Before a panel appointed under the Fast-track Approvals Act 2024 **FTAA-2504-1046**

UNDER	the Fast-track Approvals Act 2024 (**Act**)
IN THE MATTER	an application for approvals for the Waihi North Project (**WNP**) – a listed project described in Schedule 2 of the Act
BY	**OCEANA GOLD (NEW ZEALAND) LIMITED Applicant**

STATEMENT OF EVIDENCE BY HELEN BLACKIE ON BEHALF OF OCEANAGOLD (NEW ZEALAND) LIMITED

Pest Animal Management

Dated 1 September 2025

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Introduction

1. My full name is Dr Helen Blackie. My qualifications and experience, and my role in the Waihi North Project (**WNP**), are set out in my statement of evidence dated 5 February 2025 included in Part G of the substantive application document for the WNP.

2. I have been asked by OceanaGold (New Zealand) Limited (**OceanaGold**) to provide a response to the specific matters contained in written comments on the WNP substantive application from persons invited by the Panel to comment under section 53 of the Act. Those persons include:

   a. Coromandel Watchdog of Hauraki Inc (**CW**);

   b. Hauraki District Council (**HDC**);

   c. Thames-Coromandel District Council (**TCDC**);

   d. Waikato Regional Council (**WRC**);

   e. Royal Forest and Bird Protection Society of New Zealand Incorporated (**F+B**); and

   f. Department of Conservation (**DOC**)

3. I have prepared this statement within the limited time available to me. Consequently, it is necessarily at a high level. I can provide a more fulsome response to the issues covered in this statement if the Panel requires further assistance from me.

Code of conduct

4. I confirm that I have read the code of conduct for expert witnesses contained in section 9 of the Environment Court Practice Note 2023 and have complied with it in preparing this evidence. I confirm that the issues addressed in this evidence are within my area of expertise, and I have not

omitted material facts known to me that might alter or detract from my evidence.

Scope of Evidence

5. I have primarily focused on responding to evidence submitted by the DOC, as after reviewing all other ecology-related evidence there were either no substantiative issues raised about proposed pest management activities, or those referenced were a repeat of issues raised by DOC.

6. I have read the submissions provided by the TCDC and the WRC and, as there are no matters raised with regards to pest control, I have no comments on their submissions.

7. Notably, my statement specifically refers to pest management activities as proposed under the Wharekirauponga Animal Pest Management Plan (**WAPMP**), rather than those proposed under the "Waihi North Biodiversity Project" (**Biodiversity Project**), which I note is not part of the proposed mitigation package.

8. In reviewing the evidence of the parties listed at paragraph [2] above, it is apparent that some submitters (particularly CW) were unclear of the difference between the WAPMP and the Biodiversity Project. I note that the CW has amalgamated pest management concerns into a generic "Pest Plan Issues" section,[1] where it has confused the budget allocated for the Biodiversity Project with the work proposed under the WAPMA.[2] This has made it difficult to determine which project is being referred to in their submission, but I have done my best to interpret their concerns.

1 Coromandel Watchdog comments, 'A' Documents, Appendix B.01, at paragraphs 19 – 24.
2 Coromandel Watchdog comments, 'A' Documents, Appendix B.01, at paragraphs 19 and 20.

Matters of Agreement

9. There is general agreement among submitters that the pest management proposed under the WAPMP will result in positive biodiversity outcomes. As an example, at paragraph 134 of the DOC Concession report it is noted that:[3]

> *"The Waikato CMS notes that assistance with animal pest and wild animal management within the Wharekirauponga Place could result in significant improvement in forest health and help to secure threatened and at-risk species that are present in the area."*

10. I have read the terrestrial ecology review report prepared by Alliance Ecology Ltd (on behalf of HDC) and note their agreement with the overall conclusion of a net positive outcome for indigenous terrestrial biodiversity which will be obtained via the implementation of the WPAMP.[4]

11. I also agree with DOC that the pest control proposed as part of the WPAMP will provide benefits to frog populations. As stated in their comments, "*DOC considers that pest control will provide some benefit to native frog populat*ions",[5] and "….*there is moderate confidence that continuous rat suppression at the project site could result in a positive change in frog abundance outside the vibration footprint*." [6]

