



January 23, 2017

Mr. Rob Elliott
Mosaic Avenue Developments Ltd.
Suite 500 – 2609 Granville Street
Vancouver, BC V6H 3H3

Dear Mr. Elliott:

**Re: Performance Verification Plan for Certificate of Compliance
17555 57A Avenue (Lot 4), Surrey, BC
Project No. 12679**

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 17555 57A Avenue, Surrey, 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 (2017b) report titled *Report of Findings – Human Health and Ecological Risk Assessment, 17555 57A Avenue (Lot 4), Surrey, BC*.

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 1B. Remediation of Type 1B Sites does not require the use of engineering and institutional controls, but one or more intrinsic controls must be maintained to ensure the risk-based standards continue to be met under current and future scenarios.

Under a Remediation Type 1B scenario, MOE (2015) indicates that a PVP is required, and that an operations and maintenance plan and contingency plan are not required.

REQUIRED RISK CONTROLS

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

- Chloride and sodium ion contamination in soil at concentrations greater than ecological soil contact standards must remain at depths greater than 1 metre below grade (mbg).

REQUIRED ACTIONS TO IMPLEMENT THE REQUIRED RISK CONTROLS

The following actions are required to implement the risk controls:

- Mandatory notification provided to the Site owner/operator that soil contamination with concentrations exceeding standards relevant to ecological soil contact is to remain at depths greater than 1 mbg.

Records of these actions should be maintained by the Site owner/operator and submitted to the MOE if requested.

SUMMARY RATIONALE

Soil contamination exceeding the CSR Schedule 5 residential land use (RL) soil standards relevant to ecological soil contact are present at depths below 1 mbg. The risk assessment assumed that terrestrial ecological contact with such soils will not occur due to its depth. Ensuring such soil contamination is maintained at depths greater than 1 mbg is needed to prevent potential risk to ecological receptors via direct contact.

CONCLUSION

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

GENERAL LIMITATIONS AND CONFIDENTIALITY

The findings presented in this report are based upon the field work conducted by SNC-Lavalin for Mosaic Avenue Development Ltd. Keystone Environmental has prepared this document in good faith and has relied upon information provided by others. Keystone Environmental has assumed that the information provided by third parties is both complete and accurate.

This report was completed in a manner consistent with that level of care and skill normally exercised by other environmental professionals, practicing under similar circumstances in the same locale at the time of the performance of the work.

This report has been prepared for the sole use of Mosaic Avenue Development Ltd. and the review by the BC Ministry of Environment, pursuant to the agreement between Keystone Environmental and Mosaic Avenue Development Ltd. This report must be read as a whole and sections thereof cannot be read out of such context. By using this report,

Mosaic Avenue Development Ltd. and the BC Ministry of Environment agree(s) to review this report in its entirety. Keystone Environmental accepts no responsibility, and denies any liability whatsoever, to parties other than Mosaic Avenue Development Ltd. and the BC Ministry of Environment, 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 use, reliance or decisions made based on this report by other parties without prior written approval by Keystone Environmental are the responsibility of such parties and Keystone Environmental accepts no responsibility for damages, if any, suffered by other parties as a result of decisions made or actions based on this report. The findings presented herein should be considered within the context of the scope of work and project terms of reference. The findings are time sensitive and are considered valid at the time this report was produced. The conclusions and recommendations contained in this report are based upon applicable guidelines, regulations, and legislation existing at the time this report was produced; consequently, any changes in the regulatory regime may alter the conclusions and/or recommendations.

If you should have any questions, please do not hesitate to contact the signatory below.

Sincerely,

Keystone Environmental Ltd.

Original signed by

Kevin Hall, B.Sc., R.P.Bio.
Risk Assessor

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ATTACHMENT:

- References

REFERENCES

REFERENCES

- British Columbia Ministry of Environment. Environmental Protection Division. 2015. *Administrative Guidance 14 on Contaminated Sites: Performance Verification Plans, Contingency Plans, and Operations and Maintenance Plans*. (Version 3.0). Retrieved from <http://www2.gov.bc.ca/assets/gov/environment/air-land-water/site-remediation/docs/administrative-guidance/ag14.pdf>
- Keystone Environmental Ltd. (2017a). *Report of Findings – Preliminary Site Investigation – Stage 1 and Supplemental Site Investigation. 17555 57A Avenue (Lot 4) and 57A Avenue Roadway, Surrey. BC*. Burnaby, BC: Keystone Environmental Ltd.
- Keystone Environmental Ltd. (2017b). *Report of Findings – Human Health and Ecological Risk Assessment, 17555 57A Avenue (Lot 4), Surrey, BC*. Burnaby, BC: Keystone Environmental Ltd.