

July 12, 2017

Mr. Albert Chu Marine Drive BT Holdings Ltd. c/o Grosvenor Canada Ltd 20<sup>th</sup> Floor – The Grosvenor Building 1040 West Georgia Street Vancouver, BC V6E 4H1

Dear Mr. Chu:

Re: Performance Verification Plan for Certificate of Compliance

1355 Bellevue Avenue, West Vancouver, BC

Project No. 10976

Site ID: 1011

## 1. BACKGROUND

Keystone Environmental Ltd. (Keystone Environmental) has prepared this Performance Verification Plan (PVP) in support of an application for a risk-based Certificate of Compliance (CofC) for the property located at 1355 Bellevue Avenue, West Vancouver, BC (herein referred to as the "Site").

The PVP presents the principal risk management measures (i.e., the Schedule B key risk management controls) that apply and must remain in place at the Site to ensure that the Site CofC remains valid. The PVP was prepared in accordance with BC Ministry of Environment (MOE) Administrative Guidance 14: Performance Verification Plans, Contingency Plans, and Operations and Maintenance Plans (MOE, 2015). The PVP was based on the findings of the Keystone Environmental report (2017b) titled Report of Findings – Human Health and Ecological Risk Assessment, 1355 Bellevue Avenue, West Vancouver, BC, and dated July 2017.

## 2. PERFORMANCE VERIFICATION PLAN

## 2.1 Determination of Remediation Type

Based on the risk management measures for the Site, the Remediation Type applicable at the Site is considered to be Type 2 (Case 2). Remediation Type 2 Sites may require the use of engineering and institutional controls to mitigate/eliminate risks at the Site, but in the event that controls were either not implemented or were implemented but were rendered ineffective, there is a lack of imminent risks.

Under a Remediation Type 2 (Case 2) scenario, MOE (2015) indicates that a PVP is required and that an operations and maintenance plan may be required. A contingency plan is not required.

## 2.2 Required Risk Controls

The principal risk controls which must be maintained at the Site include the following items:

a) Groundwater must not be used as drinking water.

## 2.3 Required Actions to Implement the Required Risk Controls

The following actions are required to implement the risk controls:

a) Mandatory notification provided to the owner/operator of the Site that no drinking water wells are to be installed on the Site;

Records of these actions should be maintained by the Site owner and submitted to the MOE if requested. Other reporting requirements for all performance verification records include the following:

- The Director must be notified promptly by the person(s) responsible for the Site if performance verification actions indicate that any of the required risk controls are not being met. The following information must be submitted to the Director with the notification, or as soon as practicable thereafter:
  - > The time period over which risk controls were not in place or implemented
  - The nature of the excursion(s)
  - > The temporary or permanent corrective measures implemented or to be implemented
  - An implementation schedule
  - Supporting documentation

# 2.4 Summary Rationale

Groundwater contamination exceeding the CSR Schedule 6 drinking water standards is present at the Site. Drinking water at the Site is currently provided through municipal water lines. Groundwater at the Site is not expected to be used as drinking water in the future. A drinking water use preclusion on groundwater at the Site is needed to prevent human consumption and risk.

It is our opinion that the actions identified above are sufficient to ensure performance verification of the risk controls required for this Site.



## 3. GENERAL LIMITATIONS AND CONFIDENTIALITY

Findings presented in this report were based upon the Keystone Environmental (2017a) report entitled Report of Findings – Stage 1 Preliminary Site Investigation Update, Detailed Site Investigation and Confirmation of Remediation, 1355 Bellevue Avenue, West Vancouver, BC, dated June 2017, and the HHERA report (Keystone Environmental 2017b), completed for the property located at 1355 Bellevue Avenue, West Vancouver, BC. This PVP was conducted in a manner consistent with that level of care and skill normally exercised by other environmental professionals practicing under similar circumstances in the area at the time of the performance of the work

This report has been prepared solely for the internal use of Marine Drive BT Holdings Limited and the BC MOE, pursuant to the agreement between Keystone Environmental and Marine Drive BT Holdings Ltd. This report must be read as a whole and sections thereof cannot be read out of such context. Keystone Environmental Ltd. accepts no responsibility, and denies any liability whatsoever, to parties other than Marine Drive BT Holdings Ltd. and the BC MOE, who may obtain access to this report for any injury, loss or damage suffered by such parties arising out of, reliance upon, or decisions or actions based on this report, except to the extent those parties have obtained a prior written consent of Keystone Environmental to use and rely upon this report and the information contained herein. Any injury, loss or damages arising from improper use of this report shall be borne by the party making such use.

#### 4. CLOSURE

The opinions, advice and recommendations expressed in this performance verification plan are made in accordance with generally accepted principles and practices as recognized by members of the applicable profession or discipline practising at the same time and in the same or similar locations.

If you have any questions, please do not hesitate to contact the signatories listed below.

Sincerely,

**Keystone Environmental Ltd.** 

Original signed by

Brett Lucas, M.Sc., R.P.Bio. Risk Assessor

Original signed by

Adam J. Radlowski, M.Sc., R.P.Bio. Senior Environmental Risk Assessor

I:\10900-10999\10976\HHERA\PVP\10976 170712 HHERA PVP\_FINAL.docx



## REFERENCES

- MOE (2015). British Columbia Ministry of Environment. Environmental Protection Division. Administrative Guidance 14 on Contaminated Sites: Performance Verification Plans, Contingency Plans, and Operations and Maintenance Plans. (Version 3.0). Dated December 2015.
- Keystone Environmental Ltd. (2017a). Report of Findings Stage 1 Preliminary Site Investigation Update, Detailed Site Investigation and Confirmation of Remediation, 1355 Bellevue Avenue, West Vancouver, BC: Keystone Environmental Ltd. Dated June 2017
- Keystone Environmental Ltd. (2017b). Report of Findings Human Health and Ecological Risk Assessment, 1355 Bellevue Avenue, West Vancouver, BC: Keystone Environmental Ltd. Dated July 2017.

