

March 17, 2022  
File: 123221700

**Attention: BC Ministry of Indigenous Relations and Reconciliation**  
3<sup>rd</sup> Floor – 2957 Jutland Road, Victoria, BC V8T 5J9

**Reference: Performance Verification Plan, Airport Groundside Parcel,  
843/933 Highway 37, Terrace, BC**

Stantec Consulting Ltd. (Stantec) has prepared this Performance Verification Plan (PVP) for the Airport Groundside Parcel, 843/933 Highway 37, Terrace, BC (the Site) in accordance with BC Ministry of Environment and Climate Change Strategy guidance (BC ENV 2022). This PVP lists and describes the basis for risk controls necessary to confirm the Site poses an acceptable risk to human health and the environment, in accordance with the BC Contaminated Sites Regulation (CSR) Protocol 1 (BC ENV 2021) and the exposure pathways evaluation and risk characterization sections of the Site's Detailed Risk Assessment (DRA, Stantec 2022a). This PVP also outlines the actions needed to support implementation and maintenance of the risk controls at the Site.

## **RISK CONTROLS**

The following single risk control was recommended in the Site's DRA report (Stantec 2022a):

- The Site's World War II (WWII) bunkers concrete floors, outdoor entranceway slabs, and outdoor perimeter soil mounds that are a barrier to direct contact exposures by human and ecological receptors must remain intact.

BC ENV considers pavement and soil caps to be engineering controls, and sites with engineering controls to be Type 2 sites (BC ENV 2022). BC ENV requires PVPs to be developed for Type 2 risk-managed sites.

The purpose of this risk control is to confirm that under the Site's wildlands natural (WL<sub>N</sub>) land use there remains no exposure of human receptors (i.e., the general public, Kitselas community members) and ecological receptors (i.e., soil invertebrates, terrestrial vegetation) to cobalt contaminated surface soils (approximately 0 to 1 m below ground surface [mbgs]) at areas of environmental concern (AECs) 1 and 2 (see attached Figure 4 from the DRA report). Metes and bounds have not been provided for the bunkers to which the risk control applies given they are unmistakable and well-known historical structures. Further, while the risk control includes the soil mounds surrounding the bunkers, these mounds areas are visibly obvious features, and extension of the risk control to include the cover soils was a precaution. A drilling program to characterize soils immediately adjacent to the bunkers at natural grade and foundation depth could not be conducted during the Detailed Site Investigation (Stantec 2022b) due to safety concerns and access issues with the forested sloped mounds.

**Reference: Performance Verification Plan, Airport Groundside Parcel,  
843/933 Highway 37, Terrace, BC**

Note that this risk control only applies to these AECs, and only applies under a  $WLN$  land use. If the lands at the AECs are developed to the extent they represent a CL land use, cobalt would technically no longer be a contaminant of potential concern (COPC) to human receptors, soil invertebrates, or terrestrial vegetation, and this risk control would technically no longer be required.

In addition, although the DRA did not perform quantitative risk calculations associated with exposure to cobalt in soils, given AECs 1 and 2 soils only moderately exceed  $WLN$  soil standards over a relatively small spatial area, the risk to humans and terrestrial biota associated with failure to comply with the risk control (e.g., removal of entranceway slabs, removal of outdoor perimeter soil mounds), or the physical degradation or alteration of structures, is considered to be low.

## **IMPLEMENTATION**

No physical actions are needed to implement the risk control as the risk control is simply maintaining the presence of structures that are already on Site. However, the risk control should be legally implemented through the addition to Schedule B Requirements and Conditions (Clause 2.) of the Site's Certificate of Compliance (CofC), and the applicant's (BC Ministry of Indigenous Relations and Reconciliation, BC MIRR) signature of the Site's Summary of Site Condition, which includes the risk control (Section 5.2).

## **MONITORING AND RECORDS KEEPING**

No scheduled ongoing field monitoring or records keeping of the bunkers presence or integrity is recommended.

Given the Province of BC intends to transfer ownership of the Site to the Kitselas Nation, BC MIRR should retain a written record of notification of the risk control to the Kitselas Nation.

## **REPORTING AND NOTIFICATION**

No scheduled reporting to the Society of Contaminated Sites Approved Professionals of BC (CSAP) Review Services Committee or BC ENV with respect to the risk control is recommended.

However, MIRR and/or Kitselas (whoever is in ownership of the Site) should seek the opinion of a qualified professional, and possibly notify BC ENV, if changes occur at AECs 1 and 2 such that the risk control is not adhered to, and cobalt contaminated soils are no longer covered, given the Site's CofC could be considered no longer valid.

