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March 17, 2014

Project 132028/616025

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ATTENTION: John Driedger, P.Eng.
Senior Program Manager – Soil and Groundwater FDG

REFERENCE: **Performance Verification Plan, Former Shell Service Station
399 Highway 16, Burns Lake, BC Location Code: C09674**

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 former Shell service station at 399 Highway 16, Burns Lake, BC, Location Code: C09674, BC Ministry of Environment (MoE) Site ID # 3020 (herein referred to as the "Site"). The PVP presents the principal risk controls that apply at the Site 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 (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 Site, and the results presented in the SNC-Lavalin report, *Human Health and Ecological Risk Assessment, Former Shell Service Station at 399 Highway 16, Burns Lake, BC, Location Code: C09674* prepared by SNC-Lavalin, dated March 17, 2014 (SNC-Lavalin, 2014a). The HHERA was prepared based on the findings and conclusions presented in the SNC-Lavalin report, *Stage 1 and 2 Preliminary Site Investigations, Detailed Site Investigation and Decommissioning, Former Shell Service Station at 399 Highway 16, Burns Lake, BC, Location Code: C09674*, March 13, 2014 (SNC-Lavalin, 2014b).

The principal risk control on which the SNC-Lavalin (2014a) risk assessment was based, as presented in Schedule B of the CofC, is as follows:

- *A worker health and safety plan with provisions to prevent vapour inhalation exposures must be developed in the event that trenches (excavations that are deeper than they are wide, > 1.5 m below grade and suitable for human entry) are advanced at the Site.*



DETERMINATION OF PROCEDURE 12 REMEDIATION TYPE

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

This includes the maintenance of up-to-date records of performance verification actions and results for the Site 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 Site include the following:

- Communication with the Site owner/operator that a worker health and safety plan must be developed in the event that trenches (defined as excavations that are deeper than they are wide, > 1.5 m bgs and suitable for human entry) are advanced at the Site. The worker health and safety plan will include measures to mitigate trench vapour inhalation exposures. It is unknown if trench work is required at the Site, and if any such work will be undertaken in the future.

Based on the above, an advisory for the Site that a worker health and safety plan must be developed and implemented in the event that trenches (as per the above definition) are advanced at the Site 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 advisories in Schedule B of the CofC are sufficient for addressing the principal risk control at the Site.

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.



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SNC-Lavalin. 2014a. *Human Health and Ecological Risk Assessment, former Shell Service Station at 399 Highway 16, Burns Lake, BC, Location Code: C09674*. March 17, 2014

SNC-Lavalin. 2014b. *Stage 1 and 2 Preliminary Site Investigations, Detailed Site Investigation and Decommissioning, Former Shell Service Station at 399 Highway 16, Burns Lake, BC, Location Code: C09674*. March 13, 2014.

GENERAL LIMITATIONS AND CONFIDENTIALITY

This report has been prepared by the Environment & Water business unit of SNC-Lavalin Inc. (SNC-Lavalin) for the exclusive use of Shell Canada Products (Shell), who has been party to the development of the scope of work for this project and understands its limitations.

This report is intended to provide information to Shell to assist it in making business decisions. SNC-Lavalin is not a party to the various considerations underlying the business decisions, and does not make recommendations regarding such business decisions. In providing this report, SNC-Lavalin accepts no liability or responsibility in respect of the Site described in this report or for any business decisions relating to the Site, including decisions in respect of the purchase, sale or investment in the Site.

Should this report be submitted to the Ministry of Environment (MoE) by Shell, the MoE is authorized to rely on the results within the limitations of the following paragraphs for the purpose of determining whether Shell is fulfilling (has fulfilled) its obligations with respect to applicable environmental regulations. 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.

The findings, conclusions and recommendations in this report have been developed in a manner consistent with the level of skill normally exercised by environmental professionals currently practicing under similar conditions in the area. The findings contained in this report are based, in part, upon information provided by others. If any of the information is inaccurate, modifications to the findings, conclusions and recommendations may be necessary.

The findings, conclusions and recommendations presented by SNC-Lavalin in this report reflect SNC-Lavalin's best judgment based on the Site conditions at the time of the Site inspection on the date(s) set out in this report and on information available at the time of preparation of this report. They have been prepared for specific application to this Site and are based, in part, upon visual observation of the Site, subsurface investigation at discrete locations and depths, and specific analysis of specific materials as described in this report during a specific time interval. The findings cannot be extended to previous or future Site conditions or to portions of the Site, which were unavailable for direct observation, subsurface locations, which were not investigated directly, or materials or analysis, which were not specified. Substances other than those described may exist within the Site, reported substance parameters may exist in areas of the Site not investigated, and concentrations of substances greater or less than those reported may exist between sample locations.



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The findings and conclusions of this report are valid only as of the date of this report. If Site conditions change, new information is discovered, or unexpected Site conditions are encountered in future work, including excavations, borings, or other studies, SNC-Lavalin should be requested to re-evaluate the findings, conclusions and/or recommendations of this report, and to provide amendments as required.

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SNC-LAVALIN INC.

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Reviewed by:

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