given to issuing the license with "Conditions" requiring the completion of all O&M Plan recommendations to the satisfaction of the NWB and review agencies prior to commissioning the site.

If you have any questions or comments, please contact the undersigned.

Yours truly,

Nuna Burnside Engineering and Environmental Ltd.

Jim Walls, P.Geo.

Jim Walls

JW:kc

cc: Mr. Paul Waye, SAO - Hamlet of Rankin Inlet

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