

SUBMITTER Tegel Foods Limited

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SUBMITTER No. 561

IN THE MATTER OF the Resource Management
Act 1991

AND

IN THE MATTER OF Submissions to the
Environment Canterbury
Proposed Natural Resources
Regional Plan (Variation 1)
July 2004.

STATEMENT OF EVIDENCE OF LEE CAYGILL MARR

INTRODUCTION

1. My name is Lee Caygill Marr. I hold a Bachelor of Arts (Geography) and a Masters of Planning Practice (Honours) from the University of Auckland, Auckland, New Zealand. I have worked as a Planner for four years and am a Senior Planner with Harrison Grierson Consultants Limited. I am familiar with rural resource planning issues.
2. I appear in connection with the Submission lodged on behalf of Tegel Foods Limited ('Tegel') in respect of Proposed Variation 1 of the Proposed Canterbury Natural Resources Regional Plan – Chapter 4 (Water Quality).
3. The evidence I will present today will address the following points in respect of the submission prepared by Harrison Grierson on behalf of Tegel –
 - Poultry production in New Zealand and the Canterbury region;
 - Activity Rule WQL5 Condition 2;
 - Activity Rule WQL6.

THE POULTRY INDUSTRY IN NEW ZEALAND

4. The poultry industry is a dynamic sector of New Zealand's primary production industry, and it includes the production of both poultry meat and eggs. The industry is expanding rapidly, and is the major intensive livestock industry in New Zealand. In the mid-1960s the production of poultry meat using specialist meat breeds was in its infancy in this country, and consumption averaged about 1kg per person per year.
5. By comparison, in the year ending 2006, each New Zealander consumed an average of around 36kg of poultry meat, accounting for 36% of total meat consumed. Cheaper production, lifestyle changes, and consumer perception have seen poultry consumption continue to increase even though total meat consumption has remained relatively static.
6. In terms of egg production, in 2006 there were 900 million eggs produced and 218 eggs consumed per capita. The majority of eggs are sold as table eggs on the retail market, with the remainder to food service and industrial users. Egg production has increased over 20% over the last decade to meet increasing demand.

THE SUBMITTER'S OPERATIONS IN THE CANTERBURY REGION

7. Tegal's operations in Canterbury include:
 - 1 processing plant;
 - 2 feedmills;
 - 7 chicken breeding farms (Breeder Farms);
 - 29 chicken growing farms (Broiler Farms);
 - 1 chicken hatchery;
 - 2 chicken rearing farms;
 - 3 turkey broiler farms;
 - 1 turkey breeder farm;
 - 1 turkey rearing farm; and

- 1 turkey hatchery farm.
8. In the Canterbury region, Tegel Foods Limited employs around 500 full time equivalent (FTE) staff.
 9. Each function is interdependent on the others, so that regulations affecting the operation of one function will have knock-on effects on the others, including those not directly owned and operated by the submitters.
 10. Tegel views the Canterbury region as a strategic growth location and a significant proportion of their national business activity is already located here.
 11. Tegel seeks a balanced and transparent resource-planning regime for the Canterbury region that acknowledges and provides for their status as an important primary production industry and major local employer, making a significant overall contribution to the social and economic wellbeing of the region and New Zealand as a whole.

ENVIRONMENT CANTERBURY PROPOSED NATURAL RESOURCES REGIONAL PLAN VARIATION 1: CHAPTER 4 JULY 2004 (THE PROPOSED PLAN) WQL5 AND WQL6

12. I consider that improvements are needed to a number of rules to ensure they are reasonable, effects-based and justifiable in resource management terms. In particular my evidence is based on two rules referred to in our primary submission – WQL5 and WQL6.
13. I would like to state at the outset that I am not a scientist and so I can only refer to potential resource management problems as I see them and offer non-technical solutions.

