

BEFORE THE INDEPENDENT HEARING COMMISSIONERS

IN THE MATTER of the Resource Management Act 1991 ('the Act')

AND

IN THE MATTER of proposed Canterbury Land and Water Regional Plan ('pLWRP')

BETWEEN **RAYONIER NEW ZEALAND LTD**

Submitter

A N D **CANTERBURY REGIONAL COUNCIL**

Local Authority

**SUPPLEMENTARY EVIDENCE OF KELVIN HUNTER MEREDITH ON BEHALF OF
RAYONIER NEW ZEALAND LIMITED**

Presented for filing by:

Chris Fowler
Adderley Head
PO Box 16, Christchurch 8140
P: +3 353 0231 F: + 3 353 1340
E: chris.fowler@adderleyhead.co.nz

INTRODUCTION

- 1 My full name is Kelvin Hunter Meredith. My role, qualifications and experience are as described in my statement of evidence filed with the independent Hearing Commissioners ('the Commissioners') on 4 February 2013.
- 2 To assist the Commissioners in making their decision on the pLWRP I have prepared this supplementary evidence in response to questions raised at the hearing on 12 March 2013 –
 - 2.1 during presentation of Mr Nick Boyes' evidence that related to timeframes for replanting following vegetation clearance , and
 - 2.2 during my presentation regarding audit of Forest Stewardship Council (FSC) certified forests owned by Rayonier New Zealand Ltd (Rayonier) in the Canterbury Region.

REPLANTING TIMEFRAMES FOLLOWING VEGETATION CLEARANCE IN EROSION PRONE AREAS (RULE 5.150)

- 3 During my presentation of evidence and the associated power point presentation I attempted to explain why the 6 month timeframe required to re-vegetate land following vegetation clearance under Rule 5.150 was not workable for the forestry sector in the context of harvest and replanting operations. . I will provide further context to this explanation to support our original submission and evidence as presented.
- 4 The notified rule allows for a timeframe of 6 months for revegetation following vegetation clearance. Rayonier's amended rule proposes a timeframe of 18 months, as follows (amendments shown as track changes)-

...is a permitted activity provided the following conditions are met:

1. *Any cleared areas are stabilised and where it is not put to its final use shall be revegetated **as soon as practicable and no later than within 6 18** months from the date of the commencement of the vegetation clearance or earthworks, **unless the area is left to revegetate naturally or converted to another land use;***

Explanation of planting timeframes for plantation species

- 5 To understand why 18 months is required to re-establish plantation species we must first understand the harvest cycle and how this relates to "cut-off" dates for land preparation prior to replanting.
- 6 Harvesting of plantation species can occur at variable scales and the size of any cleared area is largely determined by the size of the forest being harvested, which in turn critically influences the harvesting period. For small plantations harvesting

may be completed in a matter of days to weeks. For larger plantations, such as owned by Rayonier/Matariki Forests, there can be multiple harvest areas spread across the estate in various stages of completion. These harvest areas are extremely variable in size and can range in size from 1ha to 20ha approximately and spread over a forest of 1-3,000ha in some instances. Harvesting operations on larger forests can take several months.

- 7 The element of the rule that states the revegetation must occur 6 months from the commencement of the vegetation clearance is not practical in a forestry context because commencement dates in respect of harvesting activities have very little correlation to completion dates. This is illustrated in Table 1 below which shows that an average period of three months generally occurs between the "Start Date" and "Finish Date" of harvest operations.
- 8 Due to the scale and timing of harvest operations a "cut-off" date is set in October for each given year of harvest within our estate. This date is important for successful replanting as any land harvested after this date will not be included in the planting season scheduled for the next year (i.e. between June – September) and instead will be left fallow until the following year. This is also shown in Table 1.
- 9 The rationale for this cut-off date is to allow time for weeds to regenerate on the site and in particular to allow for the regeneration of wilding pines seeded from the harvested forest. These regenerating weeds (including self seeded wilding plantation species) need to be sprayed out with herbicide in order to remove competition for the new crop of plantation trees. If there has been insufficient time allowed for competing weeds to regenerate prior to spraying, spraying will be largely ineffective and these weeds with greater vigour will quickly overtake the site and out-compete the newly planted seedlings.
- 10 As mentioned in my evidence in chief, planting is the most critical phase of the forestry rotation cycle. The planting season for plantation species begins in early June and is completed by mid-September each year. Timing is very important as soil moisture conditions and competitive weed growth do not allow for successful re-establishment of the plantation forest outside of this period.
- 11 Another important aspect to consider when adopting a rule is whether the site is vulnerable to the effect the rule is trying to prevent, which in this case is accelerated erosion as a result of vegetation clearance. A harvested area may have had the trees removed (vegetation clearance) however there is a large amount of material left in situ (slash) from the trees that help mitigate erosive effects. Further to this the site will begin to re-vegetate naturally following harvest, as explained above, with a host of competitive weeds and other plants.

12 The last part of the amendment proposed by Rayonier states "...unless the area is left to re-vegetate naturally". This is included to provide some flexibility in circumstances where for whatever reason harvesting occurs past the harvest "cut-off" date and replanting cannot occur until the replanting season is 18 months later. In these circumstances the period between harvest and replanting may exceed 18 months however the land will not be particularly susceptible to erosion because it is left fallow and will re-vegetate naturally during this period. .

