ORDER OF THE MINISTER OF ENVIRONMENT

ENVIRONMENTAL MANAGEMENT ACT SECTION 79

AMENDED SPILL PREVENTION ORDER: MO1701

WHEREAS this Amended Spill Prevention Order amends and restates Spill Prevention Order MO1701 dated January 27, 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; and
- South Island Aggregates Ltd., operator of the quarry reclamation program on the Land;

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, Mary Polak, 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 Final Closure Plan or Contaminated Soil Removal 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 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.
- 2. The Named Parties may elect to permanently close the landfill or to remove all Contaminated Soil from the Facility. If the Named Parties elect to permanently close the landfill, then the Named Parties must comply with the provisions set out in Part A: Final Closure (sections 3 7). If the Named Parties elect to remove all Contaminated Soil from the Facility, then the Named Parties must comply with the provisions set out in Part B: Contaminated Soil Removal (sections 8 12). The Named Parties must comply with either Part A or Part B of this order, and all other provisions of this order.

PART A: Final Closure

- 3. By April 17, 2017, the Named Parties must submit to the Ministry complete up to date "As-Built" plans and specifications of the existing Facility, including the landfill base liner system, leachate collection system, leak detection system, landfill, slopes, impermeable cover, leachate storage works, tanks, pipes, pumps, leachate storage pond, soil management area and wheel wash area including details, layers, cross-sections, inspections, photos, quality assurance/quality control and testing results for the works. The plans and specifications must be certified by a "Qualified Professional" as defined in the Landfill Criteria for Municipal Solid Waste, Second Edition, June 2016 (the "LCMSW").
- 4. By May 31, 2017, the Named Parties must submit a final plan to permanently close the landfill (the "Final Closure Plan") to the Ministry for review and approval. The Final Closure Plan must use the LCMSW for guidance and provide sufficient technical justification to demonstrate that any proposed site-specific alternatives provide an equivalent or better level of environmental protection, be

certified by a Qualified Professional, address and respond to any input from Ministry staff, and include the following:

- a. assessment of the adequacy of the existing Facility, including landfill stability (static and seismic), leachate collection and storage works, to prevent an escape or spill of Leachate into the environment during the post-closure period (determined in accordance with the LCMSW) and, if applicable, recommended revisions to the Facility to remedy any inadequacies;
- b. a plan for the management of any contaminated soil stored in the soil management area, in accordance with the *Environmental Management Act*;
- c. proposed landfill final cover including slopes, layers, cross-sections, topsoil, vegetation and storm water management works including ditching on the landfill final cover. Stability assessment and hydrologic modeling that demonstrates the landfill final cover and ditching will be stable and adequate for worst case conditions including 200 year design storm event(s) plus snowmelt and multi-day precipitation events must be included;
- d. a Leachate collection and storage plan including hydrologic modeling that demonstrates that the leachate collection and storage works including tanks, pipes, pumps, and leachate storage pond, will be adequate for worst case conditions including 200 year design storm event(s) plus snowmelt and multi-day precipitation events;
- e. a plan for Leachate removal and transport to an off-site facility that is authorized to treat and/or dispose of the Leachate;
- f. a post-closure inspection, operation, maintenance and environmental monitoring program including:
 - i. inspection, operation and maintenance of the landfill final cover including storm water management works on the landfill final cover, ditching, topsoil, vegetation and the repair of any damage due to erosion, leachate breakouts, slope failures, settlement and burrowing animals;
 - ii. inspection, operation and maintenance of Leachate collection and storage works;
 - iii. inspection, operation and maintenance of environmental monitoring works; and
 - iv. an environmental monitoring program, including leachate monitoring, to verify that the escape or spill of Leachate into the environment has not occurred;
- g. contingency measures to address any failure of the works or the escape or spill of Leachate or Contaminated Soil into the environment; and
- h. an implementation schedule which provides for commencement of closure activities by July 1, 2017, and completion of all closure activities by October 31, 2017.

