

BEFORE THE KAIPARA DISTRICT COUNCIL'S HEARING PANEL

IN THE MATTER OF

the Resource Management Act 1991 (**the Act**)

AND

IN THE MATTER

An application for Private Plan Change 85 (**PC85**)

-MANGAWHAI EAST by Foundry Group Limited
(formerly Cabra Mangawhai Limited) and Pro
Land Matters Company to rezone approximately
94-hectares of land at Black Swamp and
Raymond Bull Roads, Mangawhai

STATEMENT OF EVIDENCE OF CHRISTOPHER DAVIES ON BEHALF OF THE

APPLICANTS

(Soil Contamination)

16 December 2025

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INTRODUCTION

QUALIFICATIONS AND EXPERIENCE

1. My full name is Christopher Hugh Davies. I am Technical Manager at SQN Consulting Ltd (**SQN**) for the SQN GeoSciences division, a specialist asbestos and contaminated land advisory consultancy.
2. I hold a Bachelor of Science (2009) in zoology, ecology, environment and conservation, a Bachelor of Science (Honours) (distinction) (2010) in ecology, environment and conservation, and a Master of Science (distinction) (2013) in animal, plant, and environmental science.
3. I have some 14 years' experience working at contaminated land management and investigation consultancies. My specialist area of expertise is in environmental management in the context of contamination; that is, understanding the effects of polluting human activities on the environment and assessing the risks to both human health and the natural environment as a result.
4. My current role focuses on contaminated land management and includes undertaking preliminary and detailed site investigations, and development of remediation and site management processes commensurate with the scale and degree of impacts identified.
5. My qualifications and experience meet the requirements of a 'Suitably Qualified and Experienced Practitioner' as detailed in the User's Guide: *National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health* (MfE, 2012). A selection of significant projects I have been involved with is attached in **Annexure A**.

EXPERT WITNESS CODE OF CONDUCT

6. Although this is not a hearing before the Environment Court, I record that I have read and agree to and abide by the Environment Court's Code of Conduct for Expert Witnesses as specified in the Environment Court's Practice Note 2023. This evidence is within my area of expertise, except where I state that I rely upon the evidence of other expert witnesses as presented to this hearing. I have not omitted

to consider any material facts known to me that might alter or detract from the opinions expressed.

PROJECT INVOLVEMENT

7. SQN were engaged by Pro Land Matters Company Ltd and Foundry Group (formerly Cabra Mangawhai Ltd) (**the Applicant**) in June 2024 to undertake a Preliminary Site Investigation (**PSI**) of four parcels on Black Swamp Road; 18A Black Swamp Road, 45 Black Swamp Road, Lot 1 DP 29903, and Section 3, Block IV Mangawhai Survey District (the **Site**), to inform on potential risks presented by contaminated land under the Applicant's proposed Private Plan Change 85 (**PC85**) to rezone the land to a range of urban zones and a Rural Lifestyle zone. The PSI report was provided to the Kaipara District Council (**KDC**) on 12 December 2024 as part of the plan change application (attached as Appendix 12 to the s 32 Planning Report and Assessment of Environmental Effects dated July 2025).
8. In my role as Technical Manager for SQN, I was the initial point of contact for this work and developed the framework for the investigation. I have been responsible for developing the investigation approach, developing the limited soil sampling methodology undertaken during the PSI, overseeing and certifying the PSI, and maintaining client liaison during the above engagements. I am familiar with the piece of land to which the proposed plan change relates and am familiar with the applicant's proposal.

SCOPE OF EVIDENCE

9. The purpose of this statement of evidence is to document the PSI and my recommendations to ensure that the land investigated can be made fit for purpose in light of the soil contaminant standards set out in the *Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (NES-CS)* (MfE, 2011).
10. My evidence is limited to the area investigated by SQN (the Site) as described in paragraph 7 above and does not provide commentary on those areas of the proposed plan change outside of the Applicant's control at the time of the investigation, although there is no evidence to suggest that land outside the Applicant's control would be contaminated in any way that would impact on the appropriateness of the rezoning sought. I also note that further detailed

assessments can be undertaken at the time those land areas are developed in the future.

11. Specifically, my evidence will:
 - a. Provide a brief overview of the Site and proposed PC85 in the context of land contamination;
 - b. Provide a brief summary of the relevant regulatory context;
 - c. Detail the methodology used to assess contamination risks encountered during the site investigation;
 - d. Document the preliminary site investigation completed on the portion of the proposed plan change under the control of the Applicant;
 - e. Comment on the appropriateness of the area for the proposed urban development from a contamination perspective;
 - f. Comment on the Council Officer's Report (**S42A Report**); and
 - g. Provide a brief conclusion.
12. My evidence does not rely on the evidence of any other experts involved in this hearing.

