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April 28, 2015

Project 130404

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ATTENTION: John Driedger, P.Eng.
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REFERENCE: **Performance Verification Plan, Strata Management Area Adjacent to the Shell Service Station, 1305 Marine Drive, District of West Vancouver, BC, Location Code: C01217**

The Environment & Water business unit of SNC-Lavalin Inc. (SNC-Lavalin) has prepared this Performance Verification Plan (PVP) in support of an application for a Certificate of Compliance (CofC) for the Strata Management Area adjacent to the Shell service station, 1305 Marine Drive, District of West Vancouver, BC, Location Code: C01217, (herein referred to as the “Strata MA”). The PVP presents the principal risk controls that apply at the Strata MA to ensure the Strata MA CofC remains valid (i.e., the key risk controls of Schedule B). The PVP was prepared in accordance with BC Ministry of Environment (MoE) Procedure 12: Procedures for preparing and issuing contaminated sites legal instruments (2013) and Administrative Guidance 14: Performance Verification Plans, Contingency Plans and Operations and Maintenance Plans (2014).

PRINCIPAL RISK CONTROLS

A Human Health and Ecological Risk Assessment (HHERA) was conducted for the Strata MA, and the results are presented in the SNC-Lavalin report, *Human Health and Ecological Risk Assessment, Management Area Adjacent to the Shell Service Station 1305 Marine Drive, District of West Vancouver, BC, Location Code: C01217*, prepared by SNC-Lavalin, dated April 14, 2015, (SNC-Lavalin, 2015a). The HHERA was prepared based on the findings and conclusions presented in the SNC-Lavalin report, *Stage 1 PSI Update, Stage 2 Preliminary Site Investigation, Detailed Site Investigation and Remedial Excavation, Shell Service Station 1305 Marine Drive, District of West Vancouver, BC and Adjacent Management Areas Location Code: C01217*, dated April 13, 2015 (SNC-Lavalin, 2015b).



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The principal risk controls on which the SNC-Lavalin (2015a) risk assessment was based, as presented in Schedule B of the CofC, is as follows:

- Groundwater must not be used as a drinking water source.

DETERMINATION OF PROCEDURE 12 REMEDIATION TYPE

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

Under a Remediation Type 2 scenario, MoE (2013; 2014) 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 the Strata MA.

This includes the maintenance of up-to-date records of performance verification actions and results for the Strata MA 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 are being met.

Performance verification actions for the Strata MA include the following:

- Communication with the owner/operator that groundwater at the Strata MA must not be used for drinking water purposes. The Strata MA is located in a commercial/residential developed area and drinking water to the surrounding area is currently supplied by a municipal water distribution system. Consequently, groundwater is not being used as a drinking water source. Given the developed nature of the surrounding area and the presence of an alternate drinking water supply, future use of groundwater at the Strata MA as a drinking water supply is considered unlikely.

Based on the above, an advisory for the Strata MA that groundwater must not be used for drinking water purposes 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 the Strata MA.



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REFERENCES

- MoE. 2013. Procedure 12. Procedures for preparing and issuing contaminated sites legal instruments. BC Ministry of Environment, Victoria, BC, February, 2013.
- MoE. 2014. Administrative Guidance 14: Performance Verification Plans, Contingency Plans and Operations and Maintenance Plans. BC Ministry of Environment, Victoria, BC, February, 2014.
- SNC-Lavalin. 2015a. *Human Health and Ecological Risk Assessment, Management Area Adjacent to the Shell Service Station 1305 Marine Drive, District of West Vancouver, BC, Location Code: C01217*, prepared by SNC-Lavalin Inc., dated April 14, 2015.
- SNC-Lavalin. 2015b. *Stage 1 PSI Update, Stage 2 Preliminary Site Investigation, Detailed Site Investigation and Remedial Excavation, Shell Service Station 1305 Marine Drive, District of West Vancouver, BC and Adjacent Management Areas Location Code: C01217*, prepared by SNC-Lavalin Inc., dated April 13, 2015.

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