# Comments on the revised Development Application for: MCU12/0184 & ERA 12/0087

Development Permit for Material Change of Use of Premises (Animal Husbandry Type 2 - Intensive)

Development Permit for Material Change of Use of Premises for an Environmentally Relevant Activity (ERA 4 - Poultry Farming)

Intensive Poultry Farm 136 Top Forestry Road, Ridgewood QLD 4563

Submitted by: No Broiler Farm Cooroy PO Box 450 Cooroy, QLD 4563

22 August 2014

Contact: Rod Ritchie 07 5442 6776

## Introduction

Ridgewood is a quiet rural area, with scenic valleys, steep ridges and winding roads. The Applicant proposes to construct eight large chicken sheds along the ridges on his property, which is located in a largely rural residential district. The topography of the surrounding valleys and hillsides will assist the transmission of the noise, odour and dust from the chicken sheds to the neighbouring properties.

The rural road leading to the property is unsealed, winding and narrow, and cannot be improved to a standard that would allow school buses, garbage trucks, residents and cyclist to safely share the road with 19-metre B-double trucks and semi-trailers.

The MWA Noise and Air Quality Impact Assessment concludes that the potential impacts of noise, odour and dust can be minimised through best-practice emissions management and reasonable and relevant conditions. The L&R Traffic Engineering Report (31.07.2014) concludes that the low vehicle intensity of the poultry operations would have limited impacts.

However, these conclusions are questionable because of the reports' many omissions and inaccuracies as outlined in this submission. The development proposal has the potential to exceed noise, odour and dust regulatory criteria, plus the site access and road safety and maintenance issues are insurmountable. It will not be possible to apply reasonable and relevant conditions to minimise these impacts.

Further, there is the strong possibility that financial, practical and environmental constraints will preclude the implementation of recommended measures to minimise harm and nuisance.

#### This submission covers the following topics:

- 1. Noise, Odour and Dust Assessments.
- 2. Traffic Issues

## MCU12/0184 - Noise, Odour and Dust Assessments

#### Contents

1.3 Surrounding Land Uses	3
1.4 Proposed Development	4
2.0 Noise Impact Assessment	4
3.0 Odour Impact Assessment	5
4.0 Dust Impact Assessment	6
5.0 Top Forestry Road Dust	6
6.0 Conclusion	6

## 1.3 Surrounding Land Uses

Land uses surrounding the site are predominantly rural residential, rather than agricultural. In fact, of the 28 identified receptors, at most three are involved in rural pursuits. The rest are best described as rural lifestyle blocks.

Many of the closest properties to the northeast are not heavily vegetated and will be directly affected by noise, odour and dust. Many other properties, with residences set just tens of metres from Top Forestry Road, will also be greatly affected by the dust generated by heavy vehicle traffic.

**Paragraph 3** states 'minimum setback distance between the proposed poultry sheds and a surrounding residence is approximately 850 metres'.

Based on aerial imagery data, the following points are noted:

- Nearest residences (136 and 146 Top Forestry Road) are 270 and 380 metres from the nearest proposed shed.
- 111 Top Forestry Road is 780 metres from nearest proposed shed.

**Section 1.3** also states 'The majority of surrounding dwellings are elevated above the level of the proposed poultry sheds, with intervening gullies'.

- The residence located at 50 Top Forestry Road is on the same contour (approximately 170 m) as many of the proposed sheds. This property is approximately 1km north east of the nearest shed. This contour (between the residence and the sheds) appears to be uninterrupted and may allow migration of noise and/or odour.
- It is worth noting that the 'gullies' mentioned are in fact used for hobby farming, domestic food production, recreation and land conservation. MWA fails to assess these land uses when considering the effects of pollution on surrounding properties.

