



Report Date: April 02, 2019

File: 1701

Report Number: 115769

Cobble Hill Holdings Ltd. (BC0754588)
505 Fisgard Street
Victoria BC V8W 1S6

Dear Named Parties (as identified in the Second Amended Spill Prevention Order MO1701),

Re: Notice Letter, Second Amended Spill Prevention Order MO1701, 460 Stebbings Road, Shawnigan Lake, BC V0R 2W3

On March 14, 2019, Ministry of Environment and Climate Change Strategy, Environmental Protection Division staff conducted an inspection of your facility, Cobble Hill Holdings (BC0754588) located at 460 Stebbings Road, Shawnigan Lake, BC V0R 2W3 under the Environmental Management Act (EMA), Second Amended Spill Prevention Order MO1701 (SPO), dated January 27, 2017 and last amended June 29, 2017, and the Minister's letters dated August 11, 2017 and September 18, 2017.

Requirement Description:	2017-06-29 SPO 1. 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 Updated Final Closure Plan;
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Details/Findings:	<p>Inspection Overview</p> <p>On March 14, 2018, Ministry of Environment and Climate Change Strategy (ENV) Environmental Protection Officer Colin Meldrum (Officer Meldrum) conducted an office review inspection of Cobble Hill Holdings Ltd. (BC0754588) landfill cell located at 460 Stebbings Road, Shawnigan Lake (Facility). The purpose of the inspection was to verify compliance with Spill Prevention Order MO1701 (SPO), dated January 27, 2017 and last amended June 29, 2017, and the Minister's letters dated August 11, 2017 and September 18, 2017. The scope of the inspection included a review of the semi-monthly status report submissions of October 15, 2018, October 30, 2018, November 15, 2018, November 30, 2018, December 14, 2018, December 30, 2018, January 15, 2019, January 30, 2019, February 15, 2019, February 28, 2019 and March 15, 2019. The Facility was inspected on-site by Officer Laura Hunse (Officer Hunse) on the morning of March 27, 2019. The weather conditions were clear and sunny. Warm conditions in the previous week melted the majority of snow at the site and allowed for adequate viewing of the landfill cover. Officer Hunse was accompanied on-site by Facility representative Mr. Todd Mizuik. The soil management area, landfill area and exterior of the leachate collection shed were observed during the inspection.</p> <p>The inspection period was from October 1, 2018 to March 27, 2019.</p> <p>Compliance Assessment</p> <p>Officer Hunse walked the perimeter of the landfill and confirmed that it continues to be covered completely with a weighted and secured impermeable cover that provides sufficient weather protection. Storm diversion swales and ditches appeared adequate and clear of debris; no concerns were noted at time of inspection (see Photos 3-7, attached).</p>
Compliance:	In
Requirement Description:	<p>2017-06-29 SPO</p> <p>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, 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;</p>

Details/Findings:	<p>Officer Hunse observed that soil management area (SMA) soils remain under tarp on the covered pad, generally protected from weather. Excess precipitation that does enter through open ends is diverted around the weighted tarping along the graded pad, and this non-contact water collects in the drainage grating at the south end, which was in the past sent to the treatment system but is now confined. Mr. Mizuik noted that the collection point is monitored during semi-monthly inspections, but in an extreme event of it filling up and overflowing, the water is non-contact storm water and does not contain leachate (Photos 1-2).</p> <p>Leachate from the landfill area continues to be collected and stored in two tanks housed in the collection shed prior to transport to an offsite facility where it is treated to standard allowing authorized disposal through the sanitary system. Leachate is currently generated at a rate of approximately 8 m3/month. Records regarding leachate characteristics, volume, and transportation off site are included with semi-monthly reporting. Prior to transport offsite, a filtration system utilizes potassium permanganate cartridges to react with iron in the leachate to ionically attract and floc out manganese and iron precipitate. Spent filters rods are landfilled in an authorized manner.</p> <p>Access to the collection shed is limited by padlock and the enclosure is designated a confined space. The shed was locked at the time of the inspection and the internal space not viewed at that time. There was no visible indication that any spills had taken place. Tank levels continue to be monitored and employ an automatic callout system in case of high levels (Photo 8).</p>
Compliance:	In
Actions to be taken:	<p>A small section of cord material securing the south end cover of the SMA to the supportive structure has come loose and should be refastened to avoid loosening further.</p> <p>Ensure measures are in place to allow quick access to the shed space in case of emergency.</p>
Requirement Description:	<p>2017-06-29 SPO</p> <p>1. c: All works for the collection and temporary storage of Leachate generated at the Facility are inspected regularly and maintained in good working order; and</p>
Details/Findings:	Collection and temporary storage works are inspected in an approximately 8 hour program semi-monthly and findings signed by a Qualified Professional are reported to the ministry twice per month.
Compliance:	In

