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Project 130329

June 24, 2015

Suncor Energy Products Partnership 1155 Glenayre Drive Port Moody, BC V3H 3E1

ATTENTION:

Paul Gordon, Senior Advisor, Site Remediation

REFERENCE:

Performance Verification Plan, Management Area Associated with

13576 King George Boulevard, Surrey, BC

SITE ID: 40

On behalf of Suncor Energy Products Partnership (SEPP), the Environment & Water business unit of SNC-Lavalin Inc. (SNC-Lavalin) has completed this Performance Verification Plan (PVP) in support of an application for a Certificate of Compliance (CofC) for the Management Area associated with 13576 King George Boulevard, Surrey, BC, BC Ministry of Environment (MoE) site ID # 40 (herein referred to as the "MA"). The PVP presents the principal risk controls that apply at the MA to ensure the MA 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 MA and the results presented in the SNC-Lavalin report, *Human Health and Ecological Risk Assessment, Management Areas associated with 13576 King George Boulevard, Surrey, BC,* prepared by SNC-Lavalin, (SNC-Lavalin, 2015a). The HHERA was prepared based on the findings and conclusions presented in the SNC-Lavalin report, *Stage 1 Preliminary Site Investigation Addendum, Detailed Site Investigation, Remedial Excavation and Post-Excavation Report, 13576 King George Boulevard, Surrey, BC, prepared by SNC-Lavalin (SNC-Lavalin, 2015b).* 

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



Suncor Energy Products Partnership – Page 2 of 4 June 24, 2015 130329

## **DETERMINATION OF PROCEDURE 12 REMEDIATION TYPE**

Based on the principal risk controls for the MA (i.e., the use of institutional controls to mitigate/eliminate risks at the MA and lack of imminent risks in the event that controls were either not implanted or were rendered ineffective), the Remediation Type applicable at the 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 controls upon which the HHERA is based are being met at the MA.

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

• Communication with the MA 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 MA. 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 MA, and if any such work will be undertaken in the future.

Based on the above, an advisory for the MA 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 MA 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 controls at the MA.



Suncor Energy Products Partnership – Page 3 of 4 June 24, 2015 130329

#### 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 Areas Associated with 13576 King George Boulevard, Surrey, BC, prepared by SNC-Lavalin Inc., Environment & Water, June 3, 2015
- SNC-Lavalin. 2015b. Stage 1 Preliminary Site Investigation Addendum, Detailed Site Investigation, Remedial Excavation and Post-Excavation Report, 13576 King George Boulevard, Surrey, BC, prepared by SNC-Lavalin Inc., Environment & Water, June 2, 2015

# NOTICE TO READER

This report has been prepared and the work referred to in this report have been undertaken by the Environment & Water business unit of SNC-Lavalin Inc. (SNC-Lavalin) for the exclusive use of Suncor Energy Products Partnership (SEPP), 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.

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.



Suncor Energy Products Partnership – Page 4 of 4 June 24, 2015 130329

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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We trust this provides you with the information you currently require. If you have any questions, please contact this office at your earliest convenience.

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SNC-LAVALIN INC.

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