**Paragraph 4**: Figure 3 does not reference the residences located at 136 and 146 Top Forestry Road, which are 270 and 380 metres from the nearest proposed shed. There is also no consideration of adjacent freehold lots that do not currently have residential land use, specifically 124, 172 and 224 Top Forestry Road. These locations may become subject to

sensitive land uses in the future and the modelling has not considered noise, odour and dust impacts on these land parcels.

The final paragraph states: 'For the purposes of this assessment twenty-eight (28) of the surrounding residences have been identified as R1 to R28 as shown on Figure 3'.

At least 12 more nearby properties have not been included in the assessment as potential receptors.

- Since the proposal includes the use of many nearby properties for the amelioration of noise, dust and odour, these landowners are being denied their natural rights to build sheds or associated property infrastructure on large sections of their land due to the close proximity to the sheds. In addition, they would not be able to have unrestricted access to work on and enjoy the parts of their property subject to the effects of the pollution.
- Many more district residents are effectively being expected to remain enclosed indoors at various times of the day.

## 1.4 Proposed Development

**Paragraph 1**: 'It is proposed to construct poultry growing sheds on the subject site as a two-stage development. Stage 1 will comprise five sheds (Shed 1 to Shed 5), with the further three sheds (Shed 6 to Shed 8) to be constructed as Stage 2 of the development'.

The SCC Ordinary Meeting Updated Report (12 December 2013) states: 'The Queensland Farming Manager of Inghams has provided written confirmation that most new facilities have a capacity of 240,000 birds and that a capacity of less than 200,000 may not be viable. As a result, the applicant does not consider it feasible to reduce the number of sheds on the site'.

• Therefore the proposed two-stage development will not be viable, since the number of birds at any one time (in five sheds) would only be approximately 144,000.

**Page 3, paragraph 2**: 'The locations of the proposed poultry sheds on the subject site are shown on Figure 4'.

Since the sheds must be aligned with the various ridgelines, possible placement of the sheds is severely restricted. Figure 4 shows ventilation fans pointing in the direction of several sensitive receptors and, in some cases, directly at the back of nearby chicken sheds, as with 4,5 - 6, and 7 - 8. The Queensland Guidelines - Meat Chicken Farms (page 20 - A3) states: 'Fans on tunnel-ventilated sheds should be located on the end of the shed that is furthest from sensitive land uses to minimise the impacts of odour'.

## 2.0 Noise Impact Assessment

2.1

- Figure 5 shows the location of the noise data logger used to determine current ambient noise levels. The data logger would have been influenced by noise from two dwellings (136 and 146), the avocado operation and the shared access road. This data may not be representative of lower ambient noise levels in the surrounding area. Noise from the ongoing avocado industry has not been considered.
- The 8-day period in Feb 2012 is not a significant time frame

#### 2.3.1

• Table 3 refers to forklift loading at the eastern end of sheds, whereas entries to the sheds face many different directions - see Figure 4. An eastern entry will be impossible for several sheds.

The forklifts will be a continuous source of noise during catchout periods.

Table 3 fails to mention noise generated by pneumatic feed systems.

Table 3 fails to mention noise generated by litter delivery, litter removal, shed cleaning, and loading spent litter onto trucks to be removed from the site.

#### 2.3.4

- Traffic projections should not be averaged. Since there would be several days of the year in which 24 heavy vehicle trips occur in one day, the noise from this traffic should be considered as an entity.
- Noise generated by heavy vehicles (with air brakes, reversing alarms, piercing horns, and many huge tyres) cannot be considered the same level as noise as that from ordinary vehicles.
- On-site traffic noise has not been considered.

## 3.0 Odour Impact Assessment

#### 3.1.1

- The assessment is not based on site-specific meteorological data. Wind inputs are based on data from Tewantin and Nambour and predictions based on comparisons with long-term average conditions at Tewantin, about 20 km away. Odour calculations can be inaccurate without site-specific data.
- It is widely accepted that modelling results are dependent on the inputs of the model. Without verifying (in detail) the inputs used, it is difficult to determine the accuracy of the model results. We request that Council complete a rigorous assessment of the models, prior to considering the recommendations of this report.

