From:	Lee Marr
To:	Mailroom Mailbox
Subject:	Submission for Plan Change 4 to the Canterbury Land and Water Regional Plan
Date:	Monday, 12 October 2015 4:28:38 p.m.
Attachments:	image001.png image002.png S001v1-PC4 to the ECAN LWRP-hvmFINAL.pdf

Please find attached a submission on behalf of the Egg Producers Federation of New Zealand (EPFNZ) and Poultry Industry Association of New Zealand (PIANZ) in relation to Plan Change 4 to the Canterbury Land and Water Regional Plan.

We would appreciate if you could confirm that this submission has been received within the required time period.

Regards,

LEE MARR
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HARRISON GRIERSON. COM

Submission

ON A PUBLICLY NOTIFIED PROPOSED POLICY STATEMENT OR PLAN

Under Clause 6 of the First Schedule to the Resource Management Act 1991

TO	Environment Canterbury Regional Council
SUBMISSION ON	Plan Change 4 of the Canterbury Land and Water Regional Plan
NAME OF SUBMITTER	Egg Producers Federation of New Zealand, Poultry Industry Association of New Zealand

This is a submission on Plan Change 4 of the Canterbury Land and Water Regional Plan (Plan Change 4).

The Egg Producers Federation New Zealand (EPFNZ) and Poultry Industry Association of New Zealand (PIANZ) could not gain an advantage in trade competition through submission.

SUBMISSION IN SUPPORT SUBJECT TO THE FOLLOWING

1. **The specific provisions of the proposal that my submission relates to are:**

   This submission relates to Section 2.9: Definitions, Translations and Abbreviations.

2. **EPFNZ and PIANZ's submission is:**

   The submitters are largely supportive of Council's attempt to fix implementation issues of the Canterbury Land and Water Regional Plan (LWRP) through Plan Change 4.

3. **Requested Changes to Plan Change 4 Provisions**

   The submitters request that the following amendment could be made to the provisions. The requested amendment is listed below:

4. Definition – Animal Effluent

   Poultry washdown water is the liquid that is discharged to farmland after the clean out process of poultry sheds. Poultry washdown water is caught under the definition of 'Animal effluent' in the LWRP and amendments to this definition have been proposed as part of Plan Change 4.

   Poultry washdown water is derived from the following process:

   - Poultry sheds are bedded with wood shavings which absorb the poultry manure during a run. The final solid product, known as litter, is taken off site by contractors.
   - Poultry sheds are then washed down (water blasted) over the course of one day where the liquid (which is almost completely water) is typically drained onto surrounding grassed areas where it naturally soaks into the ground.

   The washwater discharge is a liquid which contains small amounts of contaminant (including nitrogen). Please refer to Section 5.0 of this submission for sample nitrogen levels located in poultry washdown water.

   For breeder and rearer poultry farms clean out happens at the end of a 46 week cycle (once a year) as the birds are removed from the site by contractors and sheds are cleaned out over a 6 week period. For broiler poultry farms the clean out process occurs at 6 cycles per year on average. This happens at the end of a 42 day run, when chickens are removed by contractors.

   The submitter requests that the definition of animal effluent is amended to allow for poultry washdown water to be a Permitted activity.

   Rule 5.36 of the LWRP controls the discharge of water containing animal effluent originating from a stock holding area as a Restricted Discretionary activity (providing the relevant standards are met). The

submitter requests that poultry effluent is explicitly excluded from the 'Animal effluent' definition to allow this discharge to be a Permitted activity.

Relief requested:

The submitters request that the proposed definition of animal effluent be amended as below. Council changes have been shown underlined and changes requested by the submitters have been made in **underline and Bold**.

Animal effluent

*Animal effluent means faeces and urine from animals other than humans, including associated process water, wash-down water, contaminants and sludge but[M] 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.[M]*

5. Nutrients found in Poultry Washwater

To support the relief requested, please find attached a washdown water test of a poultry farm in Christchurch (refer to **Appendix 1).** This is an indication of nitrogen levels in poultry washdown water. We note that the nutrient levels may vary between poultry sheds.

The permitted baseline for discharging nitrogen onto land in all nutrient allocation zones can be taken from Rule 5.41, where the farming activity is permitted providing the nitrogen loss calculation for the property does not exceed 10kg per ha per annum (and the property is not in a Lake Zone). The nitrogen loss calculation has not been done in this case, and we note that calculation is for the discharge of nitrogen below the root zone as modelled with OVERSEER. However, the washdown water test results in **Appendix 1** have been used to illustrate the potential overall levels of nitrogen discharged from poultry washdown.

