



**SUBMISSION ON A PUBLICLY
NOTIFIED PROPOSAL FOR POLICY STATEMENT OR PLAN**

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

To: Selwyn District Council

Submission on: Selwyn District Plan
Proposed Private Plan Changes 8 and 9 – Selwyn Plantation Board

Name of Submitter: Poultry Industry Association of New Zealand (Inc)
Tegel Foods Limited

Address: C/- Harrison Grierson Consultants Limited
PO Box 5760
Wellesley Street
AUCKLAND

Attention: Scott Williams

1. The specific provisions of Proposed Private Plan Changes 8 and 9 that this submission relates to are:

Proposed Private Plan Changes 8 and 9 in their entirety.

2. Our submission is:

The intensive poultry industry is a dynamic and expanding sector of New Zealand's primary production, which includes the production of both poultry meat and eggs. The industry is expanding rapidly in New Zealand, despite being relatively new. To illustrate the changes in the industry, the production of poultry meat in the mid-1960s began to use specialist meat breeds. At this time per capita consumption averages were little more than 1kg per capita per year. In 2006, New Zealander's consumed an average of 35.7kg of poultry meat per capita, reflecting an increase in consumption that accounts for 36.1% of total meat consumed. Meat consumption has remained quite static over the years yet with cheaper production and lifestyle changes, the poultry industry has been steadily growing. As an expanding activity the intensive nature of poultry farming makes it an efficient and contained land use.

The Poultry Industry Association of New Zealand (Inc) (PIANZ) is the national organisation that represents the interests of numerous poultry companies, including Tegel Foods Limited. Tegel and PIANZ are collectively referred to in this submission as "the submitters".

There are 37 poultry farms in the Selwyn District. These comprise of:

- 25 broiler farms;

- 5 breeder farms;
- 1 rearer farm;
- 5 layer farms; and
- 1 hatchery.

Of particular relevance to Proposed Plan Change 9 is the Tegel-contracted breeder farm located immediately to the north of the area to be rezoned, located at 243 Dunns Crossing Road. This operation was established in 1967, and has been in continuous operation for the last 43 years. The total area of this farm is 21.8 hectares and the farm consists of 7 poultry sheds of differing ages. Each shed measures 1,250m², giving a total floor area of 8,750m². The seven sheds currently house 60,000 breeder chickens.

The typical hours of operation of the farm are from 7.30am – 4.30pm. The typical works on the site involve the following:

- Daily egg collections and weekly feed deliveries;
- Cleaning of sheds (typically 2 at once) - this process occurs every 6-8 weeks.

3.0 Main Issues Raised by the Submitters

The submitters are concerned about the proposals to rezone rural land to rural residential in the Rolleston area for the following reasons:

- The inappropriate scale and timing of the Proposed Plan Changes;
- The inadequacy of the proposed mitigation measures in relation to reverse sensitivity.

Without limiting the general nature of the above, the following points are made:

4.0 Plan Change 1

Plan Change 1 to the Canterbury Regional Policy Statement ("Plan Change 1") seeks to provide direction for urban and rural growth in the greater Christchurch area. It is acknowledged that in some aspects the proposal is consistent with Plan Change 1 in relation to the general location of future development around existing centres and its ability to be appropriately serviced. However the submitters consider that there are issues relating to the scale and timing of the proposed plan changes.

Proposed Plan Change 9 will enable the potential establishment of up to 100 rural-residential lots. Proposed Plan Change 8 will enable the potential establishment of up to 120 lots. Together the two plan changes will enable 220 potential new rural-residential lots in one area of the Selwyn District.

Plan Change 1, although still under appeal, currently provides for only 600 new rural-residential households over the entire Selwyn District between 2007 and 2041 (refer Table 1). Furthermore the provision of these new households is sequenced, with 200 provided for between 2007 and 2016, and a further 200 from 2017-26 and 2027-41 respectively. Amendment 43 of Proposed Plan Changes 8 &

9 provides for no more than 125 rural lots to be established before December 2016. It is noted that 125 lots is 63% of the total rural-residential allowance for the entire District for this period. The submitters consider that this scale of rural-residential development is not an efficient or effective use of resources, as it may preclude other appropriate rural-residential development elsewhere in the district, and will be at a scale not anticipated for by Plan Change 1.

