

**BEFORE THE ENVIRONMENT COURT**

Decision [2016] NZEnvC OSA  
ENV-2015-AKL- 000039

**IN THE MATTER** of an appeal under s120 of the  
Resource Management Act 1991

**BETWEEN** CRADDOCK FARMS LIMITED  
Appellant

**AND** THE AUCKLAND COUNCIL  
Respondent

Court: Environment Judge C J Thompson  
Environment Commissioner K A Edmonds  
Deputy Environment Commissioner D A Kernohan  
Hearing: at Auckland 26, 27, 30 November, 1, 3 December 2015  
Site inspections 2 December 2015  
Final submissions 9 February 2016  
Counsel and parties:  
J M Savage for Craddock Farms Limited  
L F Muldowney and L E J Bielby for P L and R G Berry – s274 party  
J C Brabant for Wai Shing Holdings Ltd and ors – s274 parties  
P T Millen – s274 party  
G C Lanning and M McCullough for the Auckland Council

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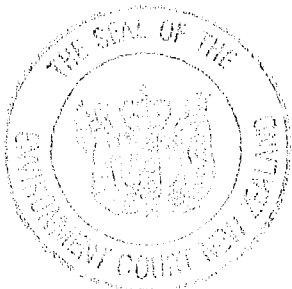
**DECISION ON APPEAL**

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Decision issued: **21 MAR 2016**

The appeal is declined

Costs are reserved

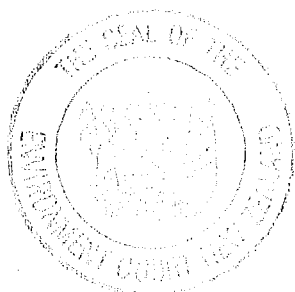


*Introduction and background*

[1] In a decision dated 12 January 2015, Commissioners appointed by the Auckland Council declined applications for land use consents, air discharge consents, earthworks consents and stormwater discharge consents made by Craddock Farms Limited. The applications involved the establishment and operation of a large layer chicken farm on the property at 254 Patumahoe Road, in South Auckland. It is approximately 3km west of Pukekohe, and 1.5km south-east of Patumahoe Village. The property is 19.010ha in area, and has, for some years, been used for racehorse training. Presently, it has a metalled oval training track, and there are stables and storage sheds, together with a house and minor unit.

[2] The proposal is to construct and operate ten laying sheds on the property, housing a total of 310,000 hens. The sheds are to be approximately 85m x 13m, with a sidewall height of 4.7m and an apex height of 6.5m. Each shed will have, at its western end, ventilation through a group of 12 chimney stacks of 10m height. The layout will be of two rows, aligned north-east/south-west, of five sheds each, with a space of about 18m between the sheds. The existing stables building, to the north-east of the sheds, will be converted for use as a pack-house.

[3] Outlining the background to the proposal, Mr Stefan Craddock told us that as well as providing an opportunity to expand the Company's present business, the Animal Welfare (Layer Hens) Code of Welfare 2012 requires changes to the industry's present practices insofar as housing hens are concerned. The Code will come into full force in December 2022 and will require the phasing out of *conventional* cage egg production. This Code was developed by the National Animal Welfare Advisory Committee established under the Animal Welfare Act 1999. At present, Mr Craddock advises, some three million layer hens, accounting for 87% of New Zealand's egg production, will require re-housing to meet the new code requirements. Naturally, the proposed new farm is designed to comply with the Code.



[4] Craddock Farms' present operation at Coulston Road in Pukekohe East has operated since 1962 and, as currently configured, has a maximum of 160,000 layer hens on 16ha of land, in conventional cage housing. It supplies supermarket chains and food service distributors with a weekly production of more than 1.25 million eggs. There is not scope on the site to expand that operation, but it is planned to continue it in parallel with the new proposal.

*Zoning and activity status*

[5] The planning documents involved are the Auckland Council Regional Policy Statement (ACRPS); the Auckland Council District Plan: Franklin Section (District Plan); the Auckland Council Regional Plan: Air, Land and Water (ALW); the Auckland Council Regional Plan: Sediment Control (SCP); and the Proposed Auckland Unitary Plan (PAUP).