Poultry washdown from two sheds in the Christchurch region was found to have 220g/m³, with approximately 10m³ of water used for a large poultry shed during washdown. Therefore, one large breeder or rearer poultry shed would discharge approximately 2.2kg/m³ total nitrogen per annum and one large broiler poultry shed would discharge approximately 13.2kg/m³ total nitrogen per annum. This has been assumed based on the average amount of washdown for each poultry activity, the findings in **Appendix 1** and the approximate amount of water used during washdown.

This is only total nitrogen over the entire year. Allowing for leachate rates, the actual amount of nitrogen leached from poultry washwater would be acceptable and likely to be below the level that would cause any adverse effect.

6. EPFNZ and PIANZ seek the following decision from the regional authority:

a) That the definition of 'Animal effluent' be reworded to exclude poultry washdown water from Section 2.9.

or

b) Such other alternative relief to satisfy the concerns of the submitters.

7. The submitters wish to be heard in support of their submission.

8. If others make a similar submission we will consider presenting a joint case with them at a hearing.

Signature: 

Date: 12 October 2015

Address for Service of Submitter:
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ANALYSIS REPORT

Client:	Tegel Foods Limited	**Lab No:**	1436141	SPv1
Contact:	Mike Block	**Date Registered:**	09-Jun-2015	
	C/- Tegel Foods Limited	**Date Reported:**	19-Jun-2015	
	PO Box 16016	**Quote No:**		
	Hornby	**Order No:**		
	CHRISTCHURCH 8441	**Client Reference:**	Wash Down Water	
		Submitted By:	Mike Block	

Sample Type: Aqueous

		Sample Name:	Mandeville - Shed 1 08-Jun-2015 1:00 pm	Mandeville - Shed 2 08-Jun-2015 1:00 pm			
		Lab Number:	1436141.1	1436141.2			
Total Potassium	g/m³		310	300	-	-	-
Total Sulphur	g/m³		86	83	-	-	-
Total Nitrogen	g/m³		220	220	-	-	-
Nitrate-N + Nitrite-N	g/m³		23	22	-	-	-
Total Kjeldahl Nitrogen (TKN)	g/m³		196	198	-	-	-
Total Phosphorus	g/m³		28	27	-	-	-

SUMMARY OF METHODS

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively clean matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis.

Sample Type: Aqueous

Test	Method Description	Default Detection Limit	Sample No
Filtration, Unpreserved	Sample filtration through 0.45µm membrane filter.	-	1-2
Total Digestion	Boiling nitric acid digestion. APHA 3030 E 22nd ed. 2012 (modified).	-	1-2
Total Digestion	Boiling nitric acid digestion. APHA 3030 E 22nd ed. 2012 (modified).	-	1-2
Total Kjeldahl Digestion	Sulphuric acid digestion with copper sulphate catalyst.	-	1-2
Total Phosphorus Digestion	Acid persulphate digestion.	-	1-2
Total Potassium	Nitric acid digestion, ICP-MS, trace level. APHA 3125 B 22nd ed. 2012.	0.053 g/m³	1-2
Total Sulphur	Nitric acid digestion, ICP-OES (method may not fully account for H_2S due to volatilisation during digestion). All forms of oxidised and organic sulphur will be determined by this method.	0.5 g/m³	1-2
Total Nitrogen	Calculation: TKN + Nitrate-N + Nitrite-N. Please note: The Default Detection Limit of 0.05 g/m³ is only attainable when the TKN has been determined using a trace method utilising duplicate analyses. In cases where the Detection Limit for TKN is 0.10 g/m³, the Default Detection Limit for Total Nitrogen will be 0.11 g/m³.	0.05 g/m³	1-2
Nitrate-N + Nitrite-N Screen	Total oxidised nitrogen. Automated cadmium reduction, flow injection analyser. APHA 4500-NO3- I 22nd ed. 2012 (modified).	0.10 g/m³	1-2
Total Kjeldahl Nitrogen (TKN)	Total Kjeldahl digestion, phenol/hypochlorite colorimetry. Discrete Analyser. APHA 4500-N_{org} D. (modified) 4500 NH_3 F (modified) 22nd ed. 2012.	5 g/m³	1-2
Total Phosphorus	Total phosphorus digestion, ascorbic acid colorimetry. Discrete Analyser. APHA 4500-P B & E (modified from manual analysis) 22nd ed. 2012. Also modified to include the use of a reductant to eliminate interference from arsenic present in the sample. NWASCA, Water & soil Miscellaneous Publication No. 38, 1982.	0.2 g/m³	1-2

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Samples are held at the laboratory after reporting for a length of time depending on the preservation used and the stability of the analytes being tested. Once the storage period is completed the samples are discarded unless otherwise advised by the client.

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Carole Rodgers-Carroll BA, NZCS
Client Services Manager - Environmental Division