#### 3.3.3

- Odour generated from the catchout times, removal and loading the trucks with the spent litter, and shed cleaning has not been considered.
- The odour modelling (Attachment 7 Figure A1) shows that the odour emissions would extend beyond the property boundary of the site. Whilst the model does not show the plume extending into locations of existing dwellings, it does show that nuisance impacts would extend into the associated properties.

It is also likely that this would result in nuisance complaints being lodged to Council. Council would be well aware of the likely costs associated with the management of resultant complaints and execution of compliance actions.

- The Environmental Protection Act 1994, defines odour as a contaminant and therefore nuisance odour needs to be dealt with under provisions of the EP Act.
- Considering the odour modelling results (Attachment 7 Figure A1), it would not be feasible to place conditions that prohibit odour, noise and dust nuisance beyond the

boundary of the proposal property. If this proposal is approved, it is considered that the neighbouring residents (and subsequently Council) will suffer the impacts of this proposed development for years to come.

# 4.0 Dust Impact Assessment

4.3.3

• Extraction fans point directly at several sensitive receptors. *The Queensland Guidelines - Meat Chicken Farms* (page 20 - A3) states: 'Fans on tunnel-ventilated sheds should be located on the end of the shed that is furthest from sensitive land uses to minimise the impacts of odour'.

Since dust is generated along with odour, fan location is crucial to minimise the impacts of dust on sensitive receptors.

• Rainwater collected from roofs of homes in the area surrounding the proposal is presently stored for domestic use. Residents are greatly concerned about toxic shed dust from the sheds polluting their drinking water.

As stated in 3.1.1, modelling results are dependent on the inputs of the model. The inputs for this modelling are not site-specific, they are based on averages of data from distant locations, one near the coast and one to the southeast. Without site-specific data, it is impossible to verify the accuracy of the modelling.

## 5.0 Top Forestry Road Dust

- Traffic cannot be averaged over days for this assessment. Twenty-six vehicle trips a day (24 of these being heavy vehicles) will raise significant quantities of dust, year round.
- Many houses are located close to Top Forestry Road and within a kilometre of the proposed development. Rainwater is collected from the roofs of these buildings for domestic use. Residents are greatly concerned that the increased dust from traffic and cartage of spent litter and chickens will pollute their drinking water.
- Heavy vehicles cannot be considered the same as ordinary vehicles. A B-double has 28 large tyres and is many times heavier, depending on the load.
- H&R traffic data collected in March 2014 includes readings for just one week, although data was collected for two weeks. Why was this information excluded?
- Traffic data for one week is not a significant range.
- Dust from the constant traffic on internal unsealed roads has not been considered.

#### 6.0 Conclusion

The new information indicates that the proposed development has the potential to exceed noise, odour and dust regulatory criteria, and to raise insurmountable site access and road safety issues. It will not be possible to apply reasonable and relevant conditions to minimise these impacts, therefore this application must be refused.

# MCU12/0184 - Traffic Issues

## Contents

1.0 Introduction	8
2.0 TER limitations, anomalies and omissions 2.1 Limitations 2.2 Anomalies and omissions	8 8 8
3.0 Road condition and function	9
3.1 Top Forestry Rd	9
3.2 Haul route roads	9 9 9
3.2.1 Crystal St/Maple St roundabout	
3.2.2 Crystal St	10
3.2.3 Old Ceylon Rd	10
3.2.3 Old Ceylon Rd/Cooroy-Belli Creek Rd intersection	10
3.2.4 Cooroy-Belli Creek Rd	10
4.0 Proposed mitigation works – Top Forestry Rd 4.1 Section 1 4.2 Section 2 4.3 Section 3	10 10 10 10
5.0 Impacts	
5.1 Road condition and function	11
5.1.1 Traffic volumes – Top Forestry Rd	11
5.1.2 Road works and maintenance costs – Top Forestry Rd	11
5.1.3 Interactions with haul route road users	11
5.2 Residents' amenity	11
5.2.1 Health risks	12
5.2.2 Loss of amenity costs	12
6.0 Conclusions	12

#### 1.0 Introduction

The L&R Traffic Engineering Report (31.07.2014) concludes that the low vehicle intensity of the poultry operations would have limited impacts on the local road network given its present volumes and high standard of construction and surface condition, with only minor works required on Top Forestry Rd.

