# **Richard Dwyer**

From: Zhong Liu [tech4@nunavutwaterboard.org]
Sent: Thursday, April 19, 2007 11:54 AM

To: 'Ron Kent'

Cc: Phyllis Beaulieu; Richard Dwyer

**Subject:** 3BM-REP amendment application for the landfarming or contaminated soil storage

Follow Up Flag: Follow up Flag Status: Furple

Dear Mr. Kent,

Thank you for your prompt reply. We already have the report you sent to me with your reply.

I noticed that the total amount of the contaminated soil seems to be 1890 cubic meters (p7 of the final report dated Sept. 9, 2005). For the Soil Storage Area at Municipal Solid Waste Site, it is mentioned that "two lifts were used to cover the area to approximately 600mm thick". they seems inconsistent with the last sketch of Appendix A (Contaminated Soil Storage Area), in which the size of the area is 18m long and 18m wide, with 3 lifts of 0.3m each. It seems that the area could not hold 1890 cubic meters of contaminated soil. The NWB requests further clarification.

In addition, could you kindly provide the NWB 1. as-built drawings for the project, 2. the current status of the contaminated soil storage area, 3. the use of the naturally remediated soil (already reused or not?), and 4. the conceptual decommissioning and restoration plan?

#### Best regards,

#### Zhong Liu

----Original Message----

From: Ron Kent [mailto:Ron@fsc.ca] Sent: Thursday, April 19, 2007 11:05 AM

To: Zhong Liu

Cc: Kevin Hodgins; BDuguay@GOV.NU.CA

Subject: RE: 02042007 - 2002 1350 18 Re: Amendment Application for a soil disposal facility in Whale Cove

2002-1350-18 (file w/o attachment)

Dear Mr. Liu

Please find attached FSC's final report on the Repulse Bay remediation project. The project was successful in several ways:

- \* We were able to clean up the entire contaminated site without collecting an excess of clean material.
- \* Through the application of good civil engineering technique, we are able to place the contaminated soil in shallow layers so that it remediated naturally in just a few weeks.
- \* We were able to save our client the additional considerable expense of designing, building, operating, and decommissioning a landfarm.

FSC is well aware of the new Environment Canada guidelines for landfarms. They were written in part by a colleague and former FSC employee, Laura Hawke, P.Eng.

FSC believes in using the latest proven technology to solve engineering problems. Environment Canada's guideline is another useful tool that has application in the North. However, we believe the application of any tool should remain a professional judgement based on specific site conditions.

I hope this provides you with the information you seek.

# Regards

Ron Kent, P. Eng. Manager, Environmental Engineering FSC Architects & Engineers 4910 53rd Street, P. O. Box 1777 Yellowknife, NWT X1A 2P4 Tel: (867) 920-2882

Fax: (867) 920-4319 website: http://www.fsc.ca

>>> "Zhong Liu" <tech4@nunavutwaterboard.org> 04/19/07 10:37 AM >>> Dear Mr. Kent,

In Mr. Kevin Hodgins' letter dated Mar. 6, 2007, the contaminated soil storage in Repulse Bay was used as a successful example. However, it is not licensed yet. Now I am re-visiting the Repulse Bay's file (the amendment application). Could you kindly give me an update of this project?

Best regards,

**Zhong Liu** 

----Original Message----

From: Ron Kent [mailto:Ron@fsc.ca] Sent: Friday, April 13, 2007 2:24 PM To: Kevin Hodgins; Zhong Liu

Cc: Andrew Johnson; 'Brian Duguay'; 'Phyllis Beaulieu'; saowc@qiniq.com

Subject: RE: 02042007 - 2002 1350 18 Re: Amendment Application for asoildisposal facility in Whale Cove

2002-1350-18

Dear Mr. Liu

Kevin asked me to reply to your questions.

Paragraph #1. Yes, that is the location of the stored soil. Please find attached a revised map with an arrow that points toward the location. Please discard the previous map.

Paragraph #2 The larger number was an early estimate of the potential amount of contaminated soil based on previous work of similar scope in different community. This estimate was made before FSC had formally

visited the site or had been provided all the existing documentation.

The estimate was found to be incorrect. In fact, from FSC"s August 25, 2006 construction report summary, the actual amount excavated to clean the site was much less - 164 cubic metres. This is now the volume that rests in storage.

The storage site was surrounded with soil berms to reduce the potential for surface runoff to enter or leave the stored soil. This has been accomplished, however, no as-built drawings exist at this time.

As to a contingency plan, there is no urgent need for the soil in another project at this time. Therefore, it can remain in storage until it meets the appropriate CCME guideline.

I hope this provides the information you seek.

### Regards

Ron Kent, P. Eng. Manager, Environmental Engineering FSC Architects & Engineers 4910 53rd Street, P. O. Box 1777 Yellowknife, NWT X1A 2P4 Tel: (867) 920-2882

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>>> "Zhong Liu" <tech4@nunavutwaterboard.org> 04/10/07 3:53 PM >>> Dear Mr. Hodgins,

I understand that no mapping exists for the old quarry in a scale suitable to show the exact location of the stored soil, and you had provided the best mapping available. However, there is no clear indication in the map you provided. I would like to know whether the area marked but no arrow pointed in the map is the place for contaminated soil.

In addition, was the contaminated soil already excavated and mobilized to the above place in summer 2006? What is the amount (1420 or 100 cubic meters)? Are there any other design drawings or as-built drawings for the contaminated soil storage facility than the concept design drawings of a lined landfarm, which is the contingency plan in case the contaminated soil exceeds related CCME guidelines?

Best regards,

**Zhong Liu** 

From: Kevin Hodgins [mailto:Kevin@fsc.ca]

Sent: Monday, April 02, 2007 4:45 PM

To: Zhong Liu

Cc: Filing Filer; Ron Kent; Brian Duguay; Phyllis Beaulieu; saowc@qiniq.com

Subject: 02042007 - 2002 1350 18 Re: Amendment Application for a soildisposal facility in Whale Cove

## 2002 1350 18

Dear Mr. Zhong Liu,

I met with CGS Representatives in Rankin Inlet last week regarding this project.

They asked that I review our responses to you on this matter.

Please find attached a copy of our letter dated March 6 that provides responses to your queries.

I know that some of our earlier email transmissions to you were not successful.

Please confirm that you receive this.

If you have any further questions please feel free to contact me.

with regards,

Kevin.

**FSC** Architects & Engineers

Kevin Hodgins, P. Eng. Principal

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>>> "Zhong Liu" <tech4@nunavutwaterboard.org> 3/6/2007 10:58:42 AM >>>

Dear Mr. Hodgins,

Enclosed please find the attachment about the above file.

Best regards,

Zhong Liu, MASc., MBA, MSc.

**Technical Advisor** 

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