[6] Under the District Plan the land in question is zoned *Rural*, and under the PAUP it would be zoned *Rural Production*.

[7] Both regional and district plans need to be considered in assessing the status of the proposal as a whole. They are:

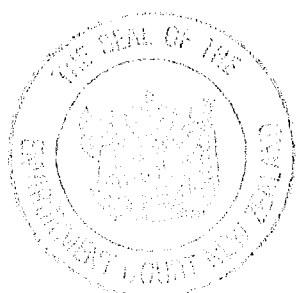
*Auckland Council Regional Plan: Air, Land and Water*

- Rule 5.5.4 provides that the diversion and discharge of stormwater is a *discretionary* activity because the impervious area will be over 10,000m<sup>2</sup> with the proposed impermeable surface being approximately 12,000m<sup>2</sup>.
- Rule 4.5.121 states that the discharge of contaminants into air from any process that includes the intensive livestock farming of poultry on site that does not comply with Rule 4.5.116, Rule 4.5.117 or Rule 4.5.119 is a *discretionary* activity.

*Auckland Council Regional Plan: Sediment Control*

- Rule 5.4.2.1 provides for earthworks outside of a Sediment Control Protection Area, on an area between 1 and 5 hectares where the land has a slope of less than 15 degrees as a *controlled* activity.

*Auckland Council District Plan: Franklin Section*



- Rule 23A.1.3.5 provides for Intensive Farming as a *restricted discretionary* activity.
- Rule 15.5.3 provides for earthworks over 250m<sup>3</sup> over a 12 month period, with a maximum depth of excavation cut or fill over 1.5 metres, and with a maximum area in excess of 2,000m<sup>2</sup> in the Rural zone as a *restricted discretionary* activity.

*Proposed Auckland Unitary Plan*

- Rule 3.H.4.1.1 provides for intensive farming of any number of poultry not meeting *permitted, controlled* or *restricted discretionary* controls (i.e. established after 21 October 2001 and over 180,000 birds) as a *discretionary* activity.
- Rule 3.H.4.2.1 provides for earthworks greater than 2,500m<sup>2</sup> and 2,500m<sup>3</sup> as a *restricted discretionary* activity.
- Rule 3.H.4.14.1 provides for any new impervious area discharging to ground that is greater than 1,000m<sup>2</sup> as a *discretionary* activity.

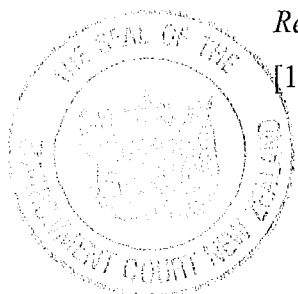
[8] On a bundled basis, it is agreed that the proposal is to be considered as a *discretionary* activity. The provisions of s104, s104B, and Part 2 of the RMA are therefore all relevant. In terms of the regional plan consents, s105 and s107 will also require consideration.

*A water take permit?*

[9] There was a suggestion in some of the material that the suite of consents being sought was deficient, in that a water-take consent would be required (over and above the consent to sink a bore on the site) and no such application had been made at the time the other applications were lodged. In the event, the issue did not need to be pursued. It was confirmed that an appropriate consent had been sought, and that the relevant groundwater is not over-allocated. The Council would be prepared to grant such a consent, and no party sought to take the matter further. In the overall scheme of things, we are content with that position.

*Reverse sensitivity rule – notification of application*

[10] This issue arises from Rule 23A.2.1.11 of the District Plan. That provides:



*Dwelling house within separation distance from an existing Intensive Farming activity.*

No part of any new Dwelling House on a lot created before 11 July 2006 shall be sited within 300 metres (separation distance) of an existing Intensive Farming activity.

