

**From:** [Bilawchuk, Maureen ENV:EX](mailto:Maureen.Env@chholdings.ca)  
**To:** [Bilawchuk, Maureen ENV:EX](mailto:Maureen.Env@chholdings.ca)  
**Subject:** FW: SPO MO1701 20171130 Status Update  
**Date:** Monday, January 15, 2018 2:07:19 PM  
**Attachments:** [COC -CHH -NOVEMBER 2017.pdf](#)  
[Nov 30, 2017 CHH Progress Report.pdf](#)

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**From:** [spomo1701@outlook.com](mailto:spomo1701@outlook.com) [<mailto:spomo1701@outlook.com>]  
**Sent:** Thursday, November 30, 2017 5:22 PM  
**To:** Environmental Compliance ENV:EX; [marty@chholdings.ca](mailto:marty@chholdings.ca)  
**Subject:** SPO MO1701 20171130 Status Update

- ***Please find information regarding the Leachate reporting requirements for the November 30, 2017 reporting period as per SPILL PREVENTION ORDER : MO1701 Section 1d***

Total Leachate Collected= 11.79 m<sup>3</sup>

Total Leachate Stored= 43.49 m<sup>3</sup>

Total Leachate Transported= 0 m<sup>3</sup>

- ***Sampling was conducted November 27, 2017 as per Section 6biii of File 311372 August 11, 2017 letter. Laboratory results are pending. The COC is attached.***

*Sampling Summary-Samples were taken on November 27, 2017:*

1. *SHA-SW1*
2. *SHA-SW2*
3. *MW6*
4. *MW3*
5. *MW2*
6. *SHA-LE-1*
7. *SHA-LD-1 (Dry Conditions)*
8. *SB-1*
9. *SB-2*
10. *SB-3*

- ***Attached is the QP Progress Report for Nov 30, 2017 as per File 311372 August 11, 2017 letter.***

Thank you

Client Information	Project Information	Laboratory Information	COC Information
Allterra Construction 2158 Millstream Road Victoria BC V9B 6H4 Phone: (250) 508-0726	P17-932 Number: [none] Sample count: 12 TAT: 5	CARO Analytical Services #110 - 4011 Viking Way Richmond BC V6V 2K9 Phone: (604) 279-1499 Fax: (604) 279-1599	Number: CHH NOV 2017 Shipped via: Harbour Air