WQL5

14. Rule WQL5 relates to the discharge of stormwater containing contaminants onto or into land. Initially the rule imposed thresholds on roof areas under parts 2 (c) and (d) restricting the total roof area of a building to 400m² where the site is not located within a stormwater management area and a total roof area of 50m² where the building is located within a stormwater management area.
15. In paragraph 2.22 of Tegel's primary submissions it was noted that "*Rule WQL5 provides for certain discharges of stormwater containing contaminants onto or into land as a Permitted Activity in certain circumstances. The rule requires that*

the total roof area of the building does not exceed 400m² where it is located outside a stormwater management area (i.e. in a rural area) and 50m² in a stormwater management area (i.e. in an urban area). These limits on roof area are arbitrary and are not effects-based. They do not relate to the size or soakage capacity of the land, or the composition of the stormwater. Commercial poultry farming operations would have roof areas well in excess of the 400m² limit (each shed is approximately 1500m² in area, and mid-size operations would have 4 sheds). This means that all of the submitter's intensive farming operations would require Discretionary Activity consent for stormwater discharges to land."

16. Council summarised Tegal's submission paragraph 2.22 as *"Amend Condition 2 Rule WQL5 to increase the roof area for stormwater discharge from "400m²" to "6000m²" in certain circumstances."* We would like to clarify that such specific relief was not requested and that the use of roof areas within the submission was used to illustrate that intensive farming operations would require discretionary activity resource consent under the proposed rule. To clarify we consider the key issues with condition 2 of WQL5 are that the roof areas proposed by Environment Canterbury are arbitrary and not effects based. The fact that the maximum roof area was tripled from 400m² to 1200m² post the submission period suggests that the roof area is arbitrary and not scientifically based.
17. The reporting officer summarised that a number of submitters considered the restrictions of Condition 2 WQL5 to be *"unnecessary for sites in rural areas"* and that *"roof size limits in rural areas should increase from 400m² to for example, 1,000-6,000m² to take account of the size of various existing and likely future buildings"*.
18. The reporting officer has assessed our submission regarding Condition 2 WQL5 along with the similar submissions and has made the following comments.
19. *"The limits on roof sizes have been set to ensure that permitted activities do not result in any significant adverse effects that could arise as a consequence of on-site stormwater disposal. Possible adverse effects include: overflows onto adjoining properties; increasing groundwater levels on adjoining properties, and the risk of contaminants entering the roof stormwater discharge system, or contaminants entering groundwater."*
20. *"While these are significant risks that warrant a precautionary approach to setting roof discharge restrictions, there are also significant potential benefits in*

- discharging relatively clean stormwater into groundwater systems. The two key benefits are recharging groundwater that may be depleted and reducing the volume of runoff if stormwater is not discharged into a river."*
21. *"There are always difficulties in determining the most appropriate regulatory limits. However, the two key issues in this specific situation are whether the soil conditions can adequately pass and effectively treat the volume of stormwater reducing the concentration of contaminants to an acceptable level."*
22. It is considered that the inclusion of a maximum roof area condition does not effectively address either of the two key issues identified by the reporting officer.
23. The reporting officer concludes *"the evidence therefore supports increasing the roof area limits in conjunction with complementary additional conditions to prevent or minimise any adverse effects. A consequential change is required to Figure WQL5 and the explanation for the rule."*
24. No technical justification for the areas has been put forward by the Council and as such they are still arbitrary and subjective. Furthermore, they are not effects based. I suggest that the Council considers more appropriate tests such as the method of stormwater disposal, the soakage capacity of the land and the area of impermeable surface as a percentage of site area.
25. A review of the 11 District Plans within the Environment Canterbury Region has found that there is no consistency between the minimum lot size areas or building coverage controls which would assist in providing a technical basis for the proposed roof area sizes. It is noted that the minimum lot sizes within rural zones varies between 2 hectares and 120 hectares under the District Plans for the 10 Territorial Authorities within the Canterbury Region which control minimum lot size. Furthermore it is noted that there is no minimum lot size control within the Mackenzie District Council Plan.
26. The most commonly used minimum lot size within the District Plans is 4 hectares followed by 20 hectares and 40 hectares which are used by numerous Councils. With regard to building coverage controls only 4 out of the 11 District Councils within the Canterbury Region restrict building coverage and this is primarily controlled with a percentage of site area rather than a maximum area (m²). It is noted that the building coverage percentages included within the 4 District Plans for rural zones vary from 3% to 20%.