13 Table 1. Harvesting and Replanting timeframes

| | Area ha | Start Date | Finish Date | Replant Date |
|--------------------|---------|------------|-------------|--------------|
| Harvest Area 1 | 5 | Jan-12 | Mar-12 | Jun-13 |
| Harvest Area 2 | 12 | Feb-12 | Apr-12 | Jun-13 |
| Harvest Area 3 | 7 | Mar-12 | May-12 | Jun-13 |
| Harvest Area 4 | 22 | Apr-12 | Jun-12 | Jun-13 |
| Harvest Area 5 | 18 | May-12 | Jul-12 | Jun-13 |
| Harvest Area 6 | 20 | Jun-12 | Aug-12 | Jun-13 |
| Harvest Area 7 | 8 | Jul-12 | Sep-12 | Jun-13 |
| Cutoff Date | | | | |
| Harvest Area 8 | 16 | Aug-12 | Oct-12 | Jun-14 |
| Harvest Area 9 | 24 | Sep-12 | Nov-12 | Jun-14 |
| Harvest Area 10 | 6 | Oct-12 | Dec-12 | Jun-14 |
| Harvest Area 11 | 9 | Nov-12 | Jan-13 | Jun-14 |
| Harvest Area 12 | 14 | Dec-12 | Feb-13 | Jun-14 |
| Harvest Area 13 | 14 | Jan-13 | Mar-13 | Jun-14 |
| Harvest Area 14 | 12 | Feb-13 | Apr-13 | Jun-14 |

Area Replanted 2013 92 hectares
Area Replanted 2014 95 hectares

Suggested amendments

14 As explained above the timeframes provided for in the proposed plan are not workable for plantation forestry re-establishment profiles. The amended timeframe proposed by the Rayonier rule allows for an 18 month replanting timeframe which is much more aligned with actual operational constraints.

15 I understand that this may not be acceptable for all land uses where vegetation clearance within these zones and a separate rule specifically for the reestablishment of plantation species may be more appropriate.

16 Horizons Regional Council have the following forestry specific rule within the One Plan under Rule 12-2 Forestry -

Any area of forestry that is harvested (other than firebreaks, tracks*, landing sites* or areas in (a) and (b)) must be planted or replanted to protect from erosion as soon as practicable and no later than 18 months from the date of the harvesting, unless the area is left to re-vegetate naturally.*

- 17 I consider that inclusion in the pLWRP of a specific re-vegetation rule for plantation forestry like that included in the Horizons One Plan would answer the concerns I have discussed above.

FOREST STEWARDSHIP COUNCIL AUDIT PROCESS

- 18 The Forest Stewardship Council (FSC) is an independent, non-governmental, not for profit organisation established to promote the responsible management of the world's forests. It provides standard setting, trademark assurance and accreditation services for companies and organisations interested in responsible forestry. Products carrying the FSC label are independently certified to assure consumers that they come from forests that are managed to meet the social, economic and ecological needs of present and future generations. FSC maintains representation in more than 45 countries. Currently the management of over 1 million of the 1.8 million hectares of plantation forest in New Zealand is FSC certified
- 19 Rayonier Matariki Forests have the entire estate (178,960ha) under FSC which is independently audited by SGS Qualifor on an annual basis. SGS are the world's leading inspection, verification, testing and certification company. They have more than 75,000 employees, and operate a network of more than 1,500 offices and laboratories around the world.
- 20 The audit process operates on a 5 year certification basis with the initial audit be a very intensive and extensive independent review and verification of company-wide systems and processes based on FSC 10 Principles and Criteria. This initial audit was undertaken in June 2011 by 3 auditors and took 2 weeks to complete at significant cost. Part of this initial process is an extensive stakeholder survey. Once initial certification has been achieved there is an annual surveillance audit undertaken. This annual audit is a snapshot of the entire estate and in our case occurred in June 2012 and over 5 full days involving 1 auditor.
- 21 Following completion of the audit draft reports are produced which are independently reviewed by SGS in South Africa. Once these reports are approved for release a publicly available summary, which can be accessed by any member of the public, is posted on the FSC website. A copy of the Forest Management Certification Report (the Report) completed by SGS for Rayonier and Matariki Forests after the June 2012 audit is attached as **Appendix A** to my supplementary evidence.
- 22 The outcome of audit process results in actions that need to be followed up by the certificate holder. These actions are based on the following

- (a) Observations – these are minor actions that must be addressed by the time of next audit and can escalate into Corrective Actions Request (CAR)
- (b) Minor Corrective Action Request (CAR) – these must be addressed within 6 months
- (c) Major Corrective Action Request (CAR) – These must be addressed within 1 month and may result in the certification being cancelled if not addressed.

23 The Report records at Section 9 (page 39) SGS's certification decision that Rayonier Matariki Forest's forest management of all company forests in the five different regions can be certified. At Section 10 (page 39) the Report discusses the status of Major CARs and Minor Cars and records that there are no Major CARs to be addressed and only three minor CARs were identified during the June 2012 audit.

I hope the above comments are of some assistance.

Kelvin Hunter Meredith
4 April 2013

The Forest Management Certification Report
(Doc. Number: AD 36A-12; Dated 21 Sep 2010)