#	Sample Information	Analyses	Containers
#1	FB 11/27/2017 08:25 Grab / Water	Alkalinity, all (KEL) TAT: 5 Anions in Water by IC, 5 Analytes (KEL) TAT: 5 Conductivity in Water (RMD) TAT: 5 L/HEPH in Water (RMD) TAT: 5 Metals, dissolved, All, Low (RMD) TAT: 5 Metals, total, All, Low (RMD) TAT: 5 pH in Water (RMD) TAT: 5 Solids, Total Suspended (RMD) TAT: 5 Turbidity (KEL) TAT: 5	C05_125 mL Plastic (Metals) (1) C06_40 mL Vial (Mercury) (1) S05_125 mL Plastic (Metals-F) (1) S06_40 mL Vial (Mercury-F) (1) C11_1 L Plastic (General) (1) C10_125 mL Plastic (H2SO4) (1) C03_250 mL Glass (EPH/PAH) (1)
Comments: PLEASE RUN OUR NORMAL SUITE OF WATER ANALYSIS			
#2	MW6 11/27/2017 08:15 Grab / Water	Alkalinity, all (KEL) TAT: 5 Anions in Water by IC, 5 Analytes (KEL) TAT: 5 Conductivity in Water (RMD) TAT: 5 L/HEPH in Water (RMD) TAT: 5 Metals, dissolved, All, Low (RMD) TAT: 5 Metals, total, All, Low (RMD) TAT: 5 pH in Water (RMD) TAT: 5 Solids, Total Suspended (RMD) TAT: 5 Turbidity (KEL) TAT: 5	C05_125 mL Plastic (Metals) (1) C06_40 mL Vial (Mercury) (1) S05_125 mL Plastic (Metals-F) (1) S06_40 mL Vial (Mercury-F) (1) C11_1 L Plastic (General) (1) C10_125 mL Plastic (H2SO4) (1) C03_250 mL Glass (EPH/PAH) (1)
Comments: PLEASE RUN OUR NORMAL SUITE OF WATER ANALYSIS			
#3	MW3S 11/27/2017 09:10 Grab / Water	Alkalinity, all (KEL) TAT: 5 Anions in Water by IC, 5 Analytes (KEL) TAT: 5 Conductivity in Water (RMD) TAT: 5 L/HEPH in Water (RMD) TAT: 5 Metals, dissolved, All, Low (RMD) TAT: 5 Metals, total, All, Low (RMD) TAT: 5 pH in Water (RMD) TAT: 5 Solids, Total Suspended (RMD) TAT: 5 Turbidity (KEL) TAT: 5	C05_125 mL Plastic (Metals) (1) C06_40 mL Vial (Mercury) (1) S05_125 mL Plastic (Metals-F) (1) S06_40 mL Vial (Mercury-F) (1) C11_1 L Plastic (General) (1) C10_125 mL Plastic (H2SO4) (1) C03_250 mL Glass (EPH/PAH) (1)
Comments: PLEASE RUN OUR NORMAL SUITE OF WATER ANALYSIS			
#4	MW3D 11/27/2017 09:30 Grab / Water	Alkalinity, all (KEL) TAT: 5 Anions in Water by IC, 5 Analytes (KEL) TAT: 5 Conductivity in Water (RMD) TAT: 5 L/HEPH in Water (RMD) TAT: 5 Metals, dissolved, All, Low (RMD) TAT: 5 Metals, total, All, Low (RMD) TAT: 5 pH in Water (RMD) TAT: 5 Solids, Total Suspended (RMD) TAT: 5 Turbidity (KEL) TAT: 5	C05_125 mL Plastic (Metals) (1) C06_40 mL Vial (Mercury) (1) S05_125 mL Plastic (Metals-F) (1) S06_40 mL Vial (Mercury-F) (1) C11_1 L Plastic (General) (1) C10_125 mL Plastic (H2SO4) (1) C03_250 mL Glass (EPH/PAH) (1)
Comments: PLEASE RUN OUR NORMAL SUITE OF WATER ANALYSIS			
#5	MW2 11/27/2017 10:15 Grab / Water	Alkalinity, all (KEL) TAT: 5 Anions in Water by IC, 5 Analytes (KEL) TAT: 5 Conductivity in Water (RMD) TAT: 5 L/HEPH in Water (RMD) TAT: 5 Metals, dissolved, All, Low (RMD) TAT: 5 Metals, total, All, Low (RMD) TAT: 5 pH in Water (RMD) TAT: 5 Solids, Total Suspended (RMD) TAT: 5 Turbidity (KEL) TAT: 5	C05_125 mL Plastic (Metals) (1) C06_40 mL Vial (Mercury) (1) S05_125 mL Plastic (Metals-F) (1) S06_40 mL Vial (Mercury-F) (1) C11_1 L Plastic (General) (1) C10_125 mL Plastic (H2SO4) (1) C03_250 mL Glass (EPH/PAH) (1)
Comments: PLEASE RUN OUR NORMAL SUITE OF WATER ANALYSIS			
#6	SB1	<b>Analyses</b>	<b>Containers</b>

