

IN THE MATTER OF the Resource Management Act 1991

AND

IN THE MATTER OF a primary submission and further submissions on the Proposed Environment Canterbury Land and Water Regional Plan

BY the Poultry Industry Association of New Zealand (Inc) ('PIANZ') and Egg Producers Federation of New Zealand (Inc) ('EPFNZ')

Submission numbers: C15C/153037

IN RESPECT OF Plan Change 4 of Environment Canterbury Land and Water Regional Plan

STATEMENT OF PRIMARY EVIDENCE OF EMMA-JANE HAYWARD

29 January 2015

1.0 INTRODUCTION

- 1.1 My name is Emma-Jane Hayward. I hold a Bachelor of Resource and Environmental Planning Degree from Massey University, Palmerston North. I am a Grad Plus member of the New Zealand Planning Institute and am a Planner with Harrison Grierson Consultants Limited.
- 1.2 I have four years' planning experience within district planning, resource consent preparation and consent processing. Full details of my relevant past experience are contained in Attachment A to this evidence.
- 1.3 My involvement in Plan Change 4 of Canterbury Land and Water Regional Plan (the 'LWRP') began when I reviewed the feedback provided by my colleague, Lee Marr on behalf of the Poultry Industry Association of New Zealand (Inc) ('PIANZ') and the Egg Producers Federation of New Zealand (Inc) ('EPFNZ') on the draft version Canterbury Land and Water

Regional Plan. I also reviewed the primary and further submission provided by my colleague, Hannah Miln, on behalf of PIANZ/EPFNZ on the notified Plan.

1.4 I provide planning evidence today on behalf of PIANZ/EPFNZ in relation to the Plan Change 4 of the Canterbury Land and Water Regional Plan.

2.0 CODE OF CONDUCT

2.1 Although this is not an Environment Court hearing I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2014 and I agree to comply with it. Except where I state that I am relying upon the specified evidence of another person, my evidence in this statement 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 which I express.

3.0 SCOPE OF EVIDENCE

3.1 My evidence is set out as follows:

- The Submission
- Discussion; and
- Conclusion.

3.2 In preparing my evidence I have read the proposed notified Plan Change 4 of the Canterbury Land and Water Plan dated 12 September 2015 and the Section 42A report prepared by Environment Canterbury dated 18 December 2015, containing the memorandum from Dr Lisa Scott, *'Advice on EPFNZ/PIANZ submission on the exclusion of poultry washdown water from the definition of 'Animal Effluent' in the LWRP Plan Change 4'*.

4.0 THE SUBMISSION

4.1 PIANZ/EPFNZ's primary submission requested that the proposed definition of animal effluent be amended, to read "*Animal effluent means faeces and urine from animals other than humans, including associated process water, wash-down water, contaminants and sludge but excluding solid animal waste. For the purposes of this definition, it does not include poultry washdown water and incidental animal effluent present in livestock processing waste streams.*

4.2 PIANZ/EPFNZ's primary submission also provided data from a one-off water quality tests from two poultry sheds on a single Canterbury farm. This data shows the nitrate level in poultry washdown water to be similar in composition to dairy and piggery washdown water. However, the volume of washdown water is shown to be considerably less than that of dairy or piggery activities.

5.0 DISCUSSION

5.1 Poultry sheds are typically cleaned in the following manner:

5.1.1 Breeder operations – At the end of the 46 week cycle (i.e. once a year) the birds are removed from the site by contractors and the sheds are cleaned out over a 6 week period before new birds arrive.

5.1.2 Broiler operations – The farm operates 6 cycles per year on average. At the end of the 42 day run, the chickens are removed from the site by contractors and the sheds are cleaned out, typically over a week.

5.2 In both situations the clean out process involves contractors collecting and removing all litter from the sheds and disposing of the litter off-site. The sheds are then washed down (water blasted). This wash water is then irrigated in a controlled manner to the surrounding paddocks (during one day).

5.3 The washdown water discharge is approximately 6-10m³ per shed, depending on the size of the poultry shed. Standard farms range from 2 to 8 poultry sheds. Therefore, the higher end of the scale would be a broiler farm with 8 large sheds discharging approximately 480m³ of washdown water per year¹.

5.4 This volume can be compared with washdown water that would be generated annually by a dairy farm.

¹ 8 sheds x 10m³ washdown water x 6 cycles per annum = 480m³ washdown water per annum

- 5.5 Using the average discharge figure of 75l/cow/day provided by the Dairy NZ calculator² and using my own experience from a dairy farm in Southland running an average herd of 550 cows, the total amount of washdown water would be 12,375m³ per year³.
- 5.6 This comparison shows that the washdown water expected from a poultry farm using these examples is 3.8% of that expected from a dairy farm. This of course is not surprising as dairy washdown is done daily or twice daily, whereas washdown of poultry sheds is done at most several times a year. I note that this point has been picked up by Dr Scott in her memo to Mr McCallum-Clark dated 18/11/15.
- 5.7 The volume of washdown water is significantly different between these farming practices and the potential effects also considerably different. In my view, it is appropriate that the regularity regime recognise the significant differences in the annual volumes of washdown water generated by poultry farms in relation to dairy.
- 5.8 The best approach to do this would be to address this issue within the rules, for example to have a permitted activity threshold for washdown water (i.e. a volume below which no consent is required). However, given that only the definition is proposed to be amended in Plan Change 4 a pragmatic approach would be to address the issue by excluding washdown water of a very low volume as produced by poultry farms (there by obviating the need for consent be this threshold).
- 5.9 Therefore, I seek an alternative relief through the amendment of the animal effluent definition to excluded washdown water under 500m³ within any 12 month period per farm.
- 5.10 I now propose that the definition should be amended to, *“Animal effluent means faeces and urine from animals other than humans, including associated process water, wash-down water, contaminants and sludge but excluding solid animal waste. For the purposes of this definition, it does not include washwater with volume less than 500m³ within any 12 month period per farm and incidental animal effluent present in livestock processing waste streams.”*

² Dairy NZ has prepared a ‘Farm Dairy Effluent –How to use the Dairy Effluent Storage Calculator’ http://www.massey.ac.nz/~flrc/required/FDE%20Calculator/How_to_use_DESC.pdf and states that the washwater volume figure average is 75l/cow/day but can vary anywhere from 30-120l/cow/day. I have applied the average of 75l/cow/day.

³ 75l/cow/day times 550 cows equals 41,250l/day. Multiplied by the number of milking days (assumes 300 days for a seasonal milking farm) this would equal 12,375,000l or 12,375m³ per years.

6.0 CONCLUSION

6.1 In conclusion, I recommend an alternative relief to address the concerns of the submission.

A handwritten signature in black ink, appearing to read 'Emma-Jane Hayward', with a long horizontal flourish extending to the right.

Emma-Jane Hayward

29 January 2015

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Attachment A: Emma-Jane Hayward, Relevant Experience

Palmerston North City Council

2011 – 2015 – Planner

- Processing of resource consent application for both subdivision and land use on behalf of the Palmerston North City Council.
- Processing non-notified and limited notified consent on behalf of Palmerston North City Council.

Harrison Grierson Consultants Limited

2015 to present – Planner

- Policy formulation on behalf of the Poultry Industry Association of New Zealand and Egg Producers Federation of New Zealand, including the preparation of feedback, submissions, and participation in consultative processes and mediation.