

**IN THE MATTER**

of the Resource Management Act 1991

**AND**

**IN THE MATTER**

of the Proposed Thames Coromandel District Plan

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**STATEMENT OF EVIDENCE OF IAN KENNETH GRANT BOOTHROYD FOR  
WAIHI GOLD COMPANY LTD (TRADING AS NEWMONT WAIHI GOLD)**

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## 1. QUALIFICATIONS AND EXPERIENCE

- 1.1 My name is Ian Kenneth Grant Boothroyd. I am a Senior Principal and Team Leader Ecology at Boffa Miskell Ltd., Auckland. I hold the qualifications of BSc (Hons) Zoology (University of Manchester, UK), MSc Applied Hydrobiology (University of Wales, UK), and DPhil Freshwater Ecology (University of Waikato, NZ).
- 1.2 I have over 25 years' experience of assessing ecological and resource management matters in New Zealand and overseas. I am an elected Fellow of the Society of Biology, UK (FSB), and I am a Certified Environmental Practitioner (CEnvP) endorsed by the Environmental Institute of Australia and New Zealand (EIANZ).
- 1.3 I am currently President of the NZ Chapter of EIANZ (MEIANZ). I am also a member of the Royal Society of New Zealand (MRSNZ) and a former elected Councillor of the Royal Society of New Zealand (RSNZ). Previously I have worked for the University of Auckland, Golder Associates (NZ) Ltd., National Institute of Water and Atmospheric Research (NIWA) as well as the Hawkes's Bay and the Waikato Regional Councils.
- 1.4 My areas of expertise are in ecology, the assessment of impacts of developments on aquatic and terrestrial resources, assessments of the value of and significance of freshwater and terrestrial environments, and the restoration and mitigation of any environmental effects.
- 1.5 I have co-authored several national protocols for ecological assessment and monitoring. I am currently a co-author in the preparation of 'Guidelines for Ecological Impact Assessment in New Zealand'.
- 1.6 I have undertaken ecological work throughout New Zealand; including within the Thames-Coromandel District.
- 1.7 In this matter, I was engaged by Waihi Gold Company Limited (trading as Newmont Waihi Gold Limited) ("**Newmont**") to provide ecological evidence in relation to its submission through the hearing process on the Proposed Thames Coromandel District Plan ("**Proposed Plan**"). While I was not involved in the preparation of that submission or any other earlier processes, I am familiar with the content of the submission and the issues it raises.

1.8 I have read the Code of Conduct for Expert Witnesses as contained in the Environment Court Consolidated Practice Note (2014), and I agree to comply with it. My qualifications as an expert are set out above. I confirm that the issues addressed in this brief of evidence are within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

## **2. SCOPE OF EVIDENCE**

2.1 This scope of evidence relates solely to Section 6 relating to Biodiversity, of the Proposed Thames Coromandel District Plan.

2.2 My evidence will specifically address the recommendations of the Council Officer in the Section 42A Report ("**Section 42A Report**") on Section 6 (Biodiversity) specifically relating to:

- (a) The introduction of policy 1aa relating to the protection of significant indigenous vegetation and significant habitats of indigenous fauna.
- (b) The introduction of policy 1a relating to subdivision, use and development of sites within areas of non-significant indigenous vegetation and non-significant habitats of indigenous fauna,
- (c) The amendment to Rule 1 relating to the clearance of vegetation outside of the Rural Area, specially 50 m<sup>2</sup> of other vegetation per site, per year.
- (d) The amendment to Rule 2 relating to vegetation in the Rural Area or Conservation Zone, specially 50 m<sup>2</sup> of other vegetation per site, per year.

2.3 My evidence should be read together with the evidence of Mr Robert Schofield, which provides planning evidence in respect of the indigenous vegetation clearance rule.

### **3. RESPONSE TO THE SECTION 42A REPORT ON BIODIVERSITY**

#### **Biodiversity**

3.1 The Section 42A report recommends a number of changes to Section 6, the majority of which are not relevant to Newmont. However, I make brief comment on the following objectives and policies:

(a) Significant indigenous vegetation and habitats of indigenous fauna; and

(b) Objective 1.

