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February 22, 2016  
File: 448-023.22

Chevron Canada Limited  
1200 – 1050 West Pender Street  
Vancouver, BC V6E 3T4

**Attn: Kristi Thornhill, Site Remediation Specialist**

Dear Ms. Thornhill,

**Re: Performance Verification Plan for Certificate of Compliance for a Portion of 350 Legion Drive, Quesnel, BC**

Hemmera Envirochem Inc. (Hemmera) has prepared this Performance Verification Plan (PVP) in support of an application for a Certificate of Compliance (CofC) for the property designated as Off-Site Management Area (OMA-1), which is a portion of 350 Legion Drive, Quesnel, BC. The PVP presents the principle risk management measures that apply at OMA-1 so that risk-based standards are and continue to be met, and the actions that must be taken so that these risk controls are implemented and maintained. This PVP was prepared in accordance with BC Ministry of Environment (MOE) *Procedure 12: Procedures for Preparing and Issuing Contaminated Site Legal Instruments*, effective February 1, 2016 (BC MOE 2016a) and BC MOE Administrative Guidance on Contaminated Sites #14: *Performance Verification Plans, Contingency Plans, and Operations and Maintenance Plans, Version 1.0*, dated December 2015 (BC MOE 2016b).

A detailed human health and ecological risk assessment (DHHERA) was conducted for OMA-1 in February 2016 (Hemmera 2016b). The DHHERA relied on the Stage 1 and 2 Preliminary Site Investigation and Detailed Site Investigation Report (Hemmera 2016a).

This Work was performed in accordance with Master Contractor Services Agreement between Hemmera Envirochem Inc. ("Hemmera") and Chevron Canada Limited ("Client"), dated May 1, 2011 ("Contract"). This Report has been prepared by Hemmera, based on fieldwork conducted by Hemmera, for sole benefit and use by Chevron Canada Limited and for review by the BC Ministry of the Environment and BC Contaminated Sites Approved Professionals (CSAP) Society. In performing this Work, Hemmera has relied in good faith on information provided by others, and has assumed that the information provided by those individuals is both complete and accurate. This Work was performed to current industry standard

practice for similar environmental work, within the relevant jurisdiction and same locale. The findings presented herein should be considered within the context of the scope of work and project terms of reference; further, the findings are time sensitive and are considered valid only at the time the Report was produced. The conclusions and recommendations contained in this Report are based upon the applicable guidelines, regulations, and legislation existing at the time the Report was produced; any changes in the regulatory regime may alter the conclusions and/or recommendations.

## **1.0 RISK CONTROL TYPE**

Based on the risk management measures for OMA-1 (i.e., the use of institutional controls to mitigate/eliminate risks at OMA-1 and lack of imminent risks in the event that controls were either not implemented or were implemented but were rendered ineffective), the Type applicable at OMA-1 is considered to be **Type 2**.

Under a **Type 2** scenario, the BC MOE (2015; 2016) indicates that a PVP is required, while an operations and maintenance plan may be required.

## **2.0 REQUIRED RISK CONTROLS**

The principle risk controls as developed from assumptions and conclusions from the DHHERA (Hemmera 2016b) is as follows:

1. Fruit or nut trees and edible vegetation should not be introduced on OMA-1 in order to limit potential exposures to human receptors.

## **3.0 REQUIRED ACTIONS TO IMPLEMENT THE REQUIRE RISK CONTROLS**

A PVP is required to maintain the principle risk management measures upon which the DHHERA is based.

Performance verification actions required for OMA-1 include the following:

- Communication/notification with the current owner (and each owner is to thereafter notify each subsequent purchaser) of this required PVP element.

No associated inspection, monitoring/maintenance or other performance verification actions, other than notification of the Director in the case that the subject of this advisory is breached, is required. The listing of this risk management measure in Schedule B of the CofC meets this requirement.

#### 4.0 SUMMARY OF RATIONALE FOR SELECTING REQUIRED PVP ELEMENTS

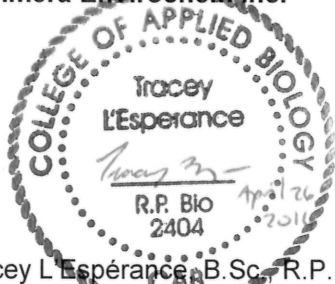
***Fruit or nut trees and edible vegetation should not be introduced on OMA-1 in order to limit potential exposures to human receptors.***

Surface soil contamination was identified on the Chevron Canada Limited property boundary, and may extend onto OMA-1. Risks from planting and subsequent harvesting of fruit or nut trees and edible vegetation have not been quantified and it is unknown whether it could result in adverse health effects in the event contamination was to be taken up into vegetation.

#### 5.0 CLOSURE

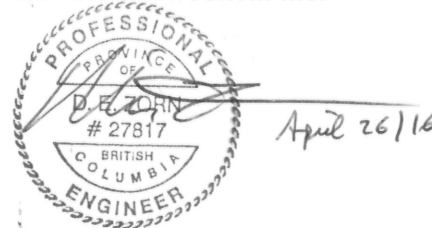
We have appreciated the opportunity of working with you on this project and trust that this report is satisfactory to your requirements. Please feel free to contact the undersigned regarding any questions or further information that you may require.

Report prepared by:  
**Hemmera Envirochem Inc.**



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Report peer reviewed by:  
**Hemmera Envirochem Inc.**



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*This document represents an electronic version of the original hard copy document, sealed, signed and dated Tracey L'Espérance, B.Sc., R.P.Bio. and Diane Zorn, P.Eng., CSAP and retained on file. The content of the electronically transmitted document can be confirmed by referring to the original hard copy and filed. This document is provided in electronic format for convenience only. Hemmera Envirochem Inc. shall not be liable in any way for errors or omissions in any electronic version of its report document.*

## **6.0 REFERENCES**

BC MOE 2015. BC MOE Administrative Guidance on Contaminated Sites: Performance Verification Plans, Contingency Plans, and Operations and Maintenance Plans, Version 1.0 dated December 2015.

BC MOE 2016. BC Ministry of Environment (BC MOE) Procedure 12: Procedures for Preparing and Issuing Contaminated Site Legal Instruments dated December 15, 2015. Effective February 1, 2016.

Hemmera (2016a). Stage 1 and 2 Preliminary Site Investigation and Detailed Site Investigation, 310 Legion Drive, Quesnel, BC (VCN0600), dated February 2016.

Hemmera (2016b). Detailed Human Health and Ecological Risk Assessment Chevron Former Bulk Plant #600 (VCN0600), 310 Legion Drive and Affected Properties, Quesnel, BC, dated February 2016.