



Memorandum

To Andrea Harris

Copy

From Christopher Bergin

Office Greymouth Office

Date 17 July 2019

File 5-P1059.00

Subject Precinct 4

QUALIFICATIONS AND EXPERIENCE

1. My name is Christopher Michael Bergin.
2. I am currently employed by Opus International Consultants Ltd as a Senior Environmental Consultant in their Greymouth office, where I have been since 2010.
3. I hold a degree Bachelor of Applied Science (Environmental Health), a Diploma in Environmental Health and National Diploma in Drinking Water Assessment. I am a member of the Environment Institute of Australia and New Zealand and the Australasian Land and Groundwater Association.
4. I have 26 years' experience in Environmental assessment work primarily in the fields of environmental impact assessment and risk assessment of contaminated land.
5. I have read the Code of Conduct for Expert Witnesses in the Environment Court Practice Note. This evidence has been prepared in accordance with it and I agree to comply with it. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

SCOPE OF EVIDENCE

6. In my evidence I will discuss the contaminated land reporting for the site.

ASSESSMENT OF EFFECTS

7. WSP Opus had it confirmed by Council that Lot 146 DP 3476 (54 Roots Street, Feilding) was identified as the only site on the Councils HAIL register.
8. A Detailed Site Investigation (DSI) was undertaken at Lot 146 DP 3476 for the Manawatu District Council. A DSI involves collection of soil samples on site for quantitative contaminant analysis.
9. The DSI focused on the land where the machinery workshop is located and land immediately surrounding.

10. Soils were tested for Polycyclic Aromatic Hydrocarbons (PAH), Total Petroleum Hydrocarbons (TPH), Organo-Chlorine Pesticides (OCP), Heavy Metals and asbestos.

11. Chemical analysis revealed a concentration of arsenic and cadmium above a residential (10% produce) SGV at a single test pit.

12. Polycyclic Aromatic Hydrocarbons (PAH), Total Petroleum Hydrocarbons (TPH), Organo-Chlorine Pesticides (OCP) and asbestos were at levels below the limit of detection.

12. WSP Opus were engaged by the property owner to collect additional soil samples to determine the extent of soil contamination within this area of the site (delineation sampling) and consider remediation options.

13. Nine additional samples were collected and analysed for arsenic. Cadmium was not analysed.

14. Statistical analysis of the arsenic in soil samples show that the initial soil sample detecting a level of 29mg/kg is an outlier. All sample results from the delineation sampling are below the soil guideline values for a residential (10% produce) end use.

Christopher Bergin

Senior Environmental Consultant

Opus International Consultants

Date: 17 July 2019