

September 30, 2015

**Ms. Elizabeth B. Schlaeger, PE**  
**EnviroAnalytics Group LLC**  
**1650 Des Peres Road, Suite 306**  
**St Louis, Missouri 63131**

**Re: Performance Verification Plan for Certificate of Compliance for 647 School Road in Gibsons, British Columbia**

Dear Ms. Schlaeger,

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 (Shell) bulk plant and service station located at 263 Gower Road & 1157 School Road in Gibsons, British Columbia (the Site) and offsite areas affected by contamination from the Site (henceforth the "management area"). The Site and management area are defined by legal lots and by metes and bounds as illustrated in Figure 1 attached. A PVP has been prepared for each CofC. This PVP is for the portion of the management area at 647 School Road, described more particularly 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 (BC MOE) Procedure 12: Procedures for preparing and issuing contaminated sites legal instruments (2013a).

**PRINCIPAL RISK ASSESSMENT MANAGEMENT CONTROLS**

A human health and ecological risk assessment (HHERA) was conducted for the Site and management area, and the results presented in the Core6 report, *Human Health & Ecological Risk Assessment, 263 Gower Point Road and 1157 School Road, Gibsons, BC* (Core6, 2015). The principal risk management measures for the Site and management area, based on the Core6 (2013) risk assessment, as presented in Schedule B of the CofCs, are as follows:

1. The health and safety management plan for the Site should incorporate the fact that there is residual contamination in subsurface soil, groundwater, and soil vapours at the Site and require that future health and safety plans developed for future construction and trench worker excavation activities at the Site incorporate these potential hazards.
2. Before completing any excavations at the Site an Environmental Professional should be consulted to ensure that contaminated soils encountered are addressed in a manner consistent with the British Columbia Contaminated Sites Regulation.
3. The barrier formed by one metre of soil, asphalt, concrete, or buildings must be maintained at the Site.
4. 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.
5. Drinking water wells are not installed in the management area.
6. Only slab on grade buildings can be constructed at the site in the future.

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

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), the Remediation Type applicable is considered to be Type 2.

Under a Remediation Type 2 scenario, BCMOE (2013a) indicates that a PVP is required, while an operations and maintenance plan may be required.

Applicable performance verification actions for this portion of the management area include the following:

1. Communication with the owners/operators that the health and safety manual contain language stating that a worker health and safety plan must be developed and implemented in the event that the following occur:
  - a. An excavation is completed that is intended for human entry. Excavations may be conducted during construction activities, for utility installation or repair or for other reasons. The listing of this risk management measures in Schedule B of the CofCs meet this requirement.
2. Communication with the owners/operators that an environmental professional be consulted to ensure that contaminated soils are handled in a manner consistent with the British Columbia Contaminated Sites Regulation in the event of the following occurs:
  - a. An excavation is conducted.
3. Communication with the owners/operators to ensure that a barrier formed by asphalt, concrete, buildings, or 1 metre of soil must be maintained. The existing barrier may be replaced provided that suitable material is used and the barrier is maintained.
  - a. This portion of the management area is currently 100% covered by asphalt, concrete, and buildings. This forms a barrier between contaminated soils at depth and potential human and ecological receptors and must be maintained in its current form or replaced with suitable material and maintained. The listing of this risk management measure in Schedule B of the CofC meets this requirement.
4. Communication with the Site 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. One heritage tree is currently growing in the management area. It is healthy and it alone will be allowed to continue to grow.
  - 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, with the exception of the heritage tree in the management area. The listing of this risk management measure in Schedule B of the CofC meets this requirement.
5. Communication with the owner/operator to ensure that groundwater wells for drinking water purposes are not installed in the management area.
  - a. The maintenance plan should include language that documents the fact that installation of groundwater wells for drinking water are not installed. This may also require a deed restriction or some other mechanism to enforce this restriction in the future. The listing of this risk management measure in Schedule B of the CofC meets this requirement.

6. Communication with the owner/operator to ensure that, where no structures are currently present, only slab on grade buildings can be constructed in the future. Additional risk management measures are not needed for existing structures that include sub-grade construction or the replacement of these structures, provided that the existing foundation is maintained or replaced.
  - a. The maintenance plan should include language that documents the fact that, where no structures are currently present, only slab on grade buildings should be constructed at the management area in the future. The listing of this risk management measure in Schedule B of the CofC meets this requirement. Existing structures that include sub-grade construction or the replacement of these structures, provided that the existing foundation is maintained or replaced, do not require additional risk management measures.

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

#### **GENERAL LIMITATIONS AND CONFIDENTIALITY**

Core6 Environmental Ltd. (Core6) prepared this report for the exclusive use of EnviroAnalytics Group LLC, 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 EnviroAnalytics Group LLC, 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.

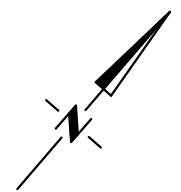
We appreciate the opportunity to support EnviroAnalytics Group LLC on this project and if you have any questions please don't hesitate to contact us.