	11/27/2017 13:00 Grab / Water	Alkalinity, all (KEL) TAT: 5 Anions in Water by IC, 5 Analytes (KEL) TAT: 5 Conductivity in Water (RMD) TAT: 5 L/HEPH in Water (RMD) TAT: 5 Metals, dissolved, All, Low (RMD) TAT: 5 Metals, total, All, Low (RMD) TAT: 5 pH in Water (RMD) TAT: 5 Solids, Total Suspended (RMD) TAT: 5 Turbidity (KEL) TAT: 5	C05_125 mL Plastic (Metals) (1) C06_40 mL Vial (Mercury) (1) S05_125 mL Plastic (Metals-F) (1) S06_40 mL Vial (Mercury-F) (1) C11_1 L Plastic (General) (1) C10_125 mL Plastic (H2SO4) (1) C03_250 mL Glass (EPH/PAH) (1)
Comments: PLEASE RUN OUR NORMAL SUITE OF WATER ANALYSIS			
#7	SB2 11/27/2017 12:30 Grab / Water	<p style="text-align: center;"><b>Analyses</b></p> Alkalinity, all (KEL) TAT: 5 Anions in Water by IC, 5 Analytes (KEL) TAT: 5 Conductivity in Water (RMD) TAT: 5 L/HEPH in Water (RMD) TAT: 5 Metals, dissolved, All, Low (RMD) TAT: 5 Metals, total, All, Low (RMD) TAT: 5 pH in Water (RMD) TAT: 5 Solids, Total Suspended (RMD) TAT: 5 Turbidity (KEL) TAT: 5	<p style="text-align: center;"><b>Containers</b></p> C05_125 mL Plastic (Metals) (1) C06_40 mL Vial (Mercury) (1) S05_125 mL Plastic (Metals-F) (1) S06_40 mL Vial (Mercury-F) (1) C11_1 L Plastic (General) (1) C10_125 mL Plastic (H2SO4) (1) C03_250 mL Glass (EPH/PAH) (1)
Comments: PLEASE RUN OUR NORMAL SUITE OF WATER ANALYSIS			
#8	SB3 11/27/2017 11:45 Grab / Water	<p style="text-align: center;"><b>Analyses</b></p> Alkalinity, all (KEL) TAT: 5 Anions in Water by IC, 5 Analytes (KEL) TAT: 5 Conductivity in Water (RMD) TAT: 5 L/HEPH in Water (RMD) TAT: 5 Metals, dissolved, All, Low (RMD) TAT: 5 Metals, total, All, Low (RMD) TAT: 5 pH in Water (RMD) TAT: 5 Solids, Total Suspended (RMD) TAT: 5 Turbidity (KEL) TAT: 5	<p style="text-align: center;"><b>Containers</b></p> C05_125 mL Plastic (Metals) (1) C06_40 mL Vial (Mercury) (1) S05_125 mL Plastic (Metals-F) (1) S06_40 mL Vial (Mercury-F) (1) C11_1 L Plastic (General) (1) C10_125 mL Plastic (H2SO4) (1) C03_250 mL Glass (EPH/PAH) (1)
Comments: PLEASE RUN OUR NORMAL SUITE OF WATER ANALYSIS			
#9	LE-1 11/27/2017 13:30 Grab / Water	<p style="text-align: center;"><b>Analyses</b></p> Alkalinity, all (KEL) TAT: 5 Anions in Water by IC, 5 Analytes (KEL) TAT: 5 Conductivity in Water (RMD) TAT: 5 L/HEPH in Water (RMD) TAT: 5 Metals, dissolved, All, Low (RMD) TAT: 5 Metals, total, All, Low (RMD) TAT: 5 pH in Water (RMD) TAT: 5 Solids, Total Suspended (RMD) TAT: 5 Turbidity (KEL) TAT: 5	<p style="text-align: center;"><b>Containers</b></p> C05_125 mL Plastic (Metals) (1) C06_40 mL Vial (Mercury) (1) S05_125 mL Plastic (Metals-F) (1) S06_40 mL Vial (Mercury-F) (1) C11_1 L Plastic (General) (1) C10_125 mL Plastic (H2SO4) (1) C03_250 mL Glass (EPH/PAH) (1)
Comments: PLEASE RUN OUR NORMAL SUITE OF WATER ANALYSIS			
#10	SW2 11/27/2017 13:45 Grab / Water	<p style="text-align: center;"><b>Analyses</b></p> Alkalinity, all (KEL) TAT: 5 Anions in Water by IC, 5 Analytes (KEL) TAT: 5 Conductivity in Water (RMD) TAT: 5 L/HEPH in Water (RMD) TAT: 5 Metals, dissolved, All, Low (RMD) TAT: 5 Metals, total, All, Low (RMD) TAT: 5 pH in Water (RMD) TAT: 5 Solids, Total Suspended (RMD) TAT: 5 Turbidity (KEL) TAT: 5	<p style="text-align: center;"><b>Containers</b></p> C05_125 mL Plastic (Metals) (1) C06_40 mL Vial (Mercury) (1) S05_125 mL Plastic (Metals-F) (1) S06_40 mL Vial (Mercury-F) (1) C11_1 L Plastic (General) (1) C10_125 mL Plastic (H2SO4) (1) C03_250 mL Glass (EPH/PAH) (1)
Comments: PLEASE RUN OUR NORMAL SUITE OF WATER ANALYSIS			
#11	SW1 11/27/2017 10:45 Grab / Water	<p style="text-align: center;"><b>Analyses</b></p> Alkalinity, all (KEL) TAT: 5 Anions in Water by IC, 5 Analytes (KEL) TAT: 5 Conductivity in Water (RMD) TAT: 5 L/HEPH in Water (RMD) TAT: 5 Metals, dissolved, All, Low (RMD) TAT: 5 Metals, total, All, Low +Cr6 (RMD) TAT: 5 pH in Water (RMD) TAT: 5 Solids, Total Suspended (RMD) TAT: 5	<p style="text-align: center;"><b>Containers</b></p> C05_125 mL Plastic (Metals) (1) C06_40 mL Vial (Mercury) (1) S05_125 mL Plastic (Metals-F) (1) S06_40 mL Vial (Mercury-F) (1) C11_1 L Plastic (General) (1) C10_125 mL Plastic (H2SO4) (1) C03_250 mL Glass (EPH/PAH) (1) C09_125 mL Plastic (CN/Cr6) (1)