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

5. Following approval of the Final Closure Plan, the Named Parties must carry out all closure activities set out in the approved Final Closure Plan in accordance with any conditions of the approval. The Named Parties must carry out the closure activities in accordance with the implementation schedule in the approved Final Closure Plan, and must complete all closure activities by October 31, 2017 or such other date as specified by the Minister.

- 6. 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 Final Closure Plan in accordance with any conditions of the approval, within 30 days after the works have been constructed.
- 7. Following completion of all closure activities in the approved 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 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.

PART B: Contaminated Soil Removal

- 8. By April 17, 2017, the Named Parties must provide written notice to the Ministry that the Named Parties will submit a plan for the removal of all Contaminated Soil, from the Facility (the "Contaminated Soil Removal Plan").
- 9. By May 31, 2017, the Named Parties must submit a Contaminated Soil Removal Plan to the Ministry for review and approval. The Contaminated Soil Removal Plan must be certified by a Qualified Professional and provide details related to the removal of all Contaminated Soil from the Facility and the transport of all such Contaminated Soil to an off-site facility that is authorized to treat and/or dispose of the Contaminated Soil. The plan must include the following:
 - a. the soil tonnages at the Facility;
 - b. environmental protection measures to monitor and oversee the work, to prevent the escape or spill of Contaminated Soil and Leachate into the environment;
 - c. the name and location(s) of off-site facility(ies), authorized to treat and/or dispose of the soil, that will receive the soil;
 - d. a detailed workplan and implementation schedule that includes: commencement of Contaminated Soil removal by July 1, 2017, 33% soil tonnage removed by September 30, 2017, 66% soil tonnage removed by December 31, 2017, complete soil removal by March 31, 2018, and submission of a Contaminated Soil removal completion report certified by a Qualified Professional including documentation of the plan by April 30, 2018.

The Contaminated Soil Removal Plan may be approved by the Minister, with or without conditions.

10. Following approval of the Contaminated Soil Removal Plan, the Named Parties must carry out all activities set out in the approved plan, in accordance with any conditions of the approval. The

Named Parties must carry out the activities in accordance with the implementation schedule in the approved plan, and must complete the removal of all Contaminated Soil from the Facility by March 31, 2018.

- 11. The Named Parties must submit implementation reports to the Ministry following commencement of Contaminated Soil removal on a monthly basis until the removal of all Contaminated Soil from the Facility is complete. Implementation reports must be submitted on or immediately before the last calendar day in each month and include:
 - a. soil tonnages and types removed from the Facility;
 - b. the names and location(s) of off-site facility(ies), authorized to treat and/or dispose of the soil, that received the soil and the corresponding soil tonnages and types received;
 - c. the soil tonnages and types remaining at the Facility; and,
 - d. photos and records of the implementation of the approved Contaminated Soil Removal Plan.

Submissions must be made electronically to the following email inbox: EnvironmentalCompliance@gov.bc.ca.

- 12. By April 30, 2018, the Named Parties must submit a Contaminated Soil Removal Completion Report certified by a Qualified Professional that includes:
 - a. photos, records, sampling and testing results, site investigation and characterization, and comparison with standards, that verify and confirm that all Contaminated Soil has been removed from the Facility;
 - the name and location(s) of off-site facility(ies), authorized to treat and/or dispose of the Contaminated Soil, that received the soil and the corresponding soil tonnages and types received.

PART C: General

Notwithstanding section 2 of this order, and without limiting any right to amend the order provided under the *Environmental Management Act*, if the Named Parties have elected to carry out Part A of this order and are not in compliance with the provisions of Part A, then the Minister may amend this order to require the Named Parties to carry out the provisions of Part B of this order in accordance with a prescribed schedule.

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*.

May Rola		<u> March 15, 2017</u>	
Minister of	Environment	Date	
(This part is for administrative purposes only and is not part of the Order)			
Authority und	er which Order is made:		
Act and Section:	Environmental Management Act, Sect	tion 79	
Other (specify):			