Requirement Description:	<p>2017-06-29 SPO</p> <p>1. d: Records of the volumes of Leachate collected, stored and transported, including the name and location of the authorized facility(ies) receiving the Leachate, are maintained and submitted to the director on or immediately before the 1st and 15th day of each month, until the Named Parties have complied with section 6 or section 11 of this order. Submissions must be made electronically to the following email inbox: EnvironmentalCompliance@gov.bc.ca.</p>
Details/Findings:	<p>Records of the volumes of leachate collected, stored and transported were maintained and submitted in the semi-monthly status reports on October 15, 2018, October 30, 2018, November 15, 2018, November 30, 2018, December 14, 2018, December 30, 2018, January 15, 2019, January 30, 2019, February 15, 2019, February 28, 2019 and March 15, 2019. The removal and transport of leachate from the Facility only took place on January 24, 2019. Records of the volumes of leachate transported, including the name and location of the authorized facility receiving the leachate were maintained and submitted in the semi-monthly status report on February 28, 2019.</p>
Compliance:	In
Requirement Description:	<p>2017-06-29 SPO</p> <p>2. a.: The Ministry acknowledges receipt of a package of "As-Built" plans and specifications for the existing facility, and a report entitled "Cobble Hill Landfill Final Closure Plan Report" prepared by Sperling Hansen Associates Inc., dated May 31, 2017 (the "Final Closure Plan"). By July 21, 2017, the Named Parties must submit an updated version of the Final Closure Plan to the Ministry for review and approval (the "Updated Final Closure Plan"). The Updated Final Closure Plan must be certified by a qualified professional as defined in the Landfill Criteria for Municipal Solid Waste, Second Edition, June 2016 ("Qualified Professional") and must revise the Final Closure Plan to include the following: a. a description of how leachate, and leak detection, collection and storage will be carried out during the transition from the existing leachate, and leak detection, collection and storage works to the new leachate, and leak detection, collection and storage works. If temporary collection and storage works are necessary during the transition, provide a description and details of the temporary works; The Updated Final Closure Plan may be approved by the Minister, with or without conditions.</p>
Details/Findings:	<p>A revised version of the Updated Final Closure Plan was submitted to the Ministry on January 31, 2019 and is currently being reviewed by the Ministry; therefore, compliance with this requirement and all other requirements of SPO1701 Section 2 were not assessed for the inspection period.</p>
Compliance:	Not Determined

Requirement Description:	2017-06-29 SPO 3: Following approval of the Updated Final Closure Plan, the Named Parties must carry out all closure activities set out in the approved Updated Final Closure Plan in accordance with any conditions of the approval. A Qualified Professional must be continuously present on-site to supervise all closure activities and must carry out the following: inspect and approve works as they are constructed for conformance with plans and specifications; perform quality assurance and quality control, including for the clay secondary liner and the geomembrane base and cover liners; perform testing, including seam and leak testing; and report to the Ministry in accordance with section 4 below. The Named Parties must carry out the closure activities in accordance with the implementation schedule in the approved Updated Final Closure Plan or such other dates as specified by the Minister.
Details/Findings:	Aside from the August 11, 2017 limited approval of the Updated Final Closure Plan comprising of section 4.8 (Minor Construction Works) and sections 9.3 - 9.6 (Environmental Monitoring Program), the Updated Final Closure Plan has not been approved by the Ministry; therefore, compliance with this requirement is not applicable for the inspection period.
Compliance:	Not Applicable
Requirement Description:	2017-06-29 SPO 4: Commencing in the month that closure activities commence pursuant to the approved Updated Final Closure Plan, the Named Parties must submit semi-monthly status reports, certified by a Qualified Professional. The reports must include the status of closure activities, inspection results, quality control and testing results, photographs which support/document the quality control and testing results, inspection reports and other supporting documents as needed to fully document all stages and components of the closure activities. Status reports must be submitted by the 15th and 30th of each month (or the next business day thereafter if the 15th or 30th of the month is not a business day) until closure activities have been completed. Submissions must be made electronically to the following email inbox: EnvironmentalCompliance@gov.bc.ca.
Details/Findings:	Semi-monthly status reports were submitted electronically on October 15, 2018, October 30, 2018, November 15, 2018, November 30, 2018, December 14, 2018, December 30, 2018, January 15, 2019, January 30, 2019, February 15, 2019, February 28, 2019 and March 15, 2019. Each semi-monthly status report was certified by a Qualified Professional with Islander Engineering Ltd. The semi-monthly status reports included inspection results, quality control and testing results and photographs.
Compliance:	In