**Marc Cameron**, MSc, RPBio, CSAP  
Senior Scientist

cc: EnviroAnalytics Group LLC

Attch: *Figure 1 Metes and Bounds*



**NOTES:**  
 1) Plan based on McElhanney Consulting Services Ltd drawing 02737-00-01, dated March 17-19, 2015 and revised June 9, 2015

- LEGEND:**
- MANAGEMENT AREA (SITE)
  - 263 GOWER POINT ROAD [UCANCO General Partners Inc.]
  - 1157 SCHOOL ROAD [UCANCO General Partners Inc.]
  - MOLLYS LANE, SCHOOL ROAD AND GOWER POINT ROADS (METES & BOUNDS) [Town of Gibsons]
  - 647 SCHOOL ROAD [Mr. J.Smith]
  - 643 & 645 SCHOOL ROAD [Mr. J.Smith]
  - SEA WALK (METES & BOUNDS) [Town of Gibsons]

CofCs: Certificates of Compliance  
 Elevations noted in metres above sea level



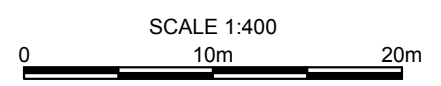
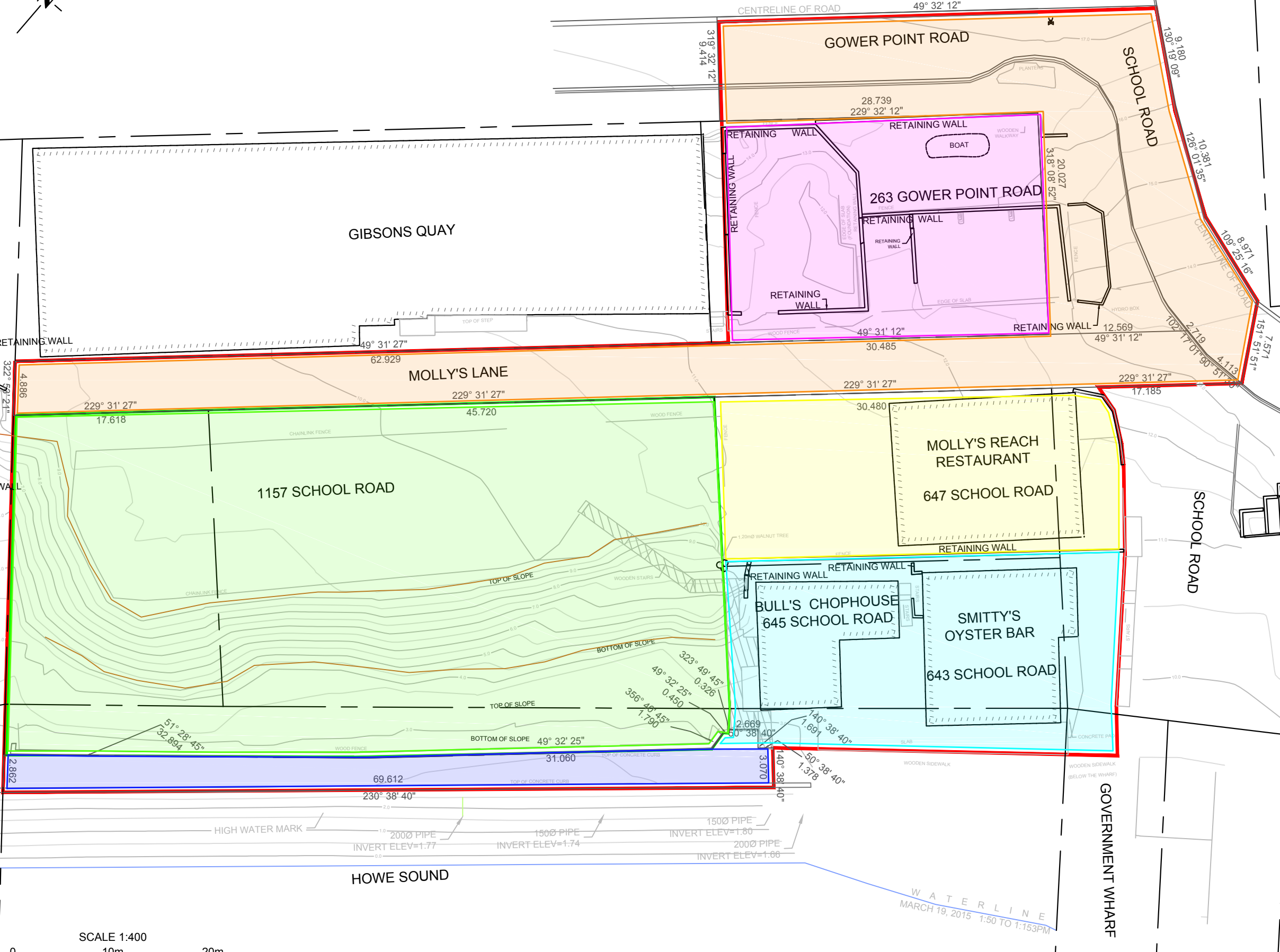
CLIENT  
**UCANCO General Partners Inc**

PROJECT TITLE  
**263 GOWER POINT ROAD & 1157 SCHOOL ROAD, GIBSONS, BC**

DRAWING TITLE  
**CERTIFICATE OF COMPLIANCE APPLICATION BOUNDARIES**

PROJECT No.  
**00187**

FIGURE No.  
**FIGURE 03**



WATERLINE  
 MARCH 19, 2015 1:50 TO 1:153PM