It is acknowledged that there are a number of appeals that are outstanding regarding Plan Change 1. Of relevance are appeals to the definition of Rural-Residential Activities and the numbers provided for rural-residential households in Table 1. It is possible that the scale of development enabled by the Proposed Plan Changes would be more appropriate were the definition to change or the numbers increased (as requested in the appeals). However this cannot be assumed. The submitters consider that the Proposed Plan Changes are pre-empting the result of appeals to Plan Change 1. Greater certainty would be provided if these Plan Changes were assessed after the appeals to Plan Change 1 have been resolved.

5.0 Plan Change 17

The background report for Proposed Plan Change 17 was released in August 2010 by Selwyn District Council. This Plan Change is in its early consultative stage and seeks to implement the requirements of Plan Change 1 by planning for the development of rural-residential areas. Although it is acknowledged that this plan change is still in its early stages the submitters consider that it is a relevant document.

The background report places a lot of emphasis on the avoidance of reverse sensitivity. In Paragraph 2.32 it is stated that any rural residential development should be designed in a way that "reduces reverse sensitivity effects". The submitters consider that the Proposed Plan Changes, and Proposed Plan Change 9 in particular, do not adequately address potential reverse sensitivity effects. This is discussed further in Section 7.0 of this submission.

It is noted that Selwyn Plan Change 17 has been proposed to meet Policy 14 of Plan Change 1 to the Regional Policy Statement, as it seeks territorial authority driven rural residential development. The submitters consider that Proposed Plan Changes 8 & 9 may be seeking to usurp this role.

6.0 Operative Selwyn District Plan

The Selwyn District Plan (SDP) includes many objectives and policies of relevance to the assessment of these Plan Changes. A clear theme that emerges is the need to protect rural character and rural activities.

Objective B4.1.2 emphasises the importance of the role that rural areas play in the Selwyn District. This objective seeks to protect the character and amenity of rural areas and their associated activities from the adverse effects of change. The existing poultry operation has been in operation since 1967, and forms part of the character of the rural area around Rolleston.

Policy B4.1.3 of the SDP outlines the need to protect existing rural uses from proposals for low density living environments. The District Plan recognises that some rural activities have adverse effects and that these effects may not be

tolerated by residents who are located in nearby low density residential developments.

Policy B4.1.3 provides a clear direction that when developing low density residential development that "effort should be made to reduce the potential of reverse sensitivity effects". It is acknowledged that the applicant has attempted to address this issue. However the submitters consider that the proposed mitigation measures in relation to reverse sensitivity are not adequate given the scale of development enabled by the Plan Changes, and the close proximity of the neighbouring Tegel-contracted farm. This is discussed further below:

7.0 Reverse Sensitivity

It is considered that the establishment of dwellings, and other sensitive activities, in close proximity to the existing, lawfully established Tegel breeder farm at 243 Dunns Crossing Road, is likely to cause reverse sensitivity effects.

Reverse sensitivity occurs when a lawfully established and pre-existing land use adversely affects a new land use. The issues arise from the incompatibility of uses, although both may be legally established.

To quote a recent 'Bell Gully' article dated 28 March 2008¹,

"Reverse sensitivity is now firmly established as a concept and as an effect under the Resource Management Act 1991 ("RMA"). Reverse sensitivity may arise where new sensitive activities are introduced to an environment where existing effects-intensive activities take place. If left unchecked this has the potential to lead to unacceptable conflict between activities."

Lawfully established existing activities can give rise to off-site impacts or nuisance elements which affect surrounding land. They may cause emissions or vibrations which go beyond the boundaries of the site; or activities associated with the land use may create adverse effects on nearby land, such as increased traffic. There are a number of important activities which are vulnerable to complaints of reverse sensitivity including "airports, quarries, ports, and state highways."

In this case, the potential for reverse sensitivity occurs where the sensitive use, being the subdivision and associated residents, is located in close proximity to an existing and lawfully established intensive poultry farming operation. The odour from the Tegel Poultry farm may be perceived by residents to be unacceptable.