Also note that it is standard for Schedule B Requirements and Conditions (Clause 3.) of site CofCs issued by BC ENV to state that if requested by the Director, the responsible person must provide a signed statement indicating whether the principal risk controls have been and continue to be met. This may include providing a signed statement by an Approved Professional.

**Reference: Performance Verification Plan, Airport Groundside Parcel,  
843/933 Highway 37, Terrace, BC**

## **LIMITATIONS**

This report documents work that was performed in accordance with generally accepted professional standards at the time and location in which the services were provided. No other representations, warranties or guarantees are made concerning the accuracy or completeness of the data or conclusions contained within this report, including no assurance that this work has uncovered all potential liabilities associated with the identified property.

This report provides an evaluation of selected environmental conditions associated with the identified portion of the property that was assessed at the time the work was conducted and is based on information obtained by and/or provided to Stantec at that time. There are no assurances regarding the accuracy and completeness of this information. All information received from the client or third parties in the preparation of this report has been assumed by Stantec to be correct. Stantec assumes no responsibility for any deficiency or inaccuracy in information received from others.

The opinions in this report can only be relied upon as they relate to the condition of the portion of the identified property that was assessed at the time the work was conducted. Activities at the property subsequent to Stantec's assessment may alter the property's condition. Stantec cannot comment on other areas of the property that were not assessed.

Conclusions made within this report consist of Stantec's professional opinion as of the time of the writing of this report and are based solely on the scope of work described in the report, the limited data available and the results of the work. They are not a certification of the property's environmental condition. This report should not be construed as legal advice.

This report has been prepared for the exclusive use of the client identified herein and any use by any third party, aside from BC ENV, is prohibited. Stantec assumes no responsibility for losses, damages, liabilities or claims, howsoever arising, from third party use of this report. The locations of any utilities, buildings and structures, and property boundaries illustrated in or described within this report, if any, including pole lines, conduits, water mains, sewers and other surface or sub-surface utilities and structures are not guaranteed. Before starting work, the exact location of all such utilities and structures should be confirmed and Stantec assumes no liability for damage to them.

March 17, 2022  
Ministry of Indigenous Relations and Reconciliation  
Page 4 of 5

**Reference: Performance Verification Plan, Airport Groundside Parcel,  
843/933 Highway 37, Terrace, BC**

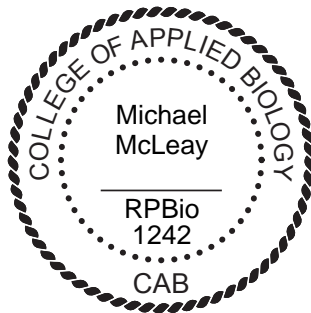
## **CLOSURE**

This PVP was prepared by Michael McLeay, R.P.Bio., CSAP (risk) who authored the Site's DRA, and is suitably trained and educated in the preparation of risk assessment and performance verification reports per BC CSR protocols and guidance. This PVP was quality reviewed by Paul Embregts, P.Eng., CSAP (numeric) who co-authored the Site's Detailed Site Investigation.

Should you have any questions or concerns, please do not hesitate to contact the undersigned.

Respectfully,

**Stantec Consulting Ltd.**



---

**Michael McLeay, R.P.Bio., CSAP**  
Senior Environmental Risk Assessor  
Phone: (250) 388-9161  
Michael.Mcleay@stantec.com

---

**Paul Embregts, P.Eng., CSAP**  
Senior Environmental Engineer  
Phone: (250) 470-4487  
Paul.Embregts@stantec.com

Attachments: DRA Figure 4 Soil Analytical Results Bunkers

March 17, 2022

Ministry of Indigenous Relations and Reconciliation

Page 5 of 5

**Reference: Performance Verification Plan, Airport Groundside Parcel,  
843/933 Highway 37, Terrace, BC**

## REFERENCES

BC Ministry of Environment and Climate Change Strategy (BC ENV). 2022. Contaminated Sites Guidance and Resources, Performance Verification.

<https://www2.gov.bc.ca/gov/content/environment/air-land-water/site-remediation/guidance-resources/performance-verification-plans>

BC ENV. 2021. Protocol 1 for Contaminated Sites, Detailed Risk Assessment, Version 3.0. May 13, 2021.

Stantec Consulting Ltd. (Stantec). 2022a. Detailed Risk Assessment, Airport Groundside Parcel, 843/933 Highway 37, Terrace, BC. Prepared for BC Ministry of Indigenous Relations and Reconciliation by Stantec Consulting Ltd. March 17, 2022.

Stantec Consulting Ltd. (Stantec). 2022b. Stage 1 Preliminary Site Investigation Update and Detailed Site Investigation, Airport Groundside Parcel, 843/933 Highway 37, Terrace, BC. Prepared for BC Ministry of Indigenous Relations and Reconciliation by Stantec Consulting Ltd. March 4, 2022.