#### **Objective 1**

3.2 I support the intent of Objective 1 but in my opinion Objective 1 would better serve its purpose with a word change to:

The full range of the District's indigenous ecosystems and biodiversity is maintained, restored or enhanced to ensure it is in a healthy and functional state.

3.3 Restoration and enhancement (e.g., through pest control, infill planting, buffer planting) are recognised components of improving biodiversity. Restoration plans are frequently used as mechanisms in resource consents to ensure improvements occur to ensure a healthy and functional state of ecosystems and biodiversity.

#### **Policy 1aa**

3.4 I support the inclusion of Policy 1aa that refers specifically to 'protect areas of significant indigenous vegetation and habitats of indigenous fauna'. However, I have concerns with the sole referral to 'protect areas of significant indigenous vegetation and habitats of indigenous fauna'. In my experience 'protect' tends to refer singly to a legal means of protection and an inability to utilise the area.

3.5 However, I note that the policy does allow for 'avoidance, remedy and mitigation of effects of use' as well as mechanisms to manage for 'more than residual effects'; I support the inclusion of these biodiversity management instruments as it provides more flexibility and a greater opportunity for biodiversity improvement than protection alone. In my opinion the inclusion of these mechanisms provides alternative means to restore and enhance biodiversity that do not rely simply on legal protection.

- 3.6 The ability to remedy or mitigate vegetation and habitats before, during or after use can lead to better biodiversity outcomes than simple legal protection.
- 3.7 It is not clear to me what criteria are used to define 'significant indigenous vegetation and habitats of indigenous fauna'. I note that the Section 42A Hearing Report (paragraph 9) refers to the use of the WRC Technical Report 2010/36 to identify potential SNAs in the first instance. I have viewed this report and note that the report is a result of a desktop exercise and that 'The 11 ecological significance assessment criteria of Appendix 3 of the Waikato RPS were used to determine whether an SNA site was significant'. However, I note that criterion 3 was further modified for the purpose of the Technical Report 2010/36.
- 3.8 I also note that the identified potential SNAs are not mapped as part of the plan. For the most part certainty of the status of an SNA can only be gained through a site visit and 'ground-truthing' by a suitably qualified ecologist. As a consequence there is generally hesitancy to committing SNAs to maps until such a time as they can be confirmed and the boundaries accurately mapped.
- 3.9 Nevertheless, it is my opinion there is enormous value in providing maps of the potential SNAs, even if they are marked as provisional. In my opinion rules can be formed that require the assessment of a potential SNA by a 'suitably qualified or certified ecologist' to ground-truth and confirm or otherwise the status of a potential SNA, and the specific criteria to be used can be clearly stated. Together this provides certainty for both a land user and the Council in ensuring that correct actions occur.

#### **Policy 1a**

- 3.10 I generally support the intent of Policy 1a regarding 'non-significant indigenous vegetation and non-significant habitats of indigenous fauna', although I note that 'non-significant vegetation and non-significant habitats of indigenous fauna' is not considered in Part 2 of the RMA. Nevertheless I acknowledge the purpose behind the inclusion of these areas and I support the focus on the functionality and connectivity of ecosystems as aspirations to improve indigenous biodiversity.
- 3.11 However, I am concerned about the inclusion of 'non-significant habitats of indigenous fauna'. I am not sure that this policy has been fully considered

and I find it ambiguous. I point out that indigenous fauna can live and thrive in some most unusual and non-indigenous habitats (e.g., native birds in production forests). In my opinion the policy is unduly restrictive and the plan would benefit from some better wording or guidance on this matter.

#### **4. INDIGENOUS VEGETATION CLEARANCE**

##### *Clearance associated with Exploration*

4.1 It is my understanding that in the hearing on the Mining chapter, Newmont sought an amended rule within Section 37 as follows:

Exploration is a permitted activity, provided:

a) It is in the Industrial Area, the Rural Area or the Conservation Zone;

and

b) Indigenous vegetation clearance does not exceed:

i) 50m<sup>2</sup> within the Industrial Area, or the Rural Area; or

ii) 150m<sup>2</sup> within the Rural Area or Industrial Area where the area of clearance is not identified as significant as ground-truthed by a suitably qualified ecologist; or

iii) 150m<sup>2</sup> within the Conservation Zone where the indigenous vegetation clearance has been approved by the Department of Conservation;

and

c) Prior to commencing exploration a rehabilitation plan is provided to the Council detailing the steps that will be undertaken to rehabilitate the site upon completion of exploration.