OVERVIEW OF THE PROPOSAL

13. The applicant proposes to rezone approximately 94 ha of land on the eastern side of the Mangawhai estuary to a mix of residential land use types of varying density with provision for a mixed-use area and a neighbourhood centre, containing commercial enterprises and a Rural Lifestyle zone at the western extent of the northern side of the PPC area.
14. The proposed zones generally align with the five standard land-use scenarios of the NES-CS for which soil contaminant standards (**SCS**) have been developed based on potential exposure to contaminants in soil, namely:
 - a. *rural / lifestyle block*, applicable to the large lot and rural lifestyle zones;
 - b. *residential* ('standard' residential configurations common in sub-urban areas), applicable to low density residential zones;

- c. *high-density residential* (urban configurations with limited soil contact, such as townhouses with ornamental gardens as expected in medium density zoning);
 - d. *recreation*, applicable to parks or areas with incidental soil contact by the public, such as children playing on grass; and
 - e. *commercial / industrial outdoor worker (unpaved)*, applicable to commercial areas where contact with soil will be infrequent, such as landscape maintenance workers or underground services installations.
15. The application of the NES-CS soil contaminant standards is based on site-specific exposure pathways between potential sources (i.e. contamination) and receptors (e.g. children, residential occupants, maintenance workers) and is independent of the underlying zoning, with more sensitive land uses (e.g. rural residential properties with more home grown produce) being more stringent than those where soil contact will be limited (e.g. commercial properties).
16. The NES-CS provides a nationally consistent framework to assess potential human health risks and is triggered by four activities on actually or potential contaminated land: subdivision of a title, a change in land use (e.g. from rural farm to residential housing), soil disturbance, and removing or replacing a fuel storage system. While not directly applicable to a plan change, it is relevant in that a zone change will likely lead to subdivision, enable changes in land uses, and result in associated soil disturbance.
17. Completion of a PSI is typically required to determine whether an area undergoing such an activity is considered actually or potentially contaminated and in the context of a plan change, may be used to identify actual or potential contamination that could be significant enough to impact the feasibility of a plan change.

CONTAMINATION ASSESSMENT METHODOLOGY

18. In accordance with the Ministry for the Environment's (**MfE**) Contaminated Land Management Guidelines (**CLMG**) and industry best practice, SQN undertook a preliminary site investigation and risk assessment to determine the likelihood of actual or potential contamination existing on site. Under CLMG No. 1 *Reporting on Contaminated Sites in New Zealand*, the aim of a PSI is to determine whether activities or industries included on the MfE's (2011) Hazardous Activities and

Industries List (**HAIL**) are ‘more likely than not’ (i.e. more than a 50% likelihood) present on site, either currently or at some time in the past.

19. The PSI is a desktop-based, qualitative (Tier 1) investigation of all available historical information (Council files, aerial imagery, and certificates of titles) relating to uses of the site, seeking multiple lines of evidence to assess the likelihood of contamination being present.
20. While a PSI is usually limited to desktop assessment, it is often difficult to meaningfully assess several activities on the HAIL as ‘likely’ based on desktop information alone, especially in rural settings (for example, the historic bulk application of persistent pesticides on sites with no spray records available).
21. In such cases, the use of limited soil sampling may be useful in assessing the likely presence of a potentially contaminating activity. Limited soil sampling is undertaken at a lower sampling rate than would be expected of a detailed site investigation (**DSI**) and using less statistically robust sampling methods (i.e. targeting suspected contaminated areas), precluding the investigation from meeting a Tier 2 investigation under the CLMGs.
22. Where evidence was identified for activities included on the MfE HAIL to have been, currently be, or more likely than not to have been, undertaken within the area of investigation, a potential risk was identified and flagged as requiring further investigation.

SUMMARY OF PRELIMINARY SITE INVESTIGATION

23. The PSI was undertaken in June and July 2024, with a revision to correct minor errata in August 2024.
24. Desktop review of records of title, property files held by KDC, and historic aerial photographs pertaining to the area of investigation identified three potentially contaminating HAIL activities in several locations across three of the four target properties:
 - a. 45 Black Swamp Road (**Property A**) may have been subject to historic persistent pesticide use (HAIL A.10) associated with historic orcharding;
 - b. Lot 1 DP 29903 (**Property B**) did not contain any potential contaminating activities, having been under pasture farming for its observable history; and

- c. Section 3 Block IV Mangawhai Survey District (**Property C**) and 18A Black Swamp Road (**Property D**) contain structures of an age that may include asbestos containing materials (**ACM**) in deteriorated condition (HAIL E.1) and lead-based paint in deteriorated condition (HAIL I if a health risk is present), with improper demolition of similar former structures having the potential to present a health risk through accidental discharges (HAIL I).
- 25. Subsequent limited intrusive soil sampling targeting potential ground contamination on Properties A and C did not identify sufficient evidence to suggest that HAIL activities are 'more likely than not' to have occurred.
- 26. No soil samples were collected on Property B (no suspected contamination) or D (excluded from the investigation scope).
- 27. Based on the findings of the limited soil sampling, Properties A, B, and C are not considered as likely to have current or historic contaminating activities and will not be subject to the NES-CS in future.
- 28. As Property D contains potential HAIL activities (HAIL E.1 and I) associated with buildings in several locations that have not been investigated through intrusive soil sampling, additional investigation will be required at the time of any future subdivision, change in land use, or soil disturbance, regardless of the underlying zoning.

