

BEFORE THE HEARING COMMISSIONERS

IN THE MATTER of the Resource Management Act
1991 ("**the Act**")

AND

IN THE MATTER of the Resource Management Act 1991
and the Environment Canterbury
(Temporary Commissioners and
Improved Water Management) Act
2010

AND

IN THE MATTER of the hearing of submissions on the
Proposed Canterbury Air Regional Plan

**STATEMENT OF REBUTTAL EVIDENCE BY LYNETTE PEARL WHARFE
FOR HORTICULTURE NEW ZEALAND**

9 OCTOBER 2015



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QUALIFICATIONS AND EXPERIENCE

1. My name is Lynette Pearl Wharfe, my qualifications and experience are set out in my evidence in chief.

SCOPE OF REBUTTAL EVIDENCE

2. My rebuttal evidence will address the following matters:
 - (a) Objectives
 - (b) Ambient Air Quality Guidelines
 - (c) Localised and ambient air quality
 - (d) Rule framework
 - (e) Reverse sensitivity policies and definition
 - (f) Definition of sensitive activities
 - (g) Outdoor burning
 - (h) Agrichemical spraying
3. In many cases there is considerable consensus between parties about the issues although a range of solutions and alternative wording are presented.

OBJECTIVES

Objective 5.8

4. Horticulture NZ sought changes to Objective 5.8 as it was not considered to read as an objective which I addressed in my Evidence in Chief.
5. A number of statements of evidence have supported an amended objective but suggested slightly amended wording.
6. Mr Le Marquand (6.3) supports the reworded objective but suggests that the word 'expectation' is added:

Manage air quality to reflect the different receiving environments across the region, taking into account the location expectations and characteristics of the background receiving environment.

7. Mr Purves for Lyttelton Port Company also supports the change to Objective 5.8 in principle and suggests some slight amendments as shown in the strikethrough below:

Manage air quality to reflect the different receiving environments across the region, taking into account the ~~location~~ expectations ~~and~~ characteristics of the background receiving environment, including the patterns of land use.

8. In my opinion the inclusion of 'expectations' of the background receiving environment assists in clarifying what is anticipated in the various receiving environments so would prefer an amendment as follows:

Manage air quality to reflect the different receiving environments across the region, taking into account the location, expectations and characteristics of the background receiving environment, including the patterns of land use.

Objective 5.9

9. Mr Le Marquand seeks change to Objective 5.9 which I support in principle but seek that the objective isn't limited to 'industrial discharging activities'.

New objective

10. Mr Matthews¹ for Carter Holt Harvey Ltd supports a new objective that provides for recognition and provision for existing industrial, service and rural productive activities that discharge to air.
11. I support the inclusion of such an objective.

AMBIENT AIR QUALITY GUIDELINES

12. The Proposed Plan seeks to use the MfE Ambient Air Quality Guidelines (2002) (**AAQG**) in a number of policies and rules. Horticulture NZ made submissions and further submissions regarding such use.
13. A number of statements of evidence have set out detailed reasons why the proposed use of the ambient air quality guidelines is inappropriate. These include:

¹ Mr Richard Matthews EIC for Carter Holt Harvey Ltd Para 4.7

- (a) Richard Matthews for Carter Holt Harvey Ltd
 - (b) David Le Marquand for the Oil Companies
 - (c) Mr Chris Hansen for Ravensdown Fertiliser Co-operative Ltd
 - (d) Justine Ashley for Fonterra Co-operative Group Ltd
 - (e) Kevin Bligh for Canterbury Aggregate Producers Group
 - (f) Ms Carmen Taylor for St George's Hospital
 - (g) Tim Ensor for Synlait Milk Ltd.
14. The statements of evidence have been informed by technical evidence on behalf of a number of submitters including:
- (a) Richard Chilton for Canterbury Aggregate Producers Group and Fonterra Co-operative Group Ltd
 - (b) Roger Cudmore for Fonterra Co-operative Group Ltd and Gelita Ltd
 - (c) Jeff Bluett for Lyttelton Port Company Ltd and ST Georges Hospital
 - (d) Ms Prue Harwood for Synlait Milk Ltd
15. There is a degree of consensus that it is inappropriate to use the Ambient Air Quality Guidelines (2002) as proposed in the plan, particularly as a consent trigger.
16. Policies 6.2, 6.3 and 6.21 and Rules 7.17 and 7.18 are relevant in this regard.
17. I concur with that position and support the evidence that demonstrates that such use is inappropriate and changes that have been sought in this respect to ensure that the use is limited to providing an indicator of the regional ambient air quality, and not as a measure for a specific consent or activity, or as a 'de factor point source discharge standard' as described by Mr Le Marquand.

