



June 29, 2016 Project: 131455

BC Ministry of Transportation and Infrastructure Suite 4B – 940 Blanshard Street Victoria, BC V8W 3E6

**ATTENTION:** Paul Savinkoff, P.Geo.

REFERENCE: Performance Verification Plan, Former Wells Highways Yard – Lot 1,

Wells, British Columbia

SNC-Lavalin Inc. (SNC-Lavalin) has prepared this Performance Verification Plan (PVP) in support of an application for a Certificate of Compliance (CofC) for Lot 1 of the former Ministry of Transportation and Infrastructure Wells Highways Yard, located in Wells, BC, BC Ministry of Environment (MoE) ID# 18889 (herein referred to as "Lot 1"). The PVP presents the principal risk controls that apply at Lot 1 to ensure the CofC remains valid (i.e., the key risk controls of Schedule B). The PVP was prepared in accordance with MoE Procedure 12: Procedures for Preparing and Issuing Contaminated Sites Legal Instruments (MoE, 2015a) and Administrative Guidance 14: Performance Verification Plans, Contingency Plans and Operations and Maintenance Plans (MoE, 2015b).

# **Principal Risk Controls**

A Human Health Risk Assessment (HHERA) was conducted for Lot 1, with the results presented in the SNC-Lavalin report, *Human Health and Ecological Risk Assessment, Former Wells Highways* Yard – Lot 1, Wells, BC, dated June 28, 2016 (SNC-Lavalin, 2016a). The HHERA was prepared based on the findings and conclusions presented in the SNC-Lavalin reports, *Stage 1 Preliminary Site Investigation Update and Supplemental Detailed Site Investigations*, dated June 27, 2016 (SNC-Lavalin, 2016b).

The principal risk control on which the risk assessment was based, as presented in Schedule B of the CofC, is as follows:

Contaminated groundwater from the site must not be used as a drinking water source.

# **Determination of Procedure 12 Remediation Type**

Based on the principal risk control for the Site (i.e., the use of an institutional control to mitigate/eliminate risks at the Site and lack of imminent risks in the event that control was either not implemented or were rendered ineffective), the Remediation Type applicable at the Site is considered to be Type 2.





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Under a Remediation Type 2 scenario, MoE (2015a, 2015b) indicates that a PVP is required, while an operations and maintenance plan may be required.

### **Performance Verification Plan**

A PVP is required to ensure that the principal risk control upon which the HHERA is based is being met at Lot 1.

This includes the maintenance of up-to-date records of performance verification actions and results for Lot 1 being maintained by the responsible person (or their agents). If requested by the Director, the responsible person (or their agents) will provide these records to the MoE. As well, if requested by the Director, responsible person(s) will provide a signed statement on whether conditions set out in this Schedule B of the CofC are being met.

Performance verification actions for Lot 1 include the following:

(from approximately 7.2 m to 16.8 m bgs) must not be used for drinking water purposes. Drinking water for residents in the town of Wells is supplied by a municipal water distribution system, with water obtained from a deep well located approximately 100 m to the northwest of Lot 1; this deep aquifer was not impacted by contamination identified at Lot 1 (SNC-Lavalin, 2016b). Shallow groundwater at Lot 1 is not being used for drinking water purposes (e.g., consumption, showering, washing, garden watering etc.), and, given the presence of the alternate drinking water supply in the area, future use of the shallow groundwater at Lot 1 as drinking water is considered unlikely.

Based on the above, an advisory for Lot 1 that shallow contaminated groundwater from the site must not be used as a drinking water source is considered appropriate to meet this risk control. The listing of this risk control in Schedule B of the CofC meets this requirement.

In summary, it is our opinion that the advisory in Schedule B of the CofC is sufficient for addressing the principal risk control at Parcel A.

### References

- MoE. 2015a. Procedure 12. Procedures for preparing and issuing contaminated sites legal instruments. BC Ministry of Environment, Victoria, BC, December, 2015.
- MoE. 2015b. Administrative Guidance 14: Performance Verification Plans, Contingency Plans and Operations and Maintenance Plans. BC Ministry of Environment, Victoria, BC, December, 2015.
- SNC-Lavalin. 2016a. Human Health and Ecological Risk Assessment, Former Wells Highways Yard Lot 1, Wells, BC, dated June 28, 2016.





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SNC-Lavalin. 2016b. Stage 1 Preliminary Site Investigation Update and Supplemental Detailed Site Investigations, Lot 1, Wells Highways Yard, Wells, BC dated June 27, 2016.

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This report has been prepared and the work referred to in this report have been undertaken by the SNC-Lavalin Inc. (SNC-Lavalin) for the exclusive use of Ministry of Transportation and Infrastructure (MOTI), who has been party to the development of the scope of work and understands its limitations. The methodology, findings, conclusions and recommendations in this report are based solely upon the scope of work and subject to the time and budgetary considerations described in the proposal and/or contract pursuant to which this report was issued. Any use, reliance on, or decision made by a third party based on this report is the sole responsibility of such third party. SNC-Lavalin accepts no liability or responsibility for any damages that may be suffered or incurred by any third party as a result of the use of, reliance on, or any decision made based on this report. Should this report be submitted to the BC Ministry of Environment (MoE) by MOTI, the MoE is authorized to rely on the results in the report, subject to the limitations set out herein, for the sole purpose of determining whether MOTI has fulfilled its obligations with respect to meeting the regulatory requirements of the MoE.

The findings, conclusions and recommendations in this report (i) have been developed in a manner consistent with the level of skill normally exercised by professionals currently practicing under similar conditions in the area, and (ii) reflect SNC-Lavalin's best judgment based on information available at the time of preparation of this report. No other warranties, either expressed or implied, are made as to the professional services provided under the terms of our original contract and included in this report. The findings and conclusions contained in this report are valid only as of the date of this report and may be based, in part, upon information provided by others. If any of the information is inaccurate, new information is discovered, site conditions change or applicable standards are amended, modifications to this report may be necessary. The results of this assessment should in no way be construed as a warranty that the subject site is free from any and all contamination.

Any soil and rock descriptions in this report and associated logs have been made with the intent of providing general information on the subsurface conditions of the site. This information should not be used as geotechnical data for any purpose unless specifically addressed in the text of this report. Groundwater conditions described in this report refer only to those observed at the location and time of observation noted in the report.

This report must be read as a whole, as sections taken out of context may be misleading. If discrepancies occur between the preliminary (draft) and final version of this report, it is the final version that takes precedence. Nothing in this report is intended to constitute or provide a legal opinion.

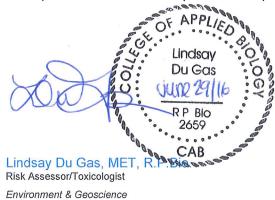




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Mandeep Purewal, MET, P.Ag Project Specialist, Risk Assessment

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