		Turbidity (KEL) TAT: 5	
Comments: PLEASE RUN OUR NORMAL SUITE OF WATER ANALYSIS + Cr Speciation			
#12	SW1 DUP 11/27/2017 10:50 Grab / Water	<p style="text-align: center;"><b>Analyses</b></p> Alkalinity, all (KEL) TAT: 5 Anions in Water by IC, 5 Analytes (KEL) TAT: 5 Conductivity in Water (RMD) TAT: 5 L/HEPH in Water (RMD) TAT: 5 Metals, dissolved, All, Low (RMD) TAT: 5 Metals, total, All, Low +Cr6 (RMD) TAT: 5 pH in Water (RMD) TAT: 5 Solids, Total Suspended (RMD) TAT: 5 Turbidity (KEL) TAT: 5	<p style="text-align: center;"><b>Containers</b></p> C05_125 mL Plastic (Metals) (1) C06_40 mL Vial (Mercury) (1) S05_125 mL Plastic (Metals-F) (1) S06_40 mL Vial (Mercury-F) (1) C11_1 L Plastic (General) (1) C10_125 mL Plastic (H2SO4) (1) C03_250 mL Glass (EPH/PAH) (1) C09_125 mL Plastic (CN/Cr6) (1)
Comments: PLEASE RUN OUR NORMAL SUITE OF WATER ANALYSIS + Cr Speciation			

Relinquished by	Date/Time	Accepted by	Date/Time



<b>FIELD REVIEW REPORT</b>		DATE: <b>Nov 30 2017</b>	ISLANDER PROJECT No.: <b>2087</b>
REPORT No: <b>9</b>	STAGE OF CONSTRUCTION: <b>Landfill Closure</b>	WEATHER: <b>Rainy 6 deg</b>	PAGE: <b>1 of 3</b>
PROJECT: <b>Cobble Hill Landfill 2017 Minor Construction Works</b>			
TO:	<b>Allterra Construction</b>	ATTENTION:	<b>Rahim Gaidhar</b>
CC:			

The field review included the inspection of the following items included in the detailed summary of works section of the *Cobble Hill Landfill — 2017 Minor Construction Works, Detailed Construction Plan (Sperling Hansen Associates, September 13, 2017)*:

- **PEA**
  - *Liner appears to be in good condition and is shedding water effectively. Continued rains have not compromised the liner coverage and all repairs are continuing to hold up and are in good condition.*
- **Leachate and Leak Detention facility**
  - Leachate collected = 11.79 m<sup>3</sup>; Total Leachate Stored = 43.49 m<sup>3</sup>; leachate transported 0 m<sup>3</sup>
  - **No leachate has migrated off-site**
- **Soil Management Area (SMA)**
  - Soil is covered with a PVC liner and weighted down with wooden crates and tires inside the SMA. All works are in good condition and no noticeable changes since the date of our last inspection
- **Contact Water Containment Pond**
  - All works are in good condition and no noticeable changes since the date of our last inspection
- **cut-off ditch upland of PEA**
  - This ditch continues to perform well. Raining during inspection confirming that ditch is functioning, and that all upland runoff is being contained and diverted around top (south) edge of PEA

ISLANDER ENGINEERING LTD.



Mike Achtem, P.Eng



**ISLANDER**  
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<b>FIELD REVIEW REPORT</b>		DATE: <b>Nov 30 2017</b>	ISLANDER PROJECT No.: <b>2087</b>
REPORT No: <b>9</b>	STAGE OF CONSTRUCTION: <b>Landfill Closure</b>	WEATHER: <b>Rainy 6 degC</b>	PAGE: <b>2 of 3</b>



**SMA - liner – looking south**



**SMA – looking north**



**Contact water containment Pond**



**Pipe trenching and Leachate and Leak Detention facility**



<b>FIELD REVIEW REPORT</b>		DATE: <b>Nov 30 2017</b>	ISLANDER PROJECT No.: <b>2087</b>
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**PEA – liner near NW corner**



**PEA– NE corner**



**Cut-off ditch upland of PEA**



**PEA north face**