LOCALISED AND AMBIENT AIR QUALITY

18. The submission by Horticulture NZ sought changes to include definitions for localised and ambient air quality which I addressed in my evidence in chief (5.3- 5.8) and identified

that there is a wider debate about the differentiation between ambient and localised air quality in the pCARP.

19. A number of statements of evidence have considered issue of localised and ambient air quality including:
 - (a) Mr Roger Cudmore for Fonterra Co-operative Group Ltd and Ravensdown Fertiliser Co-operative Ltd
 - (b) Justine Ashley for Fonterra Co-operative Group Ltd
 - (c) Tim Ensor for Synlait Milk Ltd.
 - (d) Ms Carmen Taylor for St George's Hospital
20. Mr Cudmore sets out a clear rationale for why a differentiation between localised and ambient air quality is appropriate to achieve an effects based approach to managing air quality.
21. While the focus of Mr Cudmore is, understandably, on industrial discharges it is also relevant to note that some discharges in rural areas have localised effects, such as agrichemical spraying and fertiliser application. In assessing the effects of such activities it is important to recognise that the effects are localised rather than on ambient air quality.
22. A definition for localised air quality is set out at Para 63 in Mr Cudmore's evidence. I generally support that definition, noting that the caveat regarding recognition of localised effects in rural areas.
23. Ms Ashley sets out a definition² for ambient air quality which ensures that the distinction between localised and ambient air quality is clear. I support the inclusion of that definition in the pCARP.
24. I also support the inclusion of a new Objective 5.10 as sought by Ms Ashley to specifically provide for localised air quality effects to ensure that the approach in the pCARP reflects the range receiving environments in the Region, but seek to ensure that it will apply to all localised air quality, not just those related to industrial discharges.
25. In my opinion the changes sought will give effect to the CRPS and assist in providing for effective and efficient management of air quality in the Canterbury Region by

² Ms Justine Ashley EIC Appendix 2

reflecting the nature of the receiving environment into which discharges occur.

RULE FRAMEWORK

Rules 7.17 and 7.18

26. The s42A Report recommends that Rules 7.17 and 7.18 be deleted and replaced with new rules based on BPO.
27. A number of statements of evidence address the issue as to what should be included, if anything, in Rules 7.17 and 7.18 in the absence of recommended rules by Council.
28. It is generally agreed that there is uncertainty in the proposed rules.
29. Mr Hansen for Ravensdown Fertiliser Co-operative Ltd seeks that Rule 7.17 provide for large scale and industrial and trade activities outside the Clean Air Shed and Rule 7.18 for large scale and industrial and trade activities within the Clean Air Shed as restricted discretionary activities with similar matters of discretion as Rule 7.14.
30. Such an approach would enable large scale and industrial and trade activities to seek resource consents relative to the sensitivity of the receiving environment. This would include where resource consent for burners in greenhouses is sought in the rural area.
31. In the absence of alternative recommendations from the Council I support the approach taken by Mr Hansen.

POLICIES AND DEFINITION FOR REVERSE SENSITIVITY

32. Horticulture NZ made a number of submissions and further submissions relating to the provisions for reverse sensitivity in the pCARP. I addressed reverse sensitivity in my EIC in respect of Policies 6.6- 6.8 and definition.
33. The matter of reverse sensitivity is addressed in a significant number of statements of evidence, particularly regarding Policy 6.7. I concur with the statements that seek deletion of Policy 6.7 as it is inappropriate, creates uncertainty and is contrary to the accepted understanding of reverse sensitivity.

34. A number of statements of evidence address the definition of reverse sensitivity including:
- (a) Mr David Le Marquand for the Oil Companies
 - (b) Mr Kelly Parekowhai for Transpower
 - (c) Ms Justine Ashley for Fonterra Co-operative Group Ltd
35. The discussion identifies that there are a range of opinions as to how reverse sensitivity should be defined. Given this range of opinions I consider that it is important that reverse sensitivity is defined to ensure that there is clarity as to what it means. This is important to ensure that every district plan does not seek to include different definitions when giving effect to the CRPS and the pCARP.
36. I agree with Ms Ashley³, Mr Le Marquand and Mr Parekowhai that the definition recommended in the s42A Report is not appropriate. It would be better that a definition should reflect the directions in the CRPS and the potential for complaint. As a consequence I sought an amended definition in my EIC that I consider addresses a number of issues identified by other planning experts.
37. Having considered these statements it is my opinion that inclusion of a definition of reverse sensitivity is appropriate and will assist in implementing the pCARP and consider that the amended definition in my EIC is appropriate.

