

March 13, 2016

Mr Michael Roberts
UCANCO General Partners Inc
1650 Des Peres Road, Suite 306
St Louis, Missouri 63131

Re: Performance Verification Plan for Certificate of Compliance for the former Shell Canada Products Bulk Storage and Distribution Facility at 38138 Loggers Lane in Squamish, British Columbia

Dear Mr. Roberts,

Core6 Environmental Ltd. (Core6) has prepared this Performance Verification Plan (PVP) in support of applications for Certificates of Compliance (CofCs) for the former Shell Canada Products cardlock, bulk storage and distribution facility located at 38138 Loggers Lane in Squamish, British Columbia (the Site) and offsite areas affected by contamination from the Site. The Site is defined by a legal lot with off-Site impacted areas defined by metes and bounds as illustrated in Figure 1 attached. A PVP has been prepared for each CofC. This PVP is for 38138 Loggers Lane, described with more detail in the CofC. The PVP presents the principal risk management measures that apply to ensure the CofCs remain valid (i.e., the key risk management controls of Schedule B of the Site CofCs which must remain in place at the Site). The PVP was prepared in accordance with BC Ministry of Environment (BCMOE) Administrative Guidance 14: Performance Verification Plans, Contingency Plans, and Operations and Maintenance Plans (2015).

BC MOE Site ID: 1451

Site Type: Type 2 Site. This conclusion is based on the risk management measures (i.e., the use of institutional controls to mitigate/eliminate risks and lack of imminent risks in the event that controls were either not implemented or were implemented but were rendered ineffective).

PRINCIPAL RISK ASSESSMENT MANAGEMENT CONTROLS

A human health and ecological risk assessment (HHERA) was conducted for the Site, and the results presented in the Core6 report, *Human Health & Ecological Risk Assessment, 38138 Loggers Lane, Squamish, BC* (Core6, 2016). The principal risk management measures for the 38138 Loggers Lane portion of the management area, based on the Core6 (2016) risk assessment, as presented in Schedule B of the CofC, are as follows:

1. The barrier formed by one metre of clean soil must be maintained. Clean soils are those with substances at concentrations less than or equal to their land use specific standards for Environmental Protection-Toxicity to soil invertebrates and plants, and Human Health Protection-Intake of contaminated soil.
2. Deep rooting vegetation is prevented from growing.
3. Drinking water wells are not installed.

Required Actions to Implement the Required Risk Controls:

Performance verification actions for the *38138 Loggers Lane* portion of the management area include the following:

1. Communication with the owners/operators to ensure that a barrier of at least one metre of clean soil is maintained.
 - a. *38138 Loggers Lane* is currently covered by at least one metre of clean soil. The listing of this risk management measure in Schedule B of the CofC meets this requirement.
2. Communication with the owner/operator to ensure that deep rooting vegetation is prevented from growing at the Site. Current design of the Site includes vegetation whose roots will not go deeper than 60 cm below ground surface.
 - a. The maintenance plan should include language that documents the fact that deep rooting plants should not be planted or allowed to grow at the Site. The listing of this management measure in Schedule B of the CofC meets this requirement.
3. Communication with the owners/operators to ensure that groundwater wells for drinking water purposes are not installed.
 - a. The maintenance plan should include language that documents drinking water are not installed. There is also a restrictive covenant on the property to enforce this restriction of the installation of drinking water wells in the future. The restrictive covenant and the listing of this risk management measure in Schedule B of the CofC meets this requirement.

Summary Rationale for Selecting Required PVP Element(s):

1. The need to maintain a barrier of at least one metre of clean soil to ensure that contaminated soils below the barrier are not exposed to people or ecological receptors.
2. The need to prevent deep rooting vegetation from growing at the Site is because deep rooting plants could translocate contamination at depth into above ground portions of the plants. Ecological receptors and to a lesser degree human eating leaves or fruits from these plants could be exposed to contamination therein.
3. The need to prevent installation of on-site groundwater wells for use as drinking water wells is to prevent human exposure to contaminants in groundwater. Exposure to contaminated groundwater could harm people.

In summary, it is our opinion that the advisories recommended for listing in Schedule B of the CofC are sufficient to ensure performance verification of the risk management measures required for the Site.

GENERAL LIMITATIONS AND CONFIDENTIALITY

Core6 prepared this report for the exclusive use of UCANCO General Partners Inc, 1650 Des Peres Road, Suite 306, St Louis, Missouri 63131. In providing this report, Core6 accepts no liability or responsibility for the Site described in this report or for any business decisions relating to the Site.

The BCMOE is authorized to rely on the results within the limitations of the following paragraphs for the purpose of determining whether UCANCO General Partners Inc, 1650 Des Peres Road, Suite 306, St Louis, Missouri 63131 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. Core6 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.

Any use, reliance on, or decision made by a third party based on this report, is the sole responsibility of the third party. Core6 accepts no liability or responsibility for any damages that may be suffered or incurred by any third party as a result of decisions made or actions taken based on this report.

The information documented in this report reflects Core6's judgment in light of the information available to Core6 at the time of preparing the 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 preparing this report, Core6 has relied on information provided by others and has assumed that the information provided is factual and accurate. Core6 accepts no responsibility for any deficiency, misstatement, or inaccuracy in this report resulting from information provided by others. If the assumed facts and accuracy of the materials relied upon are shown to be incorrect, or if new information is discovered, then modifications to conclusions and recommendations in this report by Core6, may be necessary.

It is possible that conditions and concentrations of chemicals may vary across the Site, and hence currently unrecognized conditions and contamination may exist at the Site. No warranty, expressed or implied, is given concerning the presence or concentrations of chemicals at the Site, except as specifically noted in this report. The conclusions and recommendations contained in this report are based upon applicable legislation existing at the time the report was drafted. Any changes in the legislation may result in the need to alter the conclusions and recommendations in the report.

We appreciate the opportunity to support UCANCO General Partners Inc on this project and if you have any questions please don't hesitate to contact us.



Jasen Nelson, MSc, RPBio, EP
Risk Assessor

Attach: *Figure 1 Metes and Bounds*