Requirement Description:	2017-06-29 SPO 5: The Named Parties must submit complete detailed final "As-Built" plans and specifications, certified by a Qualified Professional, of any revisions to the Facility including the landfill final cover, resulting from implementing the approved Updated Final Closure Plan in accordance with any conditions of the approval, within 30 days after the works have been constructed.
Details/Findings:	The Named Parties were previously found to be in compliance with this requirement in IR072415 for having submitted As-Built drawings certified by a Qualified Professional for the approved Minor Construction Works. The Updated Final Closure Plan has not been approved by the Ministry; therefore, compliance with this requirement is not applicable for the inspection period.
Compliance:	Not Applicable
Requirement Description:	2017-06-29 SPO 6: Following completion of all closure activities in the approved Updated Final Closure Plan, the Named Parties must submit quarterly implementation reports to the Ministry on or immediately before the last day of March, June, September and December of each year, for the duration specified in the approved Updated Final Closure Plan. Implementation reports must include records of inspections, operations and maintenance of the Facility, records of the volumes of Leachate collected, stored and transported, including the name and location of the authorized facility(ies) receiving the Leachate, and environmental monitoring program records interpreted and certified by a Qualified Professional. Submissions must be made electronically to the following email inbox: EnvironmentalCompliance@gov.bc.ca.
Details/Findings:	The Updated Final Closure Plan has not been approved by the Ministry; therefore, compliance with this requirement is not applicable for the inspection period.
Compliance:	Not Applicable
Requirement Description:	2017-08-11 SPO Clarification Letter 4.: The Environmental Monitoring Program must involve collection of monthly rather than quarterly samples from the surface water, groundwater and seepage blanket as identified in sections 9.4 to 9.6 of the Updated Final Closure Plan. With regard to section 9.3, leachate in the Leak Detection Tank must also be sampled monthly when liquid is present in the tank, and analyzed for the same parameters as indicated in the Leachate Tank sampling program. Monitoring must commence at existing sampling sites by August 31, 2017, and must commence at the seepage blanket monitoring wells by October 31, 2017.

Details/Findings:	<p>The semi-monthly status reports for October 15, 2018, November 30, 2018, January 15, 2019 and February 28, 2019 include the results of the monthly samples collected from the surface water (SHA-SW1 and SHA-SW2 when flowing), groundwater (MW2, MW3(S/D), and MW6) and seepage blanket (SB-1, SB-2 and SB-3 when not dry) as identified in sections 9.4 and 9.6 of the Updated Final Closure Plan.</p> <p>In addition, the semi-monthly status reports for October 15, 2018, November 30, 2018, January 15, 2019 and February 28, 2019 include the results of the monthly samples collected from the Leachate Tank (SHA-LE-1) as identified in section 9.3 of the Updated Final Closure Plan.</p>
Compliance:	In
Requirement Description:	<p>2017-08-11 SPO Clarification Letter</p> <p>4.: The Environmental Monitoring Program must involve collection of monthly rather than quarterly samples from the surface water, groundwater and seepage blanket as identified in sections 9.4 to 9.6 of the Updated Final Closure Plan. With regard to section 9.3, leachate in the Leak Detection Tank must also be sampled monthly when liquid is present in the tank, and analyzed for the same parameters as indicated in the Leachate Tank sampling program. Monitoring must commence at existing sampling sites by August 31, 2017, and must commence at the seepage blanket monitoring wells by October 31, 2017.</p>
Details/Findings:	<p>The semi-monthly status reports for October 15, 2018, October 30, 2018, November 15, 2018, February 28, 2019 and March 15, 2019 state that no monthly samples were collected from the surface water at SHA-SW2 as identified in section 9.4 of the Updated Final Closure Plan in September 2018, October 2018 and February 2019 due to no flow being present.</p>
Compliance:	Not Applicable
Actions to be taken:	Please continue to document monitoring variances due to no flow or dry conditions and ensure that monthly samples are collected when flow or leachate is present.
Requirement Description:	<p>2017-08-11 SPO Clarification Letter</p> <p>5.: A high water level alarm system must be installed by October 31, 2017, and remain operational in the leachate collection tank to minimize the risk of an unforeseen overflow of leachate.</p>