27. A review of Regional Plans for the 11 Regional Councils around New Zealand (excluding the 4 Unitary Authorities) found that the only other regional authority that restricted the impervious surface area for permitted discharges of stormwater to land was the Auckland Regional Council. The "*Proposed Auckland Regional Plan: Air, Land and Water Plan*" includes standards restricting the discharge of stormwater outside an urban area to between 1000m² and 5000m² of impervious area and a 6% impervious surface ratio. It is noted that the stormwater discharge provision of the Auckland Air, Land and Water Plan is subject to appeal at this time.
28. The discharge of stormwater to land is a permitted activity within Northland, Bay of Plenty, Manawatu-Wanganui, Taranaki, Hawke's Bay, Southland, Waikato and Wellington regions with no restrictions on impervious surface or roof area.
29. In the West Coast Region the "Plan for Discharges to Land" allows for stormwater to be discharged to land as a permitted activity, however a condition of the permitted activity requires no contamination of the stormwater to be discharged. Due to the strict definition of the Resource Management Act 1991 most stormwater is considered to be contaminated and therefore untreated stormwater cannot be considered as a permitted activity under the West Coast Plan. The discharge of any contaminant onto or into land in connection with the discharge of stormwater is a controlled activity subject to conditions under the West Coast Regional Plan. It is noted that the rules concerning stormwater discharges within the West Coast Plan do not include standards regarding maximum impervious coverage or maximum roof areas.
30. In summary, it is noted that only one other regional council (excluding unitary authorities) uses a maximum impervious surface area or similar restrictive device, such as that proposed in the Proposed Natural Resources Regional Plan. Furthermore the maximum impervious control for permitted stormwater discharges to land under the Auckland Regional Council proposed plan is over 4 times the permitted maximum roof area suggested by the reporting officer for the Proposed Natural Resources Regional Plan.
31. It is noted that the catchment areas for industrial and trade premises are restricted within the Taranaki "*Fresh Water Plan*" and the Horizons (Manawatu-Wanganui) Proposed One Plan to 0.5 hectares and 2 hectares respectively. We do not consider that intensive poultry farming activities can be considered under the

- Resource Management Act 1991 definition of industrial and trade premises as production land is excluded from this definition.
32. The above review of both District Plans in the Canterbury Region and Regional Plans (excluding Unitary Authorities) demonstrates that the inclusion of the proposed amendment to Rule WQL5 Condition 1(a) is inconsistent with typical planning practice throughout New Zealand. Notwithstanding that we consider the building area requirement to control stormwater in the Proposed Natural Resources Regional Plan to be arbitrary and not based on any demonstrable scientific evidence, it is also considered to be unnecessary as it duplicates other standards and conditions already contained in the Regional discharge rules.
33. Overall, it is considered that the change being sought by Tegel does not alter the general intent or direction sought by the proposed rule and that the other conditions of Rule WQL5 will effectively mitigate any potential adverse effects from the discharge of stormwater onto or into land. The other conditions suggested by the reporting officer for inclusion under condition 1 for discharges from roofs only include the following: prevention of any other contaminants from entering the stormwater system; prevention of discharges where the site is listed on the Environment Canterbury Listed Land Use Register as 'verified', 'contaminated for', 'significant adverse environmental effects' or 'managed for'; restrictions where discharges are from properties where hazardous substances are present; prevention of water entering any other property; restrictions on infiltration rates; prevention of soil erosion; control over the distance from the level of groundwater; and prevention of discharges within a Community Drinking Water Supply Protection area. The above conditions are considered to effectively mitigate the two key issues identified by the reporting officer as the effective treatment of the volume of stormwater discharged and a reduction in the concentration of contaminants to an acceptable level.