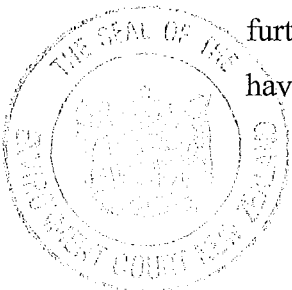
The separation distance shall be the shortest distance measured from the edge of any Building associated with the Intensive Farming activity and the Dwelling House. The Intensive Farming activity sites to which the separation distance apply are as follows:

- (i) Those established by a resource consent (land use) which has been given effect to at the time of receipt of the application for the Dwelling House;
- (ii) Those which hold existing use rights under Section 10 of the Act;
- (iii) Those specifically zoned for or established through a resource consent granted by the authority of adjacent territorial local authorities.

These provisions do not apply to additions and alterations to an existing Dwelling House.

[11] The point raised by Mr Millen, and by Wai Shing, (two of the opposing parties, whom we shall introduce shortly) is that if the proposed layer farm is given consent, and is established, it will be ... *an existing Intensive Farming activity* ... in terms of the Rule. That, they argued, means that any proposal to put a new Dwelling House on a neighbouring or nearby Lot will become a *restricted discretionary* activity if less than 300m separates the closest points of the house and any building associated with the layer farm; and that would be a substantive restriction on their rights as land owners, and would be an adverse effect on their land.

[12] The full potential impact of this Rule was not noted by Craddock Farms in lodging the application; nor seemingly appreciated by the Council in the course of processing the application. Because the Rule requires measurement of the distance between the proposed dwelling house and ... *the edge of any Building associated with the Intensive Farming activity* ... at the least the nearest point of the existing stables building, to be converted to the operation's packing shed, and the office and storage building, would have to be taken as the measuring point. But only the nearest points of the proposed layer sheds were factored into the equation. Taking the measurements from the correct buildings has the effect of moving the 300m zone onto neighbouring properties to the north, south and west of the site. In all, nine further lots, the owners of which were not notified of the application, and so did not have the opportunity of becoming submitters, are affected by Rule 23A.2.1.11.



[13] In response, Mr Savage submitted, first, that the terms of s10(1)(a) RMA would protect the right of a landowner (such as Mr Millen) to replace an existing dwelling. The subsection provides:

(1) Land may be used in a manner that contravenes a rule in a district plan or proposed district plan if —

(a) either —

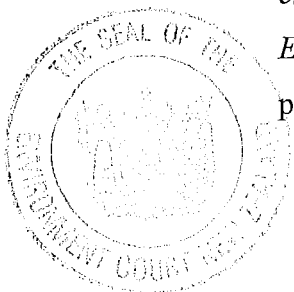
(i) the use was lawfully established before the rule became operative or the proposed plan was notified; and

(ii) the effects of the use are the same or similar in character, intensity, and scale to those which existed before the rule became operative or the proposed plan was notified:

[14] Secondly, he pointed out that all of the nine additional properties now identified as being affected appear to have a house on them. Further, all of them are less than 40ha in area. That would mean that to construct an additional house, a *non-complying* resource consent would have to be sought so that, in practical terms, there are already existing restrictions on the building of houses more onerous than the proposal might bring with it.

[15] Thirdly, he submits that in any event the impact of a Rule such as 23A.2.1.11 is not an *effect* on the *environment*, and thus not a matter for a decision-maker to take account of.

[16] We are inclined to think that he is correct on the first two counts. It is difficult to imagine that a replacement house on an affected property would not be sufficiently *similar* in character, intensity and scale to qualify for s10 protection; and having to seek a *non-complying* resource consent for an additional house carries a higher burden than a *restricted discretionary* consent to build within the 300m separation distance (shown as an ‘offset’ on the plan provided to us by the Council because of its non-circular shape) would do. Having regard to the way in which the term *environment* has been discussed in cases such as *Queenstown Lakes DC v Hawthorn Estate Ltd* [2006] NZRMA 424 (CA) – as being the environment as it exists, with the possible addition of *permitted* activities that are in practical terms, likely to occur, the



possible effect of the 300m separation distance on activities that could, in any event, only occur with the sanction of a *non-complying* consent just does not fit the concept of *environment*.

[17] On the third issue however, we saw difficulty in the apparently direct terms of s104(3)(d) – as amended in 2009:

A consent authority must not – ...

