Performance Verification Plan

708 East 26th Avenue, Vancouver, BC Site ID: 14672



Prepared for: Fraser Street Residence GP Inc. 668 – 1199 West Pender Street Vancouver, BC V6E 2R1

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PGL File: 2554-05.02

March 2015



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Site ID: 14672

Site Location: 708 East 26th Avenue, Vancouver, BC

Risk Control Type: 2

This document is meant to satisfy the reporting requirements for Type 2 risk controls as outlined in Contaminated Sites Regulation (CSR) *Administrative Guidance 14.* Specifically, this document outlines the Performance Verification Plan for implementing the institutional and engineered risk management measures described below.

1.0 REQUIRED RISK CONTROLS

The following institutional and engineered risk controls are required at the site:

- a) Groundwater wells intended to supply potable water must not be installed at the site;
 - b) A health and safety plan must be implemented for construction and utility workers during excavations or trench work beneath the site's building and/or pavement, including measures to mitigate or eliminate potential exposure to contaminant vapours and dermal contact with groundwater (such as personal protective equipment); and
- c) A vapour management system (VMS) must operate continually below the building slab. Air flow from the system exhaust must be maintained at a minimum of 34CFM.

2.0 ACTION REQUIRED TO IMPLEMENT RISK CONTROLS

The following measures are required to implement risk controls:

- a) Mandatory communication with the site owner/operator to ensure that groundwater wells intended to supply potable water are not installed;
- Mandatory communication with the site owner/operator to ensure that a health and safety plan is implemented during subsurface activities (excavations and/or trenches) beneath the site's building and pavement; and
- c) Mandatory communication with the site owner/operator to ensure the continual operation of the VMS. Operation and maintenance of the VMS must be undertaken as specified in the Operation and Maintenance Plan prepared by PGL March 2015.

Records of these performance verification actions should be maintained by the site owner to be submitted to the Ministry of Environment, if requested.

The Director must be notified promptly by the persons responsible for the site if performance verification actions indicate that any required institutional controls are not being met. The following information must be submitted to the Director with the notification, or as soon as practicable thereafter:



- 1. The time period over which institutional controls did not meet the requirements;
- 2. The nature of the excursions;
- 3. The temporary or permanent corrective measures implemented or to be implemented;
- 4. An implementation schedule; and
- 5. Supporting documentation.

A statement signed by an Approved Professional on whether the institutional and engineering controls required in Clause 2 of this Schedule have been implemented and are being met must be submitted to the Director *every 5 years or as otherwise approved by the Director* within 90 days of the anniversary of the date of issuance of the Certificate of Compliance or as otherwise approved by the Director.

3.0 RATIONALE FOR SELECTING PERFORMANCE VERIFICATION PLAN ELEMENTS

- a) Contamination remains in place in soil exceeding the CSR Schedule 5 Residential Land Use Standard protective for drinking water use and in groundwater exceeding the CSR Schedule 6 Drinking Water Standards. Regular inspection to ensure that the site does not have a drinking well installed is not required because:
 - i. The site is connected to the municipal water supply and will be for the foreseeable future.
 - ii. The future use of the site is unlikely to change, and therefore would not need a drinking water well.
 - b) Unacceptable risk levels associated with inhalation of trichloroethene and dermal contact with groundwater were identified in PGL's Risk Assessment Report dated March 2015; and
- c) Concentrations of trichloroethene and vinyl chloride exceed the CSR numerical standards below the building slab when the VMS is not operating. Ventilation at a rate of 34CFM was shown to reduce contaminant concentrations to acceptable levels.

4.0 STANDARD LIMITATIONS

PGL prepared this report for Fraser Street Residences GP Inc. and its agents exclusively. It may be relied upon by these parties, the BC Ministry of Environment and the Contaminated Sites Approved Professionals Society exclusively. PGL accepts no responsibility for any damages that may be suffered by third parties as a result of decisions or actions based on this report.

The purpose of the Performance Verification Plan is to provide the client and the Ministry of Environment with the steps necessary to implement and maintain the recommended risk management measures at the site. These recommendations are based on information collected during PGL's environmental investigations. These investigations consisted of a screening for potential contamination and, as is true for all environmental investigations, potential remains for the presence of unknown, unidentified, or unforeseen surface or subsurface contamination. More or



different investigation may be required, and additional risk management measures may be required if other risks are identified. The data used to develop these risk management measures is valid for the date of sampling, but site conditions may change with time.

The findings and conclusions are site-specific and were developed in a manner consistent with that level of care and skill normally exercised by environmental professionals currently practicing under similar conditions in the area. Changing assessment techniques, regulations, and site conditions means that environmental investigations and their conclusions can quickly become dated, so this report is for use now.

The project has been conducted according to our instructions and work program. Additional conditions and limitations on our liability are set forth in our work program/contract. This report is neither an endorsement nor a condemnation of the subject property. No warranty, expressed or implied, is made.

Respectfully submitted, NTAL CONSULTANTS LTD POTTINGER GAH THY ENDU Q Per 2748Cory Nelso 50 OPERAGE Keith H. Gagnes B.A Cory Nelson, B Environmental Senior Environmental nomeea GINEE CDC/KHG/mlo X:\2500-2599\2554 - Vancouver Pacific Development Corporation\05-02\Client Docs\Roster Docs\Roster Docs\Roster Ave (the Site)\r-2554-05-02-PVP 708 E26 Ave-Mar15.docx