DEFINITION SENSITIVE ACTIVITIES

38. Horticulture NZ sought that the definition of sensitive activity be amended to include non-target plants and crops. The s42 A Report recommends that such crops be included in the definition and I support that inclusion.
39. However the evidence of Mr Kevin Bligh for Canterbury Aggregate Producers Group and Ms Hayward for PIANZ oppose the inclusion of non-target crops in the definition of sensitive areas.
40. Mr Bligh⁴ relies on the evidence of Mr Richard Chilton⁵ which focuses on dust impacts on crops and that the addition to the

³ Ms Justine Ashley EIC for Fonterra Co-operative Group Ltd Para 47

⁴ Mr Kevin Bligh EIC for Canterbury Aggregate Producers Group para 76

⁵ Mr Richard Chilton EIC for Canterbury Aggregate Producers Group Para 12

definition is problematic as it does not relate to the level of potential adverse effects.

41. Ms Hayward⁶ considers that the recommended change to the definition places undue requirements on rural production activities. Ms Hayward identifies that odour from intensive farming would not result in an adverse effect on any plant or crop. I concur with her on this, therefore the addition is unlikely to have an impact on poultry farmers.
42. Mr Le Marquand⁷ also addresses the definition of sensitive activities and seeks that there is a differentiation based on sensitive activities and sensitive areas as the recommended definition is 'problematic and non-sensical' and will create confusion and administrative complications.
43. I agree with Mr Le Marquand that a separation between activities and areas would be clearer and avoid the pitfalls he has identified. The definitions included in Para 5.18 of his evidence would assist in clarifying the issues and identifying that the it is the sensitivity to air discharges that is to be addressed.
44. While the main focus for Horticulture NZ for inclusion of non-target plants and crop are adverse effects of agrichemical spray drift on non-target plants and crops beyond the boundary of the property where the application is occurring the concern is not limited to such effects. For instance dust, fertiliser drift and ash can impact on crops particularly just prior to harvest and can also impact on organic accreditation.
45. Therefore I support the inclusion of non-target plants and crops as being afforded consideration under the Plan but am open to recommendations as to how that could be achieved while addressing the concerns of the submitters.

OUTDOOR BURNING

46. The Horticulture NZ submission sought a number of changes to the outdoor burning provisions and also further submissions supported other changes sought by other submitters which I addressed in my Evidence in Chief.

⁶ Ms Emma-Jane Hayward EIC for Poultry Industry Assoc of NZ Para 6.1-6.7

⁷ Mr David Le Marquand EIC for The oil Companies Para 5.11

47. The evidence of Mr Nick Pyke on behalf of Federated Farmers has specifically addressed the issues relating to outdoor burning of crop residue and the importance of the tool in managing stubble.
48. I note that Mr Pyke identifies that the development of the crop residue burning buffer areas is not strongly supported by some of the data available and that stubble burning could be effectively managed through Farm Environment Plans.
49. Based on the evidence presented by Mr Pyke I consider that use of Farm Environment Plans is an appropriate approach for managing potential effects of crop residue burning.
50. The evidence of Ms Sparrow for Waimakariri District Council also addresses outdoor burning matters and seeks changes to Rule 7.10 including the 5km setback from urban areas and outdoor burning during winter months in clean air zones.
51. Provision for outdoor burning outside or urban areas during winter months in Clean Air Zones is currently provided in the NRRP subject to conditions. It is considered that the possibility of such burning leading to not meeting the NESAQ is low. This is particularly relevant given the proposed changes to the Clean Air Zones that incorporates significant rural areas within a single Clean Air Zone, rather than as a separate Zone outside the urban area.
52. I support the change sought regarding the wind direction in respect of whether outdoor burning should occur. I addressed this matter in my Evidence in Chief and concur with the findings of Ms Sparrow.

AGRICHEMICAL SPRAYING

53. The evidence of Ms Jane Whyte for Meridian Energy Ltd addresses concerns regarding discharges to air from weed control activities. (Para 38). I note that her concern relates to whether the weed spraying activities of Meridian are provided for in the Plan and seeks a specific rule relating application of vertebrate toxic ages or herbicides to enable the aerial spraying of aquatic weeds, although the rule sought isn't specific to aerial applications.
54. The rule sought by Ms Whyte would enable applications of herbicides without consideration of a range of best management practices. Such an approach is not supported.

55. I have supported the submission of Horticulture NZ in respect of changes to Rule 7.72 for agrichemical use. In my opinion the rule sought by Horticulture NZ would enable the activities undertaken by Meridian to be within the scope of an amended rule, noting that applications to water are addressed in the Proposed Land and Water Plan.

CONCLUSION

56. I have reviewed the submitters' evidence and made comments as above. I confirm that my evidence in chief stands.

Lynette Wharfe
9 October 2015