WQL6

34. Rule WQL6 relates to the discharge of stormwater containing contaminants into a river, lake or artificial watercourse. Initially the rule imposed a threshold under condition 5 requiring the discharge to be via a treatment system that removes at least 75 percent of total suspended solids in some circumstances.
35. Paragraph 2.23 of the primary submission made by Tegel notes that "*Rule WQL6 provides for certain discharges of stormwater containing contaminants into a*

river, lake or artificial watercourse as a Permitted Activity in certain circumstances. The submitter considers that artificial watercourses should be exempt for the reasons set out in item 2.19 above. The rule requires that certain discharges shall be via a treatment system that removes at least 75% of total suspended solids. Stormwater from poultry farms is primarily comprised of clean roof water (fans installed on the side walls of the sheds rather than on the roofs can assist in preventing contamination of the roof water) and hence the requirement to remove at least 75% suspended solids is unreasonable and inefficient."

36. Council summarise Tegal's submission regarding paragraph 2.23 as *"Amend the activity description in Rule WQL6 to permit discharges of stormwater containing certain contaminants into an artificial watercourse without requiring a treatment system that removes at least 75% of total suspended solids"*. We would like to clarify that the submission regarding Rule WQL6 was a two pronged request; first the removal of artificial watercourses from Rule WQL6 and secondly the removal of condition 5 which requires 75 percent of total suspended solids to be removed via a treatment system.
37. The reporting officer has assessed our submission regarding Rule WQL6 and made the following comments. *"Most artificial water courses are intricately and physically part of a wider network of natural rivers and streams. It is also frequently difficult to distinguish some artificial water courses from natural water courses, particularly in some lowland streams that have been extensively modified over the past 100 to 150 years. There is no database available that defines exactly where all artificial water courses are. Assuming that all artificial watercourses could be identified, if an exemption was provided for them there could be adverse effects on both the aquatic life associated with those watercourses and the natural watercourses that many discharge to."*
38. We consider the comments prepared by Council in relation to artificial watercourses to be justified and concur with their recommendation to retain artificial water courses within Rule WQL6.
39. We note our request to remove the provision relating to the removal of 75 percent of total suspended solids via a treatment system was not recognised, however the relief sought was granted due to other similar submissions. Condition 5 of Rule WQL6 has been removed and replaced with a condition which requires *"the concentration of total suspended solids in the discharge shall not exceed 25 grams*

per cubic metre". The subject amendment to Rule WQL6 is considered to satisfy the relevant concerns noted in the primary submission prepared by Tegel.

CONCLUSIONS

40. The poultry industry is a key part of New Zealand's primary production industry, and makes a significant contribution to the social and economic wellbeing of the Canterbury District and New Zealand. Canterbury region offers opportunities for the growth and expansion of the poultry industry, to meet increasing market demands. The industry requires a policy context that makes appropriate provision for its activities, is easy to work with, and gives clear guidance on what is expected of it.
41. Instead, we have Rule WQL5 which has adopted an arbitrary standard which is not effects based and will result in any new intensive farming activity or extension of any of the existing poultry activities requiring discretionary activity consent for stormwater discharges to land.
42. I share many of the Council's concerns with water quality and I reiterate that the submitters would be pleased to work with the Council to refine the Proposed Plan along the lines I have suggested.

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Lee Caygill Marr

Bachelor of Arts from the University of Auckland, Auckland, New Zealand, and a Masters of Planning Practice (Honours) from the University of Auckland, Auckland, New Zealand. I am a Full member of the New Zealand Planning Institute.

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