

Report Date: July 19, 2017 File:1701

Report Number: 057193

Cobble Hill Holdings Itd. (BC0754588) c/o Herald Street Law 101 - 536 Herald Street Victoria, BC V8W 1S6

Dear Named Parties (as identified within Spill Prevention Order MO1701),

Re: An Investigation Referral, Spill Prevention Order MO1701, 460 Stebbings Road, Malahat, BC V0R 2L0 Contaminated Landfill Soil Leachate Collection System, Effluent

On June 15, 2017, Ministry of Environment, Environmental Protection Division staff conducted an inspection under the Environmental Management Act (EMA), Spill Prevention Order MO1701 (Order). The inspection determined that the Named Parties are out of compliance with the Order, and the section(s) listed below. This Inspection Record lists the compliance verification information contained below.

For your information, this inspection record has been referred to the Conservation Officer Service for investigation.

Inspection Details:

Requirement Description:	a: The landfill is covered completely with weighted and secured impermeable cover, and that sufficient weather protection is provided for the cover in order to ensure its effectiveness, except as needed for implementation of an approved Final Closure Plan or Contaminated Soil Removal Plan;
Details/Findings:	On June 15, 2017, Environmental Protection Officer, Connor Fraleigh (EPO Fraleigh) and Maureen Bilawchuk (MOE) completed an on-site inspection of the landfill cell. During the inspection, EPO Fraleigh observed a tear in the landfill cell liner at the base of the liner, roughly one metre east of the leak detection piping, which had been covered by some sandbags (Photo #7). It had been raining during the time of the inspection and the rain had increased in intensity throughout the remainder of the inspection. As the rain increased, a combination of leachate and stormwater began to discharge out of the tear in the landfill liner directly to the ground beside the landfill leak detection tank (Photo #6).
	In addition to the increase in discharge from the tear in the liner, it was also noted that there was an increase in the rate of discharge to the leachate collection tank. This indicated that there was stormwater entering the landfill cell liner from another source. EPO Fraleigh and Maureen Bilawchuk had noted an opening in the liner due to a faulty patch weld earlier in the inspection that was located roughly 40 metres west of the leachate collection system (Photo #5). Stormwater was observed flowing directly into the opening, which, in turn, increased the flow to the leachate collection tank and to the tear in the liner.
Compliance:	Out
Actions to be taken:	Please continue to complete regular inspections of the landfill cell liner on-site and patch up any existing tears and/or openings currently visible on the surface of the liner.
Requirement Description:	b: All Leachate generated at the facility, including from the landfill, soil management area and wheel wash area, is collected, stored temporarily pending removal from the Facility, and transported from the Facility to an off-site facility that is authorized to treat and/or dispose of the Leachate. The collection and temporary storage of Leachate at the Facility must be carried out so as to prevent an escape or spill of Leachate into the environment;

Ministry of Environment

Compliance Environmental Protection Division Telephone: 250 751 3100 Facsimile: 250 751 3103 Website: www.gov.bc.ca/env

June 15, 2017. Rahim Gaidhar (SIRM) provided a follow-up report (via email) of the repair work completed to the liner on June 19, 2017. As the last inspection was completed in April, there should be no additional sag in the containment pond liner due to the previously noted frost heave. Please provide the rationa as to why the levels in the containment pond have decreased from the inspection complet on April 6, 2017 to June 15, 2017. Requirement Description: 1. b: All Leachate generated at the facility, including from the landfill, soil management area and wheel wash area, is collected, stored temporarily pending removal from the Facility, a transported from the Facility to an off-site facility that is authorized to treat and/or dispose the Leachate. The collection and temporary storage of Leachate at the Facility must be carried out so as to prevent an escape or spill of Leachate into the environment: Inspection Record #052631 requested that the Leachate be removed from the SMA to the containment pond. The Initial volume of Leachate that was located in the Soil Management Area (SMA) is no longer within the SMA (Photo #1). Leachate generated in the Soil Management Area (SMA) continues to be managed in accordance with the Order. During the inspection, the drain at the south side of the SMA was observed to be collecting a significant amount of storm water and Leachate (Photo #1 it was observed that there is a switch that can be turned on and off allowing for discharge the containment pond. The switched was observed to be in the off position as no leachate was discharging Leachate into the environment. There is currently an asphalt berm in place at the south side of the SMA, however, the berm has cracked in a few locations which would allow Leachate to release to the ground if a situation arose where the drain overflowed (Photo #2). In order to avoid excess stormwater being sent to the containment pond, consider divertin stormwater away from the drain and the SMA catchment area. 1. c: All works for the colle	Details/Findings:	The collection and temporary storage of Leachate at the Facility was not carried out sufficiently as leachate was observed discharging into the environment via the tear in the landfill cell liner.
Actions to be taken: SIRM immediately sent out a labour crew to control the leak in the landfill cell liner. The discharge from the tear in the liner was stopped by SIRM staff shortly after the inspection June 15, 2017. Rahim Gaidhar (SIRM) provided a follow-up report (via email) of the repail work completed to the liner on June 19, 2017. As the last inspection was completed in April, there should be no additional sag in the containment pond liner due to the previously noted frost heave. Please provide the rations as to why the levels in the containment pond have decreased from the inspection complet on April 6, 2017 to June 15, 2017. 1. b: All Leachate generated at the facility, including from the landfill, soil management area and wheel wash area, is collected, stored temporarily pending removal from the Facility, a transported from the Facility to a off-site facility that is authorized to treat and/or dispose the Leachate. The collection and temporary storage of Leachate at the Facility was to be carried out so as to prevent an escape or soil of Leachate into the environment. Inspection Record #05/26/31 requested that the Leachate be removed from the SMA to the containment pond. The initial volume of Leachate that was located in the Soil Management Area (SMA) is no longer within the SMA (Photo #1). Leachate generated in the Soil Management Area (SMA) continues to be managed in accordance with the Order. During the inspection, the drain at the south side of the SMA was observed to be collecting a significant amount of storm water and Leachate (Photo #1). Leachate generated in the Soil Management Area (SMA) continues to be managed in accordance with the Order. During the inspection, the drain at the south side of the SMA was observed to be in the off position as no leachate was discharaging to the containment pond. The switched was observed to be in the off position as no leachate was discharaging to the containment pond through the piping. Compliance: Please ensure that the switch that allows stormwate		than the last time the site was inspected on April 6, 2017 (Photo #4). As noted in the previous inspection, there have been discrepancies identified over the leachate volumes being reported. This, in conjunction with the lowered levels of leachate observed in the containment pond, has warranted further investigation. For this reason, the records of the volume of Leachate collected, stored and transported off-site were requested.
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Ministry of Environment