APPROPRIATENESS OF THE SITE FOR URBAN DEVELOPMENT

- 29. The results of SQN's investigation have not identified any actual or potential contamination issues that raise fundamental concerns in respect of the proposed changes in land use or development.
- 30. To expand, the PSI has identified several HAIL activities on the Site that would be considered typical of farming and aged infrastructure. None of these activities pose a potential contamination risk that cannot be readily managed using conventional contamination management practices.
- 31. As the NES-CS is a national standard applicable to defined activities regardless of underlying zoning, those activities will trigger the requirement for further investigation and, where necessary, remediation of the land to make it fit for the future land use. Those matters are more appropriately addressed at the resource consent stage.

S42A Report

32. I have read the s42A report and confirm that I agree with its conclusions regarding land contamination as they are consistent with the findings of the PSI.
33. I note that the reporting planner concludes there is nothing to suggest at this point that any potential contamination is of a type or extent that would render the land incapable of being remediated or made safe for the proposed residential or business development.¹
34. No submitter raised concerns relating to potential land contamination.

CONCLUSION

35. Investigation of those areas of the proposed plan change under the Applicant's control has not identified any significant contamination constraints that would impact on the proposed plan change. Rather, those actually and potentially contaminating activities identified are typical of farming activities and aged infrastructure and will be addressed by the NES-CS framework at the time of a subdivision, change in land use, or soil disturbing activity.
36. Although the PSI excluded areas of the proposed plan change that may include land contamination, enforcement of the NES-CS at the subdivision or land use consent stage will address those potential areas, regardless of the land's zoning.
37. I consider that any further contamination identified within areas of the Site that are yet to be subject to a PSI will be able to be appropriately remediated and managed in an economic manner through a combination of onsite utilisation within appropriate land use scenario footprints or offsite disposal if necessary.

Christopher Hugh Davies

16 December 2025

¹ Section 42A report at [110].

Annexure A:

Christopher Davies Statement of Experience

1. I entered the contaminated land industry in 2010 when I began my postgraduate research into the effects of gold mine pollution on mammals, completing two postgraduate degrees focusing on environmental contamination.
2. Of more than 14 years' experience working in private consulting companies specialising in environmental assessments of contaminated land, over seven years have been spent assessing and managing contaminated land in New Zealand. Relevant roles include:
 - a. Technical Manager / Principal Scientist - SQN Consulting Ltd (October 2023 to present)
 - b. Senior Environmental Scientist - Geosciences Ltd (April 2022 - October 2023)
 - c. Environmental Scientist - Geosciences Ltd (February 2018 - April 2022)
 - d. Environmental Scientist - EEPP, Wits Enterprise (South Africa) (July 2011 - August 2017)
3. I meet the requirements of a Suitably Qualified and Experienced Practitioner (SQEP) as described in the National Environmental Standard's Users guide, able to certify preliminary and detailed site investigations and associated management and remedial strategies, and their subsequent validation.
4. Relevant private plan changes that I have been involved in recently include:
 - a. Ohinewai rezoning (Waikato District Plan Hearing 19) – complete a preliminary site investigation and stage 1 detailed site investigation of 177 hectares of land proposed for mixed residential, commercial, and industrial rezoning.
 - b. Whenuapai Greens (PC109) – ‘on call’ as an expert witness to provide evidence on Geoscience Ltd’s Preliminary Site Investigation (no evidence required).
 - c. Whenuapai Business Park (PC107) – complete several preliminary and detailed site investigations to support the light industrial rezoning of 47.5 Ha of land to establish a new Whenuapai Business Park Precinct.
 - d. Alfriston Road PPC (2024) – oversee and certify a preliminary site investigation, detailed site investigation, and remediation action plan for land proposed to undergo a private plan change in Ardmore.

- e. Wellsford PPPC (2024) - oversee and certify a preliminary site investigation for a portion of a proposed private plan change in Wellsford.
- f. Hobsonville Grove (PC111) – provide evidence as an expert witness on Geosciences Ltd's Detailed Site Investigations (hearing scheduled for February 2026).