There is the potential of a high level of odour discharge to occur when the sheds are being cleaned out. Given this there is the potential for complaints to be made to not only the District Council, but also the Regional Council, regarding such activities and the associated odour. The Councils, in turn, will be pressured to attempt to control or restrain the farming activities being legitimately carried out. This may lead to pressure for the poultry farm to curtail their operations, or cease altogether.

¹ Marija Batistich, BA, LLB (Hons) (Auckland), Senior Associate, David McGregor, OBE, ED, LLB (Auckland), Senior Partner and Julia Harker, Solicitor. An extract from DSL Environmental Handbook, a collection of up-to-date practice guides produced by DSL Publishing.

<http://www.bellgully.com/resources/resource.01662.asp>

The most common way of avoiding reverse sensitivity effects related to odour is by the requirement of a buffer area between the existing activity and any new sensitive activity. The Selwyn District Plan recognises this by requiring new sensitive activities to be located a minimum of 300m from any existing, lawfully established intensive farming activity.

The application for Proposed Plan Change 9 includes an Odour Assessment Report undertaken by Golder Associates. This report uses modelling to claim that in this particular site, a 300m buffer is not required. The report recommends a 150m buffer. The report relies upon this modelling and the fact that the Tegel site is a breeder farm, which would produce less odour than other forms of intensive poultry farming.

Dr Terry Brady, an air quality expert familiar with the effects of odour and in particular the effects of intensive poultry farming, has reviewed the Golder's Report (refer to **Appendix 1**). Dr Brady considers that the Golder's Report is lacking in several respects, in particular the following:

- That the modelling method used is not the most reliable for the site conditions;
- That dispersion modelling in general cannot be relied upon at present due to new research from Australia which calls existing modelling methods into question; and
- That the model does not take into account odour that may be generated when litter is removed from the sheds.

Because of these reasons Dr Brady considers that the recommended 150m buffer distance will not be sufficient to avoid reverse sensitivity effects. Dr Brady recommends a setback of between 300m and 400m based on the existing provisions of the Selwyn District Plan, and experience in other regions throughout New Zealand. The submitters concur that a setback of between 300 and 400m would be more appropriate based on their experience within Canterbury and other regions of New Zealand.

Notwithstanding the buffer distance issue, the submitters also consider that the proposed rule (Rule 4.9.27) is lacking in several respects:

- The rule specifically refers to breeder farms only. Although it is acknowledged that a land use consent and a regional air discharge consent would be required if the farm expanded, it is possible that the farm may convert to another form of intensive farming (such as rearing, hatching, laying or growing) but with the effect remaining the same scale, intensity and character (thereby not requiring consent). If that were to occur the rule would no longer apply. Therefore the submitters consider that reference should be made to the "intensive farming operation on Lot 3 DP 20007" rather than the "breeder farm operation".; and
- The proposed rule is very specific in that it applies to only 'any dwelling, family flat, and any rooms within accessory buildings used for sleeping or living purposes' (i.e. only residential activities). However it is noted that the operative SDP rule relating to buffer areas refers to 'sensitive activities'.

The definition of sensitive activities is broad and includes, but is not limited to, camping grounds, educational facilities, restaurants and community facilities. The submitters consider that this breadth of activities should also be reflected in the proposed rule as this will avoid any future reverse sensitivity effects if other activities locate near the existing poultry farm.

8. The submitters seek the following relief from Selwyn District Council

- That Proposed Plan Change 8 & 9 be refused in their entirety as their scale and sequencing is not consistent with Plan Change 1.
- That should the Council be minded to approve the Plan Changes their scale should be reduced to be more consistent with the outcomes envisaged by Plan Change 1 (i.e. enable a lower number of lots).
- That should the Council be minded to approve the Plan Changes that Amendment 28 be altered to provide for a 300m setback, provide for sensitive activities, and provide for an intensive farming activity on the site. Potential wording for this amended clause is outlined below:

Insert new Rule 4.9.27 for Buildings and Building Position (Page C4-011) as follows:

Any dwelling, family, flat, and any rooms within accessory buildings used for sleeping or living purposes sensitive activity in the Living 3 Zone at Rolleston (as shown on the Outline Development in Appendix 38) shall be setback at least ~~150m~~ 300m from the northern boundary shared with Lot 3 DP 20007 containing a ~~poultry breeder farm~~ an intensive farm, provided that this rule shall cease to have effect upon the cessation of the intensive farming operations on Lot 3 DP 20007.