4.2 The amended rule provides a baseline of 50 m<sup>2</sup> clearance and the need for additional standards/criteria to be met (in the form of approvals/technical input) associated with clearance of between 50 m<sup>2</sup> and 150 m<sup>2</sup>. In my opinion, the mechanisms included within Newmont's amended rule provide sufficient confidence for ensuring significant indigenous vegetation is not lost, or is restored and/or enhanced; and is thus consistent with Policy 1. I emphasise the mechanisms as:

(a) The area is non-significant indigenous vegetation as ground-truthed by a suitably qualified or certified ecologist, or

(b) Department of Conservation approval is required.

- 4.3 I would add additional mechanisms to the amendment being:
- (a) The identification of criteria to assess significance. It would be reasonable to adopt the criteria already used in the WRC Technical Report 2010/36 to identify potential SNAs; or criteria agreed by Council.
- 4.4 It is my understanding that prospecting and exploration are temporary in nature and that sites are typically rehabilitated. I would be more concerned about the development of new tracks and roads which are typically more permanent in nature and where matters considered in Policy 1a would be much more difficult to achieve. It is my understanding that under the Proposed Plan (Section 29), clearance associated with other land use activities including network utilities, around houses or driveways to houses, tracks or fences or formed road, which are permanent in nature have restrictions related to road or clearance widths, but no restriction on the total area of clearance.
- 4.5 It is my understanding that the provision of a 150 m<sup>2</sup> clearance area for indigenous vegetation is sought on the basis such a clearance area would be consistent with the area of clearance that the Department of Conservation approves to locate drill rigs on non-schedule 4 DOC estates to date. As outlined in the evidence of Mr Grindlay (presented at the Mining hearing on 18 December 2014), a maximum 150 m<sup>2</sup> clearance area is sought so as to accommodate the required exploration activities and structures on site which typically include: a drilling rig, equipment storage, amenities, topsoil, stockpiles etc. I have viewed an exploration site and note the compact manner in which the operation occurs.
- 4.6 I also note that to the best of my knowledge there is no ecological basis to restricting clearance of indigenous vegetation to an area of 50 m<sup>2</sup>. Clearly less disturbance to indigenous vegetation is generally preferable, but in my opinion Policy 1a provides ample provision for use and development and the protection or management of indigenous biodiversity.
- 4.7 In my opinion, to not provide for any indigenous vegetation clearance associated with prospecting or exploration ignores the minimal effects associated with such activities. It is my understanding that prospecting and exploration are temporary in nature and the sites are rehabilitated. This contrasts with other uses that are permanent (e.g., clearance for buildings,

roads, access ways, communication towers, powerline corridors). The absence of a rule singles out prospecting and exploration while at the same time under the Proposed Plan allowing clearance associated with other land use activities including network utilities, around houses or driveways to houses, tracks or fences or formed road, which are permanent in nature with no restriction on the total area of clearance.

## **5. CONCLUSIONS**

- 5.1 For the reasons outlined in my evidence, I largely support the proposed plan provisions relating to Biodiversity, and I largely concur with the recommendations of the Council reporting officer.
- 5.2 However, in my opinion, Objective 1 could be strengthened by including the terms 'maintained, restored or enhanced'.
- 5.3 I support the inclusion of Policies 1a and 1aa with amendments as outlined in my evidence above.
- 5.4 Notwithstanding the comments outlined in my evidence above, in my opinion the objective and policies for Biodiversity within the District Plan provide sufficient direction and flexibility to achieve the aims of the Plan.
- 5.5 As a result I am firmly of the opinion that clearance of 150 m<sup>2</sup> within the Rural Area or Industrial Area for a temporary activity where the area of clearance is not identified as significant and the site is rehabilitated is acceptable and will meet the requirements of the objectives and policies of the plan.

**Ian Boothroyd**

**2 February 2015**