12. I also agree with DOC's comments that pests are a recognised and substantial threat to existing native frog populations and that proposed control should be intensive and of a high standard:[7]

> "*DOC considers mice, rats and pigs to be the pests that are of the greatest level of impact on native frogs and that therefore control of these pest species*

3 Waihi North Project Reports and advice, Appendix C - concession report, at paragraph 134.
4 HDC Comments received on Waihi North, at pages 185 - 201.
5 DOC Comments received on Waihi North, at paragraph 82.
6 DOC Comments received on Waihi North, at paragraph 86.
7 DOC Comments received on Waihi North, at paragraph 83.

should be delivered to a high standard and, where available, established best practice"

13. DOC acknowledges that this is the "*first time that pest control of this scale and intensity has been proposed to protect native frogs in New Zealand*".[8] I agree that this plan is the most ambitious and intensive attempt to date to undertake pest control to benefit frogs, which is why I have high confidence in it achieving substantial population gains.

14. DOC acknowledges that the pest control to be implemented for frogs is "*experimental"*, as in pest control of an intensity and duration this high has not yet been undertaken and consequently quantifying benefits for frogs is difficult. While I believe this would be an issue should the proposed pest control have been a *reduction* in scale and intensity versus projects with known beneficial outcomes, an increased intensity of control should almost certainly result in increased benefits versus those shown in other studies.[9]

15. I am also in agreement with DOC regarding the general approach proposed for pest control in the WPAMP, that *"…. a ground-based bait station/trapping network overlayed with a three yearly aerial 1080 operation should adequately reduce numbers of possums, rats and mustelids. The addition of trapping will assist in reducing predators in the years between 1080 operations. DOC generally agrees with the proposed methods selected for deer and goat control with ground-based shooting being used as the main control method."* [10]

The scale of pest control in the WPAMP

16. I disagree with DOC that the proposed 1000ha of pest control is too small to effectively control pests.[11] This seem to contrast their earlier statement

8 DOC Comments received on Waihi North, at paragraph 85.
9 Germano et al "Age dependent effects of rat control on Archey's frog (Leiopelma archeyi) at Whareorino, New Zealand" (2023) 47(2) New Zealand Journal of Ecology 3529.
10 DOC Comments received on Waihi North, at paragraph [84].
11 DOC Comments received on Waihi North, at paragraph [98].

(discussed above at paragraph 15 of this statement) that the proposed pest control would adequately reduce numbers of stoats, possums and rats.

17. I have provided evidence of success in pest management outcomes in similarly sized projects to the WPAMP,[12] and note that the observed 10% annual increases for Archey's frogs obtained in the Whareorino study was achieved with an initial pest-controlled area of 300ha, which later increased to 600ha.[13] The intensive area of pest control proposed here is 632ha (within a larger buffer area).

18. DOC's primary concern appears to be the need to extend the scale of aerial and ungulate control.[14] A potential increase in the scale of aerial control operations could be supported with an increase of the buffer zone, for example, from 1 km to 2 km from the core area to further reduce reinvasion risk. This change may also address some issues regarding pig control raised in CW's comments.[15]

19. It is worth noting that the Whareorino study, referenced in paragraph [14] above, did not undertake pig, mice, feral cat, possum or mustelid control and still achieved a 10% population increase in frogs.

Ground control methods

20. As mentioned above at paragraph 15, there is a general agreement on the proposed pest control methods. However, there are some potential differences in opinion on the frequency of ground-based toxic control.

21. DOC has suggested an increase in toxin bait use, with "*bait stations kept loaded with toxin year-round*".[16] The current WPAMP provides for a

12 WPAMP, at pages 6 – 9.
13 Germano et al "Age dependent effects of rat control on Archey's frog (Leiopelma archeyi) at Whareorino, New Zealand" (2023) 47(2) New Zealand Journal of Ecology 3529.
14 DOC Comments received on Waihi North, at paragraphs [84] – [90].
15 Coromandel Watchdog comments, 'A' Documents, Appendix B.01, at paragraphs [22] - [24].
16 DOC Comments received on Waihi North, at paragraph [88].

minimum of one baiting round each year, with up increased frequency of baiting up to 4 x per year when a target species threshold is exceeded.[17] The purpose of using pest thresholds to initiate toxin operations is to reduce toxin load on the environment (as well as the potential impacts of trampling of frogs during servicing operations). As discussed in my 2014 review paper,[18] continued toxin use can lead to sub-lethal dosing, induced toxin or bait shyness or other non-target species removing baits. This could ultimately reduce the efficiency of the proposed control.

