

OCEANAGOLD (NEW ZEALAND)
LIMITED

MACRAES PHASE FOUR (MP4)

Aquatic Environmental Effects

Evidence of **Dr Grant Allen** Regarding
Technical Assessment of **Aquatic
Environmental** Effects and Proposed
Conditions

INTRODUCTION

1. My full name is Grant Richard Allen.
2. My role in relation to Macraes Phase 4 (“**MP4**”) has been to provide expert advice in relation to surface water quality effects. I am a co-author of the Assessment of Aquatic Environmental Effects (“**the Report**”) and the supporting Recommended Surface Water Quality Framework report, both of which are provided within *Part B – Technical Reports* of the application.
3. This evidence has been prepared to accompany the Report, the Recommended Surface Water Quality Framework report and the application by Oceana Gold (New Zealand) Limited (“**OGNZL**”) for approvals required for MP4 under the Fast-track Approvals Act 2024 (“**FTAA**”).
4. Section 4.1(h) of the FTAA Panel Conveners’ Practice and Procedure note (July 2025) says all technical experts authoring reports should include a statement regarding compliance with the Code of Conduct for Expert Witnesses. This evidence has been prepared to fulfil this requirement, and if a hearing is not held, this evidence confirms that, relative to my area of expertise the Report provides an appropriate description of the relevant environment, the proposed activities comprising the effects of the MP4 on that environment, and the way those effects are proposed to be managed.
5. The findings are set out in full in the Assessment of Aquatic Environmental Effects and appendices included within *Part B – Technical Reports* of the application.
6. While this application is not being considered by the Environment Court, I confirm that I have read the Code of Conduct for expert witnesses contained in the Environment Court of New Zealand Practice Note 2023 and that I have complied with it when preparing the Report. Other than when I state I am relying on the advice of another person, the Report is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

QUALIFICATIONS AND EXPERIENCE

7. I hold a Doctor of Philosophy (PhD) in Chemistry.
8. I am a full member of the Environmental Institute of Australia and New Zealand (MEIANZ) and the Royal Society of New Zealand (MRSNZ).
9. I am a Director and Lead Environmental Scientist at Viridis Limited and have held that position since December 2022.

10. I have approximately 20 years' experience in environmental consulting, having commenced my consulting career in 2007.
11. During this time, I have worked across the mining, natural resources, power generation, industrial, and government sectors, providing technical leadership, environmental advice, and expert review services. My professional experience includes the management and delivery of complex environmental monitoring programmes, the preparation and review of Assessments of Environmental Effects, and leadership of multidisciplinary teams supporting resource consent applications. I have overseen and reviewed assessments relating to wastewater discharges, stormwater discharges, water abstractions, leachate, and silt pond discharges, with a particular focus on effects on receiving environments and compliance with consent conditions.
12. In providing this evidence, I have considered the following matters as relevant to that topic:
 - (a) The project description provided by OGNZL as set out in Section 6 of the Substantive Application prepared by Mitchell Daysh Limited;
 - (b) The description of the existing environment as set out in Section 4 of the Substantive Application, the effects of MP4 on that environment and their significance, and the proposals to manage those effects as all set out in the assessment of effects in Section 9 of the Substantive Application; and ;
 - (c) The surface and groundwater technical assessment prepared by GHD Limited; and
 - (d) Contemporary national and international guidance for the protection of aquatic ecological values, including:
 - i. Otago Regional Council Regional Plan for Water, Schedule 15 water quality targets
 - ii. The Australia New Zealand Guidelines for fresh and marine quality
 - iii. Ministry for the Environment's acute guidelines for NZ water management
 - iv. United States Environment Protection Authority aquatic life criteria
 - v. The New Zealand Periphyton Guidelines
 - (e) Contemporary national requirements and guidance for drinking-water quality, including:
 - i. Water Services (Drinking Water Standards for New Zealand) Regulations 2022
 - ii. Aesthetic Values for Drinking Water Notice 2022

CONFIRMATION OF CONTENTS OF REPORT AND PROPOSED CONDITIONS

13. I confirm that in my opinion the Report contains an accurate and appropriate description of the environment, the actual and potential effects of MP4, and the recommended actions to manage those effects within my area of expertise.
14. I confirm that in my opinion the contents of the Report may be relied on in making a decision on the approvals sought for MP4, and confirm that provided effects within my area of expertise are managed as proposed in the application those effects will not be unacceptable and will be managed to a standard that I consider meets good practice.
15. I confirm that I have reviewed the conditions that OGNZL proposes for the various approvals being sought as they relate to my area of expertise. I confirm that in my opinion those proposed conditions are appropriate.



Dr Grant Allen

Dated this 2nd day of September 2026.