This conclusion is questionable because of the report's omissions, anomalies and limitations.

Given the actual road conditions and usage, the haul route roads are unsuitable for the regular heavy vehicle traffic the poultry operation would generate. The volume, types and schedules of these vehicles would have significant negative impacts on:

- road condition and function
- road safety
- residents' amenity
- property values.

### 2.0 TER limitations, anomalies and omissions

#### 2.1 Limitations – the report does not take into consideration:

- a) The 7 days survey data is not representative of traffic volumes and road users on Top Forestry Rd.
- b) The 80kph speed limit on Top Forestry Rd, Old Ceylon Rd and the Cooroy-Belli Creek Rd from No.129.
- c) The vehicle accident history of the haul route roads from Top Forestry Rd to the Bruce Hwy.
- d) Present road condition and usage of the haul route.
- e) The route for the shed waste removal trucks.
- f) The Qld DTMR recommended 8 metres minimum unsealed road width for Multi-Combination Vehicle use.
- g) The Qld DTMR operational restriction on MCVs from obstructing the path of other vehicles.
- h) Heavy vehicles cause more noise, dust, odour and road damage than other vehicle types.
- i) Impacts on residents living beside the entire haul route.

#### 2.2 Anomalies and omissions

- a) The survey cameras were in place March 7-21, but only data from March 12-18 was used.
- b) The survey data does not distinguish between light and heavy truck use on Top Forestry Rd.
- c) People walking along Top Forestry Rd were not surveyed; only those crossing it and King Parrot Lane.

- d) The report does not consider the usual volume reductions during public and school holidays.
- e) The report omits vehicle numbers for:
- the poultry operation's permanent and casual staff.
- Week 5 loss collection.
- Water deliveries the operation's water needs will exceed stored supply during extended dry periods.

f) Contradictory totals are given for vehicle volumes. For example:

Batch cycle total vehicles App C Fig. 4.2

244 254

Batch cycle total heavy vehicles App C totals MVC + AV + Rigid truck totals

 $\hat{s}$  21

Bird pick-up total heavy vehicles App C totals column App C AV column

108 trips/54 trucks 94 trips/47 trucks

g) Loading duration for a bird pick-up truck is given as 60 minutes (p 12) and 40 minutes (App C).

#### 3.0 Road condition and function

#### 3.1 Top Forestry Rd

Top Forestry Rd is an 80kph, narrow unsealed road with unformed shoulders and poor sightlines. It normally is graded once a year, and deteriorates quickly after heavy rain. The only regular heavy vehicles are the Council rubbish trucks.

Its primary function is residential property access. Of the 31 properties accessed via Top Forestry Rd, 27 are residential and have no alternative access. The only commercially productive agricultural property is the applicant's avocado farm.

The road provides access to West Cooroy State Forest which has not been logged in more than 5 years and is now managed by Queensland Parks & Wildlife Service. Council promotes the area as a bird-watching location (No 9 on Noosa Bird Trail Map) and a mountain biking destination. Other recreational users include hikers and horse riders.

The report considers the road surface to be of a high standard with no potholing or rutting. Before the April inspection, the road was graded twice in 2013 followed by a brief wet season with local rainfall for Jan through Mar being 60% less than 2012. The road was graded in July 2014 with no significant rainfall between the first and second inspections. The report does not consider the degradation effects of heavy vehicle volumes, speed, weight and articulation on the road surface compared to its current light vehicle usage.