Compliance Environmental

Protection Division

Telephone: 250 751 3100 Facsimile: 250 751 3103

Website: <u>www.gov.bc.ca/env</u>

On June 15, 2017, Environmental Protection Officer, Connor Fraleigh (EPO Fraleigh) and Maureen Bilawchuk (MOE) completed an on-site inspection of the landfill cell located at Cobble Hill Holdings Ltd. (BC0754588) (CHH)'s facility near Shawnigan Lake.

The scope of this inspection was to assess the facility for compliance with Spill Prevention Order MO1701 (SPO); dated January 27, 2017; last amended March 15, 2017, and to complete a follow-up inspection of the deficiencies noted in Inspection Record #056323. Specifically, with regards to the leak detection system repairs that were completed on May 20, 2017.

Non-compliance(s) noted during the inspection:

- 1.a The landfill cell liner was not secured and impermeable due to some tears resulting in a discharge of Leachate into
- 1.b The collection and temporary storage of Leachate was not carried out sufficiently resulting in a discharge of Leachate into the environment
- 1.c The landfill cell liner was not maintained in good working order resulting in a discharge of Leachate into the environment

Compliance History:

2017-05-18 - Warning - Leak detection piping not connected to the leak detection tank, records of Leachate volume stored on-site not provided in email submissions

2017-04-06 - Advisory - Minor issues with the landfill liner integrity noted, volumes of leachate collected being inaccurately reported

If you have any questions or require any clarification, feel free to contact me at Connor.Fraleigh@gov.bc.ca.

Please be advised that this inspection record may be published on the provincial website within 7 days.

Below are attachments related to this inspection.

If you have any questions about this letter, please contact the undersigned.

Yours truly,

Connor Fraleigh

Environmental Protection Officer

cc: Martin Uwe Block Michael Kelly

South Island Resource Management Ltd.

South Island Aggregates Ltd. Cobble Hill Holdings Ltd.

AJ Downie Leslie Payette

Attachments:

1) 2017-06-15 Photo Record SPO MO1701 - IR 57193.pdf 2017-06-15 Photo Record SPO MO1701 - IR 57193

Deliver via:	
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Registered Mail: X	Hand Delivery:

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Ministry of Environment Compliance

Environmental Facsimile: 250 751 3103
Protection Division Website: www.gov.bc.ca/env

Telephone: 250 751 3100

DISCLAIMER:

Please note that sections of the permit, regulation or code of practice referenced in this inspection record are for guidance and are not the official version. Please refer to the original permit, regulation or code of practice.

To see the most up to date version of the regulations and codes of practices please visit http://www.bclaws.ca

If you require a copy of the original permit, please contact the inspector noted on this inspection record or visit: http://www2.gov.bc.ca/gov/topic.page?id=DF89089126D042FD96DF5D8C1D8B1E41&title=Publically%20Viewable%20Authorizations

It is also important to note that this inspection record does not necessarily reflect each requirement or condition of the authorization therefore compliance is noted only for the requirements or conditions listed in the inspection record.

Authorization: MO1701	Cobble Hill Holdings Ltd. near Shawnigan Lake, BC
NRIS IR #: 57192	June 15, 2017 Site Inspection Photos

Photo 1

Viewing southwest towards the Leachate in the SMA.



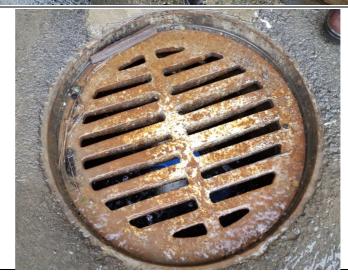
Photo 2

Viewing west towards the SMA where the containment berm issues were observed.



Photo 3

Viewing the drain in the SMA close to capacity. Nozzle appears to be in the off position blocking flow to the containment pond.



Authorization: MO1701	Cobble Hill Holdings Ltd. near Shawnigan Lake, BC
NRIS IR #: 57192	June 15, 2017 Site Inspection Photos

Photo 4

Viewing north towards the containment pond.



Photo 5

Viewing the tear in the landfill cell liner and the associated stormwater flow entering the landfill cell.



Photo 6

Viewing the Leachate discharge location from the north side of the landfill cell liner.



Authorization: MO1701	Cobble Hill Holdings Ltd. near Shawnigan Lake, BC
NRIS IR #: 57192	June 15, 2017 Site Inspection Photos

Photo 7

Viewing the tear along the weld where leachate was observed discharging to ground.



Photo 8

Viewing the uncovered leak detection tank.



Photo 9

Viewing inside of the leak detection tank.



Document : 2017-06-15 Photo Record SPO MO1701 - IR 57193.pdf

Document comment: 2017-06-15 Photo Record SPO MO1701 - IR 57193