Details/Findings:	Mr. Mizuik noted that electronically recording high water level alarms installed in the tanks provide constant remotely accessible feedback of levels in the tanks, and auto-callout to appropriate contacts when tanks fill to 50%, 75% and 90% fill levels; though, in general, leachate is removed from the site when the fill levels approach half full.
Compliance:	In
Requirement Description:	2017-08-11 SPO Clarification Letter 6. b. iii.: Additional reporting to the Ministry must be carried out as follows: b. In addition to including the information listed in section 4 of the SPO, the semi-monthly status reports must also: iii. Include water quality results received from the lab during the reporting period, suitably tabulated with copies of the original lab reports.
Details/Findings:	The semi-monthly status reports for October 15, 2018, November 15, 2018, December 14, 2018, January 15, 2019 and February 28, 2019 include the results of the monthly samples from the surface water, groundwater, seepage blanket and leachate tank suitably tabulated and with copies of the original lab reports.
Compliance:	In

Compliance History:

2018-11-14 IR102127 - Notice of Compliance
2018-07-12 IR090482 - Notice of Compliance
2018-02-01 IR078018 - Notice of Compliance
2017-12-04 IR072415 - Notice of Compliance
2017-10-17 IR070056 - Notice of Compliance - All Minor Construction Works have been constructed
2017-09-27 IR068133 - Warning - Qualified Professional not continuously present on-site, monthly monitoring did not commence by date required, minor construction works schedule not received
2017-06-15 IR057193 - COS Referral - Landfill cell liner not covered completely with weighted and secured impermeable cover resulting in discharge of leachate
2017-05-18 IR056323 - 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 IR052631 - Advisory - Minor issues with the landfill liner integrity noted, volumes of leachate collected being inaccurately reported

More information about Environmental Compliance, the Non-Compliance Decision Matrix, and reporting and data submission requirements can be found at the links below:

- General compliance information: <http://www.gov.bc.ca/environmentalcompliance>
- Non-Compliance Decision Matrix information: <http://www.gov.bc.ca/environment/how-compliance-is-assessed>
- Reporting and data submission requirements (to be sent to EnvAuthorizationsReporting@gov.bc.ca): <http://www.gov.bc.ca/submit-waste-authorization-reports>

Please be advised that this inspection report may be published on the provincial government 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,

Colin Meldrum
Environmental Protection Officer

cc:

Attachments: 1) 2019-03-27 photo_record.pdf Photo record

Deliver via:
Email: <input checked="" type="checkbox"/> Fax: <input type="checkbox"/> Mail: <input type="checkbox"/>
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Ministry of Environment and Climate Change Strategy	Compliance Environmental Protection Division	Mailing Address: 2080-A Labieux Rd Nanaimo BC V9E 6J9	Telephone: 250 751 3100 Facsimile: 250 751 3103 Website: www.gov.bc.ca/env
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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.

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	460 Stebbings Road near Shawnigan Lake
NRIS IR #: 115769	March 27, 2019 Site Inspection Photos

Photo 1

SMA, looking NW.

Moisture/non-contact from exterior grades towards centre foreground to drain



Photo 2

SMA, looking SE



Authorization: MO1701	460 Stebbings Road near Shawnigan Lake
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Photo 3
SE corner of
landfill, looking N



Photo 4
S corner of
landfill, looking
W



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Photo 5
NW corner of landfill, looking SE



Photo 6
W corner of landfill, looking E, SMA in background



Authorization: MO1701	460 Stebbings Road near Shawnigan Lake
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Photo 7
North face of
landfill



Photo 8
Leachate
collection shed



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Tote sacks of carbon filter material from the decommissioned treatment plant in SMA

