

**BEFORE AN EXPERT PANEL
SOUTHERN SEAWALL RENEWAL PROJECT**

FTAA-2510-1118

Under the **FAST-TRACK APPROVALS ACT 2024**

In the matter of an application by Wellington International Airport Limited for approvals for the Southern Seawall Renewal Project

By **WELLINGTON INTERNATIONAL AIRPORT LIMITED**
Applicant

**STATEMENT OF EVIDENCE OF SARAH JANE SHEPHERD (CONTAMINATED
LAND) ON BEHALF OF WELLINGTON INTERNATIONAL AIRPORT LIMITED**

17 March 2026

BUDDLE FINDLAY

Barristers and Solicitors
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INTRODUCTION

1. My full name is **Sarah Jane Shepherd**.
2. My evidence is given on behalf of Wellington International Airport (**WIAL**) in respect of WIAL's proposed Southern Seawall Renewal project (**Project**) in response to comments made under section 53 of the Fast-track Approvals Act 2024 (**Act**) by:
 - (a) Wellington City Council (**WCC**); and
 - (b) Greater Wellington Regional Council (**GWRC**).
3. I was the Suitably Qualified and Experienced Practitioner (**SQEP**) responsible for the:
 - (a) Beca – Detailed Site Investigation (Contamination) WIAL Sea Defences Renewal Project – Miramar Golf Course, dated 27 January 2026;
 - (b) Beca – Detailed Site Investigation (Contamination) Seawall Renewal, dated 15 October 2025;
 - (c) Beca – Preliminary Site Investigation (Contamination) Sea Defence Structures Renewal, dated 5 September 2025; and
 - (d) Beca – Contaminated Land Management Plan (**CLMP**) WIAL Sea Defences Renewal dated 3 October 2025;

in Part B of the application for the Project. My qualifications and experience are set out on page iv of the technical assessments.

Code of conduct

4. I confirm that I have read the Code of Conduct for expert witnesses contained in the Environment Court Practice Note 2023 and have complied with it in preparing this evidence. In particular, unless I state otherwise, the issues addressed in my evidence are within my area of expertise and I have not omitted to consider material facts known to me that might alter or detract from the opinions I express.

WCC SECTION 53 COMMENTS

5. Ms Nerena Rhodes of PDP has carried out a technical review of the application materials relating to contaminated land to inform WCC's section 53 comments.¹ PDP's memorandum:
 - (a) notes the pre-lodgement discussions between Ms Rhodes and me on these issues;
 - (b) explains that the technical feedback Ms Rhodes provided on WCC's behalf was incorporated into the resource consent conditions proposed by WIAL; and
 - (c) records Ms Rhodes' agreement that the effects on human health from disturbance of contaminated land are likely to be low, and her support for the proposed conditions for contaminated land.
6. I concur with Ms Rhodes' conclusions on these matters.

GWRC SECTION 53 COMMENTS

Discharges from contaminated land

Issue

7. Ms Rhodes has also provided advice to GWRC as relevant to its statutory functions with respect to contaminated land.
8. Based on Ms Rhodes' advice, GWRC considers that resource consent for discharges from contaminated land is required under the Natural Resources Plan for the Wellington Region (**NRP**) from both the Miramar Golf Course (**MGC**) Yard and the Southern Seawall and Eastern Bank Remediation area, due to the following:
 - (a) in respect of the MGC Yard, PDP considers there to be sampling gaps to the south and east of the stormwater pond and the southern extent of the site; and
 - (b) for the Southern Seawall and Eastern Bank Remediation area, Ms Rhodes has noted that the CLMP states that soil samples did not exceed environmental and human health guidelines but some

¹ PDP's memorandum is appendix 6 to WCC's comments.

exceeded indirect ecological guidelines for per- and polyfluoroalkyl substances (**PFAS**).

