

5 December 2024

Canaan PD 2 Pty Ltd  
c/o Monteath & Powys  
Suite 3, 125 Bull Street  
NEWCASTLE WEST NSW 2309

**Attention: Jamie Graham**

Dear Jamie,

**RE: 42 FULLERTON COVE ROAD, FULLERTON COVE NSW  
CONTAMINATION SUMMARY AND EXPECTED REMEDIATION STRATEGY**

## **1 INTRODUCTION**

Qualtest Laboratory NSW Pty Ltd (Qualtest) have been engaged to prepare a contamination summary and expected remediation strategies report for the site located at 42 Fullerton Cove Road, Fullerton Cove, NSW (the Site).

This report concludes that the risk of contamination is low, and if present, would be localised to the footprints/adjacent to the sheds and or waste materials.

If contamination is present, the remediation strategy for the expected types of contamination would comprise conventional methods.

As discussed in this report, Qualtest considers that the site can be made suitable for the proposed development.

Qualtest previously carried out a Preliminary Contamination Assessment (PCA) for the site, ref: NEW20P-0178-AA, dated 16 November 2020. The site was used for residential purposes, and contained a residence with a swimming pool, and two large sheds.

## **2 BACKGROUND**

The objectives of the PCA were to provide an assessment of the likelihood for contamination to be present on the site from past uses and activities, and surrounding land uses, and provide recommendations on the need for further assessment, management and/or remediation (if required).

In order to achieve the above objective, Qualtest carried out the following scope:

- Desktop study and site history review, including review of relevant reports relating to contamination associated with the Williamstown RAAF Base;
- Site walkover; and,
- Data assessment and preparation of a Preliminary Contamination Assessment Report.

It is understood that a Development Application (DA) has been submitted for the site, and the PCA was submitted as part of the DA. Council have responded with a request for information in May 2024 that states: *“Chapter 4 of the SEPP Resilience and Hazards, the consent authority needs to be satisfied that the land is suitable or can be made suitable for the proposed use.”*

Qualtest previously prepared a Contamination Summary Letter (ref: NEW20P-0178-Acv2, dated 4 June 2024) to demonstrate that the site can be made suitable for the proposed use, based on the findings of the PCA.

Further, the Hunter and Central Coast Regional Planning Panel (HCCRPP), stated the following within their Record of Deferral dated 18 November 2024: *“Additional information has been provided in regarding contamination, but satisfaction of Clause 4.6(1)(c) is heavily qualified. There needs to be a clear statement as to what is expected to be found and what type of remediation is likely to be needed. A clear statement that it is anticipated that the site can be remediated and made suitable for the use is required.”*

This contamination summary and expected remediation strategies report has been prepared in response to the HCCRPP deferral meeting requirements as listed above. The report includes further information on the type of contamination expected to be identified by the detailed site investigation, and how that contamination would likely be remediated.

## **2 PRELIMINARY CONTAMINATION ASSESSMENT FINDINGS**

The site history review showed the site was subjected to sand mining exploration prior to 1979, but was not sand mined due to a lack of commercial grade ore. Since 1979, the northern portion of the site had been used for residential purposes, with two sheds for storing equipment and tools. Materials and waste were observed surrounding the sheds. The southern, western and eastern portions of the site have remained as bushland since at least 1979.

Four Areas of Environmental Concern (AECs) were identified based on the site history and site observations, and surrounding land uses. The AECs related to:

1. Stored equipment, materials and waste;
2. Use of sheds for vehicle repairs and storage of oils/fuels/paints;
3. Potential use of hazardous building materials; and,
4. PFAS contaminated groundwater and surface water migrating from Williamstown RAAF Base.

### **2.1 AECs 1 to 3**

Two sheds were located in the eastern side of the northern portion of the site. The larger shed was constructed of aluminium with a concrete floor, and the smaller shed was constructed of timber and fibreboard (potential asbestos containing materials (PACM)), with a concrete floor and metal roof. In addition, a dilapidated demountable home was located between the two sheds. Based on the observed materials used to construct the sheds, the risk of soil contamination from hazardous building materials, such as asbestos or lead paints, in the larger aluminium shed is considered to be low. There is a potential for soil contamination from PACM in and surrounding the smaller shed.

The larger shed was observed to contain a car undergoing repairs/restoration, chairs, bbq, cardboard boxes, tools and equipment, and small quantities (<20L) of fuels and oils in containers. The smaller shed was observed to contain a lawnmower, fridges, chair, tools and equipment, and small quantities (<20L) of fuels, oils and paints in containers. As the sheds had

concrete floors, and fuels, oils and paints were stored in containers and in small quantities, it is considered that the risk of soil contamination is low.

