



## G Dowker - PB Ag Soil Contamination Report

### Section 1

Client	G Dowker
Date/Time	17/07/2024
Property Name	




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Methodology	<p>Mid Regional Council have requested that a preliminary contamination investigation is conducted on the area around existing vineyard of 253 Burrundulla Road, Burrundulla, NSW 2850 Lot 1 DP 198755.</p> <p>Compliance with State Environmental Planning Policy (Resilience and Hazards) 2021</p> <p>The subject site is located next to an existing vineyard which may result in the site being contaminated as a result of the current and historic horticultural practices, as noted within Table 1 of the contaminated land planning guidelines.</p> <p>Pursuant to Clause 4.6(2) of State Environmental Planning Policy (Resilience and Hazards) 2021, Council must consider a report specifying the findings of a preliminary investigation of the land concerned carried out in accordance with the contaminated land planning guidelines where there is change of use on land (in this case for residential , commercial purposes) where development for horticulture is being, or is known to have been carried out on the land.</p> <p>The preliminary contamination investigation is to be prepared by a suitably qualified consultant and must include soil testing of the site. Where the report finds that contamination exists on the site, the report is to provide recommendations for remediation work required before the land may be suitable to be used for residential and commercial purposes.</p> <p>Methodology</p> <p>Systematic sampling is a probabilistic strategy that involves selecting points at regular intervals over an area, for example, grid intersections, or time.</p> <p>Systematic sampling does not generate clusters of sampling locations but ensures an even coverage of the site or decision area, which makes this approach ideal for characterising sites or decision areas. Systematic sampling is statistically unbiased as long as the coordinates of the first sampling location are determined randomly.</p> <p>Area of Site A was approximately 80m<sup>2</sup> (10x8m) (0.08 Ha)</p> <p>Area of Site B was approximately 120m<sup>2</sup> (13x9m)(0.120 Ha)</p> <p>Number of sample sites required per site is 8 (EPA Sampling Design Contamination Guidelines)</p> <ul style="list-style-type: none"> <li>- Samples were taken at set intervals across the pre determined test area. See attached sample grid (Appendix C)</li> <li>- Soil was collected using a soil sample probe which was washed with distilled water and dried prior to collecting soil from each site. Soil was collected at a depth of 20 cm.</li> <li>- Soil was immediately placed into labelled 250 ml glass jars, sealed with lid, 16 sample jars per site (2 jars per sampled location within each site) were supplied by ASL Laboratory Mudgee</li> <li>- Each sample jar was clearly labelled identifying sample site, sample number, date and time of sampling.</li> <li>- Once soil collected the jars were immediately placed in a chilled car fridge and delivered to ALS Mudgee NSW for required testing to be carried out.</li> <li>- All samples were collected by Paul Baguley of PB ag Consulting Pty Ltd</li> <li>- Preliminary investigation soil was tested to a depth of 20 cm</li> </ul> <p>The areas were tested on the 25th of June 2024 and samples delivered to Lab 25th June 2024</p> <p>Soil was tested for 8 minerals, OC, OP. PCB</p>
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<p><b>Soil Results and Comments</b></p>	<p>(See appendix A for full soil Results)</p> <p>( See appendix Table 5-A - Soil Investigation Levels HILs)</p> <p>Summary of Results Site A:</p> <p><b>Heavy Metals</b>            Arsenic falls in within safe guidelines for residential development            Cadmium falls within safe guidelines for residential development            Chromium falls within safe guidelines for residential development            Copper falls within safe guidelines for residential development            Lead falls within safe guidelines for residential development            Nickel falls within safe guidelines for residential development            Zinc falls within safe guidelines for residential development            Mercury falls within safe guidelines for residential development</p> <p><b>OC, OP, PCB</b>            Organochlorine Pesticides ( OC ) falls within safe guidelines for residential development</p> <p>Organophosphorus Pesticides ( OP ) falls within safe guidelines for residential development</p> <p>Polychlorinated Biphenyls ( PCB ) falls within safe guidelines for residential development</p> <p>Summary of Results Site B:</p> <p><b>Heavy Metals</b>            Arsenic falls in within safe guidelines for residential development            Cadmium falls within safe guidelines for residential development            Chromium falls within safe guidelines for residential development            Copper falls within safe guidelines for residential development            Lead falls within safe guidelines for residential development            Nickel falls within safe guidelines for residential development            Zinc falls within safe guidelines for residential development            Mercury falls within safe guidelines for residential development</p> <p><b>OC, OP, PCB</b>            Organochlorine Pesticides ( OC ) falls within safe guidelines for residential development</p> <p>Organophosphorus Pesticides ( OP ) falls within safe guidelines for residential development</p> <p>Polychlorinated Biphenyls ( PCB ) falls within safe guidelines for residential development</p> <p>The preliminary contamination investigation has been conducted on the areas of adjacent land proposed for dwelling development next to the existing vineyard of 253 Burrundulla Road, Burrundulla, NSW 2850 Lot 1 DP 198755. The results clearly demonstrate that soil contamination is not an issue and in the case of dwelling consent this should be approved in-line with the Development Application (DA)</p> <p>No remedial soil works are required or recommended.</p>
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<p><b>Additional Comments</b></p>	<p>Vineyards, orchards, and market garden soils have a typical background concentration of selected contaminants, and these would be expected to be found in any contaminant soil testing conducted on these sites.</p> <p>Contaminants typical background concentration (mg/kg)</p> <p>Arsenic 1 to 50 mg/kg Cadmium 1 mg/kg Copper 2 to 100 mg/kg Lead 2 to 200 mg/kg Zinc 10-300 mg/kg Nickel 5-200 mg/kg Mercury .03 mg/kg</p> <p>(Reference Table 5 -A Soil Investigation Levels mg/kg)</p> <p>Results from preliminary contamination testing fall within these ranges.</p>
<p><b>Photo Gallery</b></p>	 <p>Site A</p>



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Sample Site A location - 1 of 8



Site A Sample Grid 900 x 900



## G Dowker - PB Ag Soil Contamination Report



Site A Sample Grid 900 x 900



Site B



## G Dowker - PB Ag Soil Contamination Report





Sample Site B location - 1 of 8



Site B Sample Grid 900 x 900



G Dowker - PB Ag Soil Contamination Report

		
	Site B Sample Grid 900 x 900	
	 -32.621310, 149.625953	25/06/2024 09:09 AM





## G Dowker - PB Ag Soil Contamination Report

### Form Locations