9. Both locations are recorded in the Selected Land Use Register (**SLUR**) as Category I (Verified History of Hazardous Activity or Industry). The MGC Yard is located within SLUR site 2846, and the Southern Seawall and Eastern Bank Remediation is partially located in SLUR site 2851.
10. GWRC's comments highlight relevant provisions under the NRP, which include:
 - (a) Objective O42 (which relates to identifying contaminated land and managing discharges to protect the environment);
 - (b) Policy P99 (which directs managing hazardous substance discharges to avoid, remedy or mitigate significant adverse effects);
 - (c) Rule R82, which permits discharges from contaminated land subject to conditions; and
 - (d) Rule R94, which requires resource consent (as a discretionary activity) for all other discharges.
11. GWRC considers that a discharge permit for discharges from contaminated land at each of the MGC Yard and Southern Seawall and Eastern Bank Remediation should be granted by the Panel under Rule R94, and seeks that the conditions require:
 - (a) for the MGC Yard, additional sampling to be conducted by a SQEP and results provided to GWRC prior to earthworks being conducted; and
 - (b) for both sites, that the CLMP be not updated to address environmental (in addition to human health) risk, in respect of the Southern Seawall and Eastern Bank Remediation site, and any further sampling at the MGC Yard, and submitted to Council for certification prior to implementation.
12. I set out my response below, dealing with the two areas in turn.

MGC Yard area

13. A response to the GWRC review was issued on 27 January 2026 that addressed Ms Rhodes' concerns about sampling at the MGC Yard. WIAL representatives have advised me that it was sent to GWRC (and the

Environmental Protection Authority) on 18 February 2026. According to the list of documents considered by Ms Rhodes, it does not appear she has reviewed or considered this updated material.

14. The response stated *"hand excavation locations were strategically distributed to target the managed turf elements of the former golf course, including tee boxes, greens, and fairways. To our knowledge the area east of the pond did not contain these key features and was therefore not prioritised for sampling. Based on the comprehensive coverage across the wider golf course site when previous investigations are considered and the consistency of results outside the PFAS-impacted area, we consider it reasonable to conclude that contaminant concentrations in this area are likely to be low and comparable to other non-impacted areas. No further sampling is considered required in this area."*
15. I remain of the view that the sampling undertaken at the MGC Yard is appropriate and meets the relevant requirements for a DSI.
16. In relation to contaminant sources at the golf course there are two activities that have been considered:
 - (a) the management of turf at the golf course; and
 - (b) the historical airport apron.
17. Contaminants associated with turf management at the golf course had been assessed by GHD² and PDP³ in previous investigations north of the MGC Yard site. These previous investigations found heavy metals and organochlorine pesticides (**OCP**) above background concentrations but below human health criteria in selected soil samples. PFAS were identified in one shallow soil sample in one low-lying location 260 m north of the MGC Yard site. The PFAS detection was delineated to surficial soils. The presence of PFAS was attributed by GHD to the historical use of wastewater for irrigation, combined with the low-lying position of this sample location. This was the basis for focusing the assessment of heavy metals and OCPs from historical turf management on the intensely managed turf areas rather than the entire footprint of the former golf course within the MGC Yard site.

² GHD Ltd (2020) Miramar Golf Course Detailed Site Investigation.

³ Pattle Delamore Partners Ltd (2023) Miramar Golf Club Incorporated - Miramar Golf Club – Detailed Site Investigation.

18. In the MGC Yard DSI there were eight soil samples collected from areas outside of the tee boxes, greens, and fairways. Heavy metals, OCP, and PFAS (where analysed) were below regional background concentrations or laboratory report limits in these samples supporting the approach taken.
19. With respect to the PFAS detected in soils associated with the former apron, Appendix J in the MGC Yard DSI shows where PFAS was and was not detected, demonstrating that this area has been sufficiently delineated.
20. In my view this is an appropriate justification for the sampling rationale, and the MGC Yard DSI meets the requirement of condition (a) of Rule R82 in the NRP being "*A DSI has been undertaken, reported and provided to GWRC in accordance with R81*".