The report claims intermittent road widening occurred during the July grading. While roadside grass was scraped from the edges, there was no structural widening.

#### 3.2 Haul Route Roads

Structural aspects of the haul route roads limit their suitability for the operation's heavy vehicle traffic.

**3.2.1** The Crystal St/Maple St roundabout and adjacent centre islands are not designed for heavy vehicle encroachment; neither is the centre island outside the Noosa Christian

College. Pedestrians, including students, use these structures when crossing Maple St and to access nearby bus stops.

- **3.2.2 Crystal St** limitations include a blind curve, many vehicles parked kerbside and a busy intersection at Myall St opposite the Cooroy Golf Course.
- **3.2.3 Old Ceylon Rd** has a 6.2m sealed road width and insufficient vertical clearance between the unsealed shoulders and overhead trees. State road guidelines recommend a 3.5m lane width for MCV use of two lane sealed roads.
- The Old Ceylon Rd/Cooroy-Belli Creek Rd intersection has a degraded surface, poor sightlines and a Give Way sign. Given the 80kph speed limit on the Belli Creek Rd and the sweep path of a heavy vehicle, trucks turning left into and right out of Old Ceylon Rd increase the potential for accidents and the obstruction of other vehicles.
- **3.2.4 The Cooroy-Belli Creek Rd** beyond No. 129 is part of an established cyclist training and event route with a minimum sealed road width, narrow shoulders, poor sightlines, unmarked concealed entrances and an 80kph speed limit. The interaction of heavy trucks with cyclists raises road safety concerns given the 2014 bicyclist road rules, which require a 1.5m clearance when overtaking cyclists on 60+kph roads, while permitting drivers to cross unbroken centre lines, and cyclists to ride two abreast.

### 4.0 Proposed mitigation works – Top Forestry Rd

The proposed minor mitigation works are inadequate and inappropriate. They do not effectively address Top Forestry Rd's limitations to carry increased volumes of heavy vehicle traffic. The works would increase road maintenance frequency and costs. The proposed works, signage and vegetation removal would compromise the road's visual amenity. Vegetation clearance also would destabilise road edges and increase the dust spread range.

The works are based on an ARRB suggested minimum carriageway width of 5.5m. The Qld DTMR classifies a 19m/50T B-Double as a Multi-Combination Vehicle. MCV route guidelines recommend a minimum 8m width for unsealed roads (p14). The standard width of a prime mover is 2.9m (2.5m cab + 200mm each side for wing mirrors). The combined width of two on-coming B-Doubles/AVs would be 5.8m with no clearance between vehicles. A minimum 5.5m road width does not address the safety risks associated with the passage of on-coming heavy trucks, especially as the road shoulders are unstable or non-existent. Nor does it mitigate the risks for other drivers.

- **4.1 Section 1** No mitigation works are proposed, however the narrowest part just before King Parrot Lane is edged by large trees and a steep bank that has subsided twice in the last 4 years.
- **4.2 Section 2** Widening parts of Section 2 would require the removal of large, mature native trees on both sides of the road and the stabilisation of road edges and a subsiding bank. L&R states that the 670m-long Section 2 has road widths of 5.0m 5.4m, but recommends that only a 350m length be widened to 5.5m.
- **4.3 Section 3** The installation of a 4.5m wide, 236m-long, one-way system in Section 3 for the benefit of the poultry operation would inconvenience other road users and impede normal traffic flow. This system raises safety concerns given the road's long-term, customary 2 lane use.

The alternative road widening proposal at chainage 1100m "involves significant slope and

embankment stability work" (Appendix D). Both proposals impose road works and maintenance costs on ratepayers.

No mitigation works are proposed for the junction of the site access road and Top Forestry Rd. Trucks are required to drive forward when entering and exiting the access road, however drivers would be unable to see approaching outbound vehicles.

The collection of the carcass bins would compromise road safety and obstruct traffic if, as stated previously, the collection trucks will not be entering the site. The location of the carcass bins relative to the school bus stop is also of concern.

