

ORDER OF THE MINISTER OF ENVIRONMENT

ENVIRONMENTAL MANAGEMENT ACT SECTION 79

SECOND AMENDED SPILL PREVENTION ORDER: MO1701

WHEREAS this Second Amended Spill Prevention Order amends and restates Amended Spill Prevention Order MO1701 dated March 15, 2017;

AND WHEREAS Cobble Hill Holdings Ltd., Inc. No. BC0754588 ("**Cobble Hill Holdings**") is the owner of land legally described as Lot 23 Blocks 156, 201 and 323 Malahat District Plan VIP78459 (the "**Land**") located at 460 Stebbings Road near Shawnigan Lake, British Columbia, which is used as a landfill facility for contaminated soil and ash (the "**Facility**") as part of a reclamation plan for a quarry site;

AND WHEREAS Permit PR-105809 issued to Cobble Hill Holdings under the *Environmental Management Act* authorizing the discharge of refuse and effluent in connection with the Facility has been cancelled for non-compliance;

AND WHEREAS the contaminated soil and ash landfilled at the Facility under Permit PR-105809 (the "**Contaminated Soil**") generates and may be expected to continue to generate leachate, which is a liquid that, in the course of passing through matter, extracts soluble or suspended solids, or any other component of the material through which it has passed ("**Leachate**");

AND WHEREAS the Leachate and contaminants in the Contaminated Soil are polluting substances that, in my opinion, are capable of causing pollution if they were to be spilled or escape onto any land or into any body of water, as they contain contaminants that are capable of substantially altering or impairing the usefulness of the environment;

AND WHEREAS I consider that the following persons (together, the "**Named Parties**") have possession, charge or control of the polluting substance:

- **Cobble Hill Holdings Ltd.**, owner of the Land and Facility;
- **Martin Uwe Block and Michael Kelly**, directors of Cobble Hill Holdings Ltd.;
- **South Island Resource Management Ltd.**, operator of the Facility;
- **South Island Aggregates Ltd.**, operator of the quarry reclamation program on the Land;
and
- **Allterra Construction Ltd.**, participant in the operation of the Facility.

AND WHEREAS I consider it reasonable and necessary to lessen the risk of an escape or spill of the polluting substances (Leachate and Contaminated Soil) to make the following Order;

NOW THEREFORE pursuant to Section 79 of the *Environmental Management Act*, I, Jordan Sturdy, Minister of Environment, order as follows:

1. The Named Parties must ensure that:
 - 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;
 - 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;
 - 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
 - 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 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 the Named Parties have complied with section 5 of this order. Submissions must be made electronically to the following email inbox: EnvironmentalCompliance@gov.bc.ca.

2. 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;
 - b. procedures for management and monitoring of the leachate storage. The procedures are to ensure there is no risk of overflow from the tanks, including details relating to tank inspections and frequencies of inspections, and consideration of trigger levels, metering, remote monitoring and/or high-level alarms. The discussion and procedures must demonstrate that for worst case (eg. very high volume of inflow) leachate inflows:
 - i. the trigger level provides adequate freeboard in the leachate storage tank, and
 - ii. the inspection frequencies and monitoring activities are adequate to ensure that the trigger level will not be exceeded.

- c. a description of the works and actions to be carried out to eliminate or minimize non-contact storm and surface water from entering the leak detection system, including related details and cross-sections for the south and west perimeter of the landfill final cover;
- d. an evaluation and assessment of the secondary clay liner organic carbon content and stability (structure and permeability) when exposed to leachate, and a description of how any issues identified through the evaluation and assessment will be addressed;
- e. revisions to the monitoring program as follows:
 - i. Section 9.3 Leachate Monitoring Table: Add to the 'Monitoring Location Column', the "Leak Detection Tank", and
 - ii. Section 9.4 Surface Water Monitoring Table: Amend the Monitoring Location Column to replace "SW-1 – Settling Pond Discharge" with "SW-1 - Ephemeral Creek Immediately Downstream of the Settling Pond Outlet (EMS site ID E305365)". Amend the Frequency Column by adding "5 samples in a 30 day period in the Spring and Fall as well as a single Summer and Winter sample collected at the same time as the groundwater sampling (if there is water at the sampling sites), during closure activities and for two years following the completion of closure activities".
- f. revisions to Section 9.6 Seepage Blanket Monitoring as follows:
 - i. add at least one additional seepage layer monitoring well to monitor for leakage from the piping to the proposed new leachate and leak detection storage tanks, and assess and evaluate whether further additional seepage layer monitoring wells are necessary to achieve adequate coverage and monitoring of the seepage layer;
 - ii. ensure all seepage layer monitoring well screens are extended to the underlying competent bedrock surface;
 - iii. include a drawing that shows the seepage layer monitoring wells in plan and cross-section views;
 - iv. add the following sampling activities to be conducted during closure activities and for two years following the completion of closure activities: quarterly detailed water quality analyses, at the same time as the groundwater and surface water sampling is conducted.
- g. contingency measures to address any failure of the works, or the escape or spill of Leachate or Contaminated Soil into the environment, including any significant leachate leakage through the landfill base liner(s); and
- h. an implementation schedule which provides for commencement of closure activities by August 14, 2017, significant progress and appropriate interim cover/stabilization by October 31, 2017 prior to winter (if final closure is not complete), and completion of all closure activities as early as is practical and no later than September 30, 2018.

The Updated Final Closure Plan may be approved by the Minister, with or without conditions.

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.

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.
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.
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.

Notwithstanding section 2 of this order, and without limiting any right to amend the order provided under the *Environmental Management Act*, the Minister may amend this order to require the Named Parties to carry out the removal of the Contaminated Soil from the Facility or to carry out other measures as deemed necessary.

This order shall take effect immediately.

The Named Parties are jointly and severally responsible for fulfilling all requirements of this order.

Nothing in this order prevents the Ministry of Environment from taking any other action that may be taken under the *Environmental Management Act*.

Minister of Environment



June 29, 2017

Date

(This part is for administrative purposes only and is not part of the Order)

Authority under which Order is made:

Act and Section: *Environmental Management Act*, Section 79

Other (specify): _____