4. We wish to be heard in support of our submission.

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

Signature 
(Signature of submitter or person authorised to sign on behalf of submitter)

Date 10 September 2010

Address for Service of Submitters Poultry Industry Association of New Zealand (Inc)
Tegel Foods Limited

C/- Harrison Grierson Consultants Limited
P O Box 5760
Wellesley Street
AUCKLAND
Attention: Scott Williams, Planner

Telephone: (09) 917 5000
Facsimile: (09) 917 5040

Email: s.williams@harrisingrierson.com

U:\1020\130120_01\500 Del\510 Reports\SUB001v3-AK130120-teg-selwynpc8-sew .doc

Appendix 1

Dr Terry Brady, Air Specialist

Ref 3027.13

7 September, 2010

Harrison Grierson
PO Box 5760
Wellesley Street
Auckland 1141

Re Tegel Foods Rolleston

Attention Scott Williams

Dear Scott

I have reviewed the Golder Associates (Golder) report Rolleston Odour Assessment - Skellerup Block (Report Number: SELPL-CHC-004) dated March 2009. The report was prepared by Golder to assess the applicability of the existing 300m buffer that Selwyn District Council applies to intensive farming zones that include poultry farming.

I understand that the land to the southeast of the Tegel farm is currently zoned rural and the owners seek to have it re-zoned for rural residential development. My comments below relate to the suitability of the Golder report to provide an applicable guideline for a buffer distance that will ensure no odour nuisance at the proposed development that might occur as a result of discharges to air from the Tegel operation.

Golder has made use of computer modelling to predict the potential off site effects that might occur. The over-all philosophy and procedures used by Golder are, in general, sound. However there are a number of important issues that make the actual conclusions of the report invalid to the point that the report cannot be relied on to provide any margin of security for occupiers of the proposed development. Those matters are summarised as

1. Choice of Model
2. Modelling in General
3. Intermittent Discharges

1. Choice of Model

Golder has used the standard AUSPLUME model that is widely used in New Zealand and Australia for this purpose. However in this case it is questionable whether it is able to provide reliable predictions during cold calm evenings when off site odours would be least dispersed. Such conditions are usually characterised by a katabatic or drainage air flow that would carry any odours directly into the proposed development with little or no dispersion. An alternative model such as CALPUFF should probably have been used since it has more sophisticated routines to deal with calm and variable drainage air flows.

2. Modelling in General

Until recently dispersion models have been widely used to assess the effects of potential odour from poultry farms. However a fundamental problem in the methodology has recently been shown to dramatically change the way in which models are used. This was documented in a recent report (June 2010) by the Rural Industries Research and Development Corporation¹ and relates to the use of traditional "volume source" configuration for the discharges. At the present time most models are not easily able to be configured to include the issues identified in the RIRDC report. Certainly the Golder's report does not include them since the RIRDC report was only published in July 2010.

3. Intermittent Discharges

Golder's report also does not address the odour that occurs during clean out operations when litter is periodically removed from the sheds. While it is not easy to predict these effects it is entirely possible that odours could be noticed at distances in excess of 150m under certain meteorological conditions and especially if the litter has a stronger odour than normal due to events that may be beyond the control of the operator. Such events could, for example, include a bad batch of feed, or accidental breakdown of ventilation systems watering systems.

CONCLUSION

I note that the proposed 150m buffer is half of that specified in the District Plan, and less than half the 400m buffer adopted in the Taranaki region that was based on the experience of field officers and complaint history, and the 400m recently adopted in the Auckland region based on complaint history.

Finally, for the reasons outlined above, I do not believe that the Golder's report can be used to reliably assess the potential effects of the discharges of the existing Tegel operation, and it would be unwise to allow residential development to occur 150m away from the discharge points based on its findings.

Yours sincerely



TJ Brady

Ph 09 630 8710
Mob 027 2970 230
Email terry@tbc.pl.net

¹ Separation Distances for Broiler Farms: Verifying methods including the effects of thermal buoyancy Publication No. 10/073 Project No. PRJ-002747. ISBN 978-1-74254-044-3 ISSN 1440-6845. July 2010. Available at <https://rirdc.infoservices.com.au/downloads/10-073.pdf>