#### 5.0 Impacts

#### 5.1 Road condition and function

5.1.1 Traffic volumes – Top Forestry Rd

The operation's forecasted vehicle numbers would generate the following % volume increases:

29.5% minimum daily traffic

21.5% maximum daily traffic

8.3% maximum weekly traffic

15% maximum weekly truck traffic.

The survey recorded zero truck movements from 0:00am – 6:00am. A projected 9 heavy truck trips for this period would occur during bird pick-ups.

It is disingenuous to say that a 25% peak volume increase due to seasonal agricultural variations is not unusual for unsealed rural roads (MWA p27), when the only seasonal variation on Top Forestry Rd is related to the applicant's avocado production which is accounted for already.

#### 5.1.2 Road works and maintenance costs – Top Forestry Rd

The poultry operation would increase the frequency and costs of road maintenance, while the structural mitigation works would impose additional costs on ratepayers.

#### 5.1.3 Interactions with haul route road users

Introducing heavy vehicle traffic to the haul route roads would increase road safety risks for motorists, pedestrians and cyclists.

The interaction of heavy trucks with school buses and rubbish trucks that stop and start frequently poses considerable safety risks. There are many sections on the route where rubbish trucks and buses cannot pull off the road when stopping, and overtaking is not possible.

During a live bird pick-up, there would be significant interaction with the 7-9am school and commuter traffic (buses and cars) and pedestrians on the haul route, especially at the Maple St/Crystal St roundabout and on Myall St. On alternate Monday mornings there also are 2 rubbish collections.

#### 5.2 Residents' Amenity

MWA (p 27) claims that a peak volume of 26 vehicles per day represents a minor unreasonable nuisance potential on Top Forestry Rd without considering that 24 of those 26 vehicles are heavy trucks. An ambient road dust assessment was not undertaken.

The operation's vehicle volumes, types, loads and schedules would have significant negative amenity impacts on residents adjacent to the entire haul route. The use of average volumes and the claim there is no operational traffic on 30/63 days/cycle does not mitigate the negative impacts of night traffic and maximum vehicle days, especially as the calendar days of these events change each batch cycle. Also, the report does not take into account that:

- road surface and a heavy vehicle's weight and speed determine the amount and range of noise, dust and vibration.
- the nature of the noises and odours generated by the operation's vehicle types and loads are more intrusive than other sources.
- the bird pick-up time span would exceed 10 hours if more than 10 trucks are required.

#### 5.2.1 Health risks – dust, noise odour and vibration

Health risks arising from the operation's heavy vehicle traffic include:

- respiratory illnesses associated with air-borne contaminants from road dust, vehicle fumes and load contents (i.e. carcasses and manure).
- contamination of domestic water supplies as there is no reticulated water supply to Top Forestry Rd.
- sleep deprivation during bird pick-ups with up to 3 truck trips/hour starting at 02:30am.

### 5.2.2 Loss of amenity costs

The physical, psychological and financial well-being of residents along the haul route would be compromised for the applicant's financial gain. Increased costs imposed on residents by the operation's vehicle traffic include:

- heath care
- property and water supply maintenance.

Residents also would face the negative financial implications of decreased property values and saleability.

#### 6.0 Conclusions

None of the applicant's Traffic Engineering Reports have considered the entire haul route, including its:

- structural limitations
- customary use by pedestrians, cyclists and tourists.

The poultry operation's vehicle traffic would impose unacceptable risks and costs on haul route road users and residents. Significant negative impacts include:

- increased road safety risks
- increased road works and maintenance costs
- residents' loss of amenity.

The conclusions and recommendations of the L&R Traffic Engineering Report are questionable. Its omissions, anomalies and limitations indicate the operation's vehicle traffic and its impacts have been underestimated. Further, should the poultry operations require vehicles larger than the designated 19m/50 tonnes B-double, then Council would have to consider the need for a route assessment and approval.