Waste materials were present around the sheds, and typically comprised metal items and sheets, plastic items, whitegoods (i.e. microwave), timber furniture, plastic tarps, timber pallets, and mattresses and other soft furnishings. Based on the waste materials observed, the potential for soil contamination from oil/fuel leaks, flakes of paint, and/or asbestos is considered to be low.

If present, contamination would be localised to the footprint/adjacent to the footprint of the sheds and/or the waste materials.

## 2.2 AEC 4

The site is located in the southern tip of the Broader Management Area of the NSW EPA PFAS Management Area for the Williamstown RAAF Base. Based on a review of publicly available information, it is considered that the potential for PFAS contaminated groundwater, surface water and sediment to be present on the site is low.

## 2.3 Summary

The Conceptual Site Model (CSM) indicated that should soil contamination exist on the site from AECs 1 to 3, then a potential exposure pathway could exist to current and future site users.

Based on the site history and observations made during the site walkover, it was recommended that a detailed site investigation, comprising soil sampling in the AECs identified, was carried out after removal of buildings and stored equipment and materials. The investigation would need to include surface soil sampling under and adjacent to the residence, sheds, and observed equipment and waste. It was further recommended that these assessments could be completed as part of site clean-up activities (i.e. during demolition of buildings and removal of waste) under a Contaminated Land Management Plan.

It was also recommended that a Hazardous Materials Survey was carried out for the buildings and structures on site, prior to demolition.

It is understood that a Development Application (DA) has been submitted for the site, and that Council have requested additional information: *“Chapter 4 of the SEPP Resilience and Hazards, the consent authority needs to be satisfied that the land is suitable or can be made suitable for the proposed use”*.

Further, the HCCRPP, stated the following within their Record of Deferral dated 18 November 2024: *“Additional information has been provided in regarding contamination, but satisfaction of Clause 4.6(1)(c) is heavily qualified. There needs to be a clear statement as to what is expected to be found and what type of remediation is likely to be needed. A clear statement that it is anticipated that the site can be remediated and made suitable for the use is required.”*

The DA includes the demolition of the buildings, therefore the buildings are unable to be demolished prior to obtaining DA approval. It is not practical to complete the additional contamination assessment, with representative sampling of the AECs, whilst the buildings are present.

In addition, the Aboriginal Cultural Heritage Assessment Report (ACHAR) for the site recommended that an Aboriginal Heritage Impact Permit (AHIP) was obtained. *“The AHIP should be for a term of five (5) years and should allow for harm of AHIMS 38-4-0333/Fullerton Cove Road; site 1; and salvage of AHIMS 38-4-2140/42 Fullerton Cove Road PAD 3 through excavation and community collection prior to harm. The AHIP will need to be obtained from*

*Heritage NSW under Part 6 of the National Parks and Wildlife Act 1974 (NPW Act), prior to impacts occurring.” Therefore, no impacts to the ground, including sampling for contamination assessment can be carried out until after an AHIP has been approved, and sub-surface salvage and surface collection of the site by archaeologists has occurred.*

### **3 EXPECTED CONTAMINATION AND LIKELY REMEDIATION**

Based on the above, Table 3.0 outlines the likely contamination in each AEC, and how that contamination (if present) would be remediated. The location of the buildings listed in Table 3.0 are shown on Figure 1 attached.

**Table 3.0 – Expected Contamination and Remediation Strategies**

<b>AEC</b>		<b>Likelihood of Contamination</b>	<b>Expected Contamination Types</b>	<b>Likely Remediation Option</b>
1	Waste materials around sheds - metal items and sheets, plastic items, whitegoods (i.e. microwave), timber furniture, plastic tarps, timber pallets, and mattresses and other soft furnishings	Low	Metals, Asbestos (bonded ACM) Aesthetics	Removal of waste to a licensed waste facility.  Removal of fragments of ACM (if any) by "hen-pecking" and disposal to a licensed waste facility.  Stained or contaminated surface soils (if any) excavated, waste classified and disposed to a licensed waste facility.
3	Demountable House	Low	Metals, Asbestos (bonded ACM)	Removal of fragments of ACM (if any) by "hen-pecking" and disposal to a licensed waste facility.  Surface soils contaminated with metals (if any) excavated, waste classified and disposed to a licensed waste facility.
2	Metal Shed - Vehicle repairs, small quantities (<20L) of fuels and oils in containers	Low	TRH, BTEX, PAH, Metals	Surface soils contaminated with hydrocarbons and/or metals (if any) excavated, waste classified and disposed to a licensed waste facility.
2, 3	Fibro Shed - small quantities (<20L) of fuels and oils in containers	Medium	Asbestos (bonded ACM), TRH, BTEX, PAH, Metals	Removal of fragments of ACM (if any) by "hen-pecking" and disposal to a licensed waste facility.  Surface soils contaminated with hydrocarbons and/or metals (if any) excavated, waste classified and disposed to a licensed waste facility.