22. The provision for use of up to four toxin operations in a year (each of which may last 4 – 6 weeks), provides for potential deployment of toxins over 16 – 24 weeks a year, which, in my experience, would be more than sufficient to reduce pests to low levels (especially given the permanent trap network in place to supplement toxic control).

23. In my view, increasing the minimum toxic baiting frequency to twice a year in the WPAMP would help address some of DOC's concerns, but I believe the maximum use of toxins should not be further increased due to the reasons outlined above.

Control of mice in the WPAMP

24. There is general agreement that mice need to be controlled and provision for their control has been provided in the WPAMP. DOC is uncertain, however, that mouse control will be successful.[19] In response, targets and thresholds have been provided for mice in the WPAMP,[20] with additional work (such as infilling with bait stations) required if these thresholds are exceeded.

17 Pest targets, thresholds and responses to exceedance are detailed at pages 58 – 61 of the WPAMP.
18 Blackie, H. M., MacKay, J. W., Allen, W. J., Smith, D. H. V., Barrett, B., Whyte, B. I., & Eason, C. T. (2014). Innovative developments for long-term mammalian pest control. Pest management science, 70(3), 345 – 351.
19 DOC Comments received on Waihi North, at paragraph [92].
20 Pest targets, thresholds and responses to exceedance are detailed in p 58-61 of the WPAMP.

25. I do not support DOC's suggestion that bait stations be at maximum 25m apart in a grid arrangement is required,[21] as this would equate to over 10,000 bait stations needing deployment over the 660 ha area. As discussed in previous technical meetings with DOC, the trampling impacts of servicing a bait station network of this intensity would be substantial, with significant potential impacts on the ground dwelling frogs. It would also introduce a substantial toxic load on the environment.

Control of pigs

26. DOC agrees that feral pig control should form a "k*ey part of any population restoration attempts*",[22] and also agree that the proposed control pig target of zero density is suitable.[23]

27. There is also agreement that ground hunting is the primary control method employed in the WPAMP, however, if there are concerns from DOC (or CWH) that further control tools are required for pigs, then additional tools can be implemented.[24] The tool range currently outlined in the WPAMP could be extended to include options of:

    a. Baiting regimes

    b. Trapping

    c. Judas Pigs

28. It should be noted that reinvasion of pests such as pigs will remain an issue in any mainland pest control project for the foreseeable future. The aim of the WPAMP is not to remove pigs from the entirety of the Southern Coromandel area, but instead to have zero tolerance for their presence

21 DOC Comments received on Waihi North, at paragraph [94].
22 DOC Comments received on Waihi North, at paragraph [96].
23 DOC Comments received on Waihi North, at paragraphs [96] – [98].
24 A useful review of the additional tools is provided for in Lathan and Yockey (2020).

within the WPAMP site. This will particularly reduce the occurrence of resident pigs which could have substantial biodiversity impacts.

29. I do not agree with DOC's suggestion that a pig proof fence should be built around the entire WPAMP area.[25] The length of such a fence line would be substantial, making it extremely expensive, difficult to maintain, and potentially spread the risk of kauri dieback via soil disturbance. However, pig-proof fences will be built in the areas for native frog release as per the ELMP – WUG / Native frog release plan.

Conclusion

30. There are some further small-scale changes proposed to the WPAMP by DOC, which I consider too minor to address here.[26] I do not believe they are instrumental in the success (or otherwise) of the proposed pest regime. However, some of these changes could be incorporated into a revised version of the WPAMP and comments can be provided if the Panel requires.

Dated: 1 September 2025

Dr Helen Blackie

25 DOC Comments received on Waihi North, at paragraph [98].
26 For example, preferences in monitoring methods and frequencies.