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February 28, 2017

Project: 134052

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**ATTENTION:** John Driedger, P.Eng.  
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**REFERENCE:** **Performance Verification Plan,  
McDonald's Management Area, associated with the Former Shell Lease Site,  
4727 Rutherford Road, Nanaimo, BC, Location Code: C11493,  
Site ID: n/a**

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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 McDonald's Management Area associated with the Former Shell Lease Site, located at 4727 Rutherford Road, Nanaimo, BC, BC Ministry of Environment (MoE) Site ID: n/a (herein referred to as the "MA"). The MA is owned by McDonald's Restaurants of Canada Ltd. The PVP presents the principal risk controls that apply at the MA to ensure the CofC for the MA remains valid (i.e., the key risk controls of Schedule B of the CofC). The PVP was prepared in accordance with MoE Procedure 12: Procedures for preparing and issuing contaminated sites legal instruments (2015a) and Administrative Guidance 14: Performance Verification Plans, Contingency Plans and Operations and Maintenance Plans (2015b).

## Principal Risk Controls

A Human Health and Ecological Risk Assessment (HHERA) was conducted for the MA, and the results are presented in the SNC-Lavalin report, *Human Health and Ecological Risk Assessment, Former Shell Lease Property, 4750 Rutherford Road, Nanaimo, BC and Adjacent Management Area, Location Code: C11493*, prepared by SNC-Lavalin, (SNC-Lavalin, 2017a). The HHERA was prepared based on the findings and conclusions presented in the SNC-Lavalin report, *Stage 1 & 2 Preliminary Site Investigation, Detailed Site Investigation, Decommissioning, and Remedial Program, Former Shell Lease Property, 4750 Rutherford Road, Nanaimo, BC and Adjacent Management Area* (SNC-Lavalin, 2017b).





The principal risk control for the MA on which the SNC-Lavalin (2017a) risk assessment was based, as presented in Schedule B of the CofC, is as follows:

- › Groundwater from the MA<sup>1</sup> must not be used as a drinking water source.

Other assumptions have been made throughout the HHERA (SNC-Lavalin, 2017a), but are not considered risk controls. These assumptions include that future buildings, if any, at the MA will not have basements > 4 m bgs and that the overall grade at the MA will remain consistent with current grade. Given that these assumptions were used to determine the presence of Contamination at the MA (i.e., they are assumptions used in the investigation for the MA), they are not considered to be risk controls and are not further discussed in the PVP.

## Determination of Procedure 12 Remediation Type

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

Under a Remediation Type 2 scenario, MoE (2015a; 2015b) indicates that a PVP is 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 MA.

This includes maintaining up-to-date records of performance verification actions and results for the MA being kept 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 MA include the following:

- › Communication with the owner/operator that Contaminated groundwater at the MA must not be used for drinking water purposes. The MA is currently comprised of paved and unpaved areas. Groundwater at the MA is not used for drinking water purposes (including bathing/showering, cooking, gardening, drinking, etc.) and is not anticipated to be used for these purposes in the future, with drinking water supplied to the area by a municipal water distribution system. It is considered unlikely that groundwater will be used for drinking water purposes in the future.

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<sup>1</sup> The MoE documents (Certificate of Compliance and Summary of Site Condition) use 'site' vs. 'MA' in the risk control; however, for clarity and so as not to be confused with the Shell Site, MA has been used here.







Based on the above, an advisory that groundwater at the MA 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 an advisory in Schedule B of the CofC is sufficient for addressing the principal risk control at the MA.

## 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. 2017a. *Human Health and Ecological Risk Assessment, Former Shell Lease Site, 4727 Rutherford Road, Nanaimo, BC, and Adjacent Management Area. Location Code: C11493*, prepared by SNC-Lavalin Inc., dated February 27, 2017.
- SNC-Lavalin. 2017b. *Stage 1 & 2 Preliminary Site Investigation, Detailed Site Investigation, Decommissioning, and Remedial Program, Former Shell Lease Site, 4727 Rutherford Road, Nanaimo, BC and Adjacent Management Area*, prepared by SNC-Lavalin Inc., Environment & Geoscience, dated February 22, 2017.

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Shell Canada Products – Page 4 of 4  
February 28, 2017

Project 134052

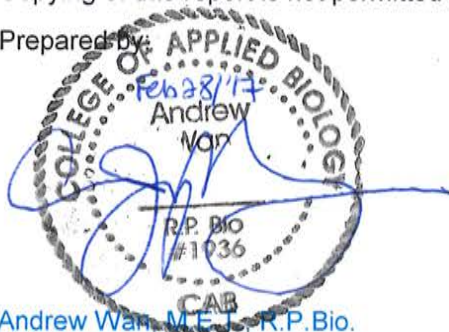
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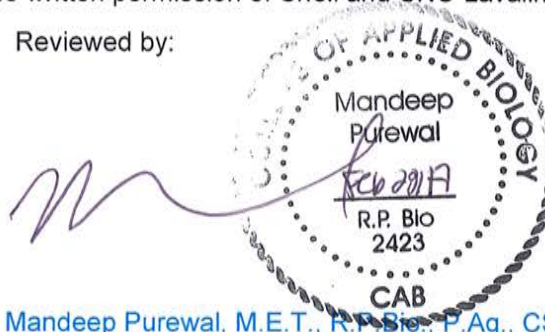
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