AEC		Likelihood of Contamination	Expected Contamination Types	Likely Remediation Option
3	Dwelling	Low	Asbestos (bonded ACM), Metals	Removal of fragments of ACM (if any) by “hen-pecking” and disposal to a licensed waste facility.  Surface soils contaminated with metals (if any) excavated, waste classified and disposed to a licensed waste facility.
4	PFAS contaminated groundwater or surface water migrating from Williamstown RAAF Base	Very Low	PFAS	Assessment of new data from Defence ongoing monitoring.  If a potential risk is identified, onsite assessment for PFAS.  No remediation expected to be required.

Notes: ACM = Asbestos Containing Material

#### Contingency Remediation Options:

If hen-pecking of bonded ACM from soils is not practical, the ACM impacted soils could be excavated and disposed to a licensed waste facility. If Fibrous Asbestos/Asbestos Fines (FA/AF) were identified, the AF/FA soils would be excavated and disposed to a licensed waste facility.

## **4 CONCLUSIONS**

### **Expected Contamination Types and Remediation Strategy**

If the detailed site investigation identifies contamination, the contamination would be expected to comprise bonded ACM fragments, heavy metals, and/or hydrocarbons in surface soils. These would be remediated using conventional remediation methods, with the likely remediation method comprising disposal of waste materials, ACM fragments, and/or contaminated soils to a licensed waste facility.

### **Site Suitability**

As discussed above, the risk of contamination is low, and if present would be localised to the footprints/adjacent to the sheds and/or waste. Therefore, it is unlikely that the recommended additional assessment would identify contamination that would preclude the development of the site.

If contamination is present, the remediation strategy for the expected types of contamination would comprise conventional methods, that have been proven to be effective in NSW. These strategies comprise disposal of contaminated materials to a licensed waste facility.

Qualtest recommend that the additional assessment should be carried out prior to Construction Certificate being issued, e.g. made a condition of the DA, to enable representative sampling of the AECs identified. This would also allow time for the salvage and surface collection of aboriginal heritage items under an AHIP.

The site can be made suitable for the proposed development. In order to satisfy Condition 4.6(1)(c) of State Environmental Planning Policy (Resilience and Hazards) 2021, and demonstrate that the site is suitable, the following would be completed prior to obtaining the Construction Certificate for the proposed development:

- A Detailed Site Investigation (DSI) will be carried out to assess the AECs identified;
- If required, a Remediation Action Plan (RAP) will be prepared and implemented. The remediation strategies would comprise conventional, and proven methods; and
- If remediation is carried out, a Validation Report would be prepared at the completion of the remediation works to state that the site is suitable for the proposed development (commercial/industrial land use).

The above items would be completed and submitted to Council prior to the construction certificate being issued for the proposed development.

If the above are implemented, Qualtest consider that the site can be made suitable for the proposed development.

## **5 LIMITATIONS**

The findings presented in the report and used as the basis for recommendations presented herein were obtained using normal, industry accepted practices and standards. To our knowledge, they represent a reasonable interpretation of the general conditions of the site.

In preparing this report Qualtest has relied on information provided by the client, and has assumed that the information provided is accurate. Information from searches of government websites has also been relied upon, and Qualtest has not independently verified or checked the data contained on these websites.

Data and opinions contained within the report may not be used in other contexts or for any other purposes without prior review and agreement by Qualtest. If this report is reproduced, it must be in full.

If you have any further questions regarding this report, please do not hesitate to contact the undersigned.

For and on behalf of Qualtest Laboratory (NSW) Pty Ltd.



Emma Coleman  
Senior Environmental Scientist

**Attachments:** Figure 1 - Site Features

This letter has been prepared by Emma Coleman, who is a Certified Environmental Practitioner (CEnvP) (registration no. 1274) – Site Contamination Specialist (registration no. SC41121), under the Environment Institute of Australia and New Zealand.







Image obtained from Nearmaps, with features overlain by Qualtest



Client:	Canaan PD2 c/o Monteath & Powys	Drawing No:	FIGURE 1
Project:	Contamination Summary & Expected Remediation	Project No:	NEW20P-0178-AE
Location:	42 Fullerton Cove Road, Fullerton Cove NSW	Scale:	N.T.S.
Title:	Site Features Plan	Date:	29/11/2024