Southern Seawall and Eastern Bank Remediation area

21. With respect to the Southern Seawall and Eastern Bank Remediation, I respectfully disagree with the position reached by GWRC and Ms Rhodes that discharges from contaminated land at the Southern Seawall and Eastern Bank Remediation do not meet condition (b) of Rule R82 in the NRP (and therefore that a discharge permit is required under Rule R94).
22. Condition (b) requires that the results of a DSI indicate that the discharge does not pose unacceptable risks to the environment, on-site or off-site (as well as to human health, which is not at issue). The Southern Seawall DSI addresses this matter in some detail and demonstrates that there will not be any unacceptable risks to the environment.
23. The Southern Seawall DSI discusses both aquatic and terrestrial ecological receptors. The analysis in the DSI then focuses on the aquatic exposure pathway when assessing risks arising from potential discharges to water (as set out in Sections 8.2.4 and 9.1.3). The Southern Seawall DSI concludes that discharges from soil that are anticipated to be disturbed during Project works are not considered to pose unacceptable risks to human health or the environment.
24. The focus is on the aquatic exposure pathway when assessing against Rule R82 because that provision (and R94) relates to discharges of contaminants that may enter water.
25. The indirect ecological guidelines (PFAS National Environmental Plan 3.0, HEPA, hereafter referred to as **PFAS NEMP**) that were exceeded by five

soil samples assess risk to terrestrial ecological receptors; exceedances do not necessarily indicate that there will be downstream effects if contaminants enter water.

26. On the matter of indirect ecological guideline exceedances, the indirect exposure ecological criteria discussed in the DSI account for the pathways through which organisms can be exposed whether or not they are in direct contact with PFAS contaminated soil (i.e. exposure through the food chain). The PFAS NEMP states that the indirect exposure value may be over-protective if the area of exposed soil is too small to have any material impact on food chain transfer to secondary consumers such as invertivores and carnivores.
27. When the site is developed into a yard as part of the Project, the finished surface will be compacted aggregate. Manaaki Whenua Landcare Research⁴ proposed that ecological soil guidelines do not apply to impervious / impermeable surfaces (such as land/soil that is sealed, compacted driveway areas), given the unsuitability of these environments for any ecological receptors regardless of contamination issues.
28. Once the area east of the seawall is reinstated on completion of the construction, the proposed land use is largely similar to present-day conditions, but will include an enhanced kororā area. In the areas of the site that are proposed to be restored to ecological habitat, topsoil will need to be imported to allow for planting. As Manaaki Whenua Landcare Research note that the bulk of soil biological activity occurs in the upper 30 cm of soil, the indirect ecological exposure pathway will be managed by maintaining at least 30 cm of unimpacted soil.
29. I note in the initial review of the Southern Seawall DSI by Ms Rhodes (and colleague Mr Simkin) dated 11 June 2025, they were of the opinion that ecological soil guidelines are non-statutory and are not recommended for regulatory use and use of the indirect ecological guideline should be justified.
30. On this basis I remain of the view that the Seawall Site meets permitted activity condition (b) of Rule R82, in that the Southern Seawall DSI

⁴ Manaaki Whenua Landcare Research (June 2022) – Exploring the implementation of ecological soil guideline values for soil contaminants (Envirolink Grant 2214-MLDC162). Prepared for Marlborough District Council.

demonstrates that the discharge does not pose unacceptable risks to the environment.

Conclusion

31. In conclusion, I consider that the MGC Yard DSI meets the requirements of condition (a) of rule R82 and the MGC Yard DSI and Southern Seawall DSI demonstrate that the contaminated soils detected at the sites do not pose unacceptable risks to human health or the environment, meeting condition (b) of rule R82.
32. As such, I consider that the discharge of a contaminant from contaminated land where a contaminant may enter water is a permitted activity (but I defer to Ms O'Sullivan and Ms Robotham, the planners advising WIAL, on planning matters).

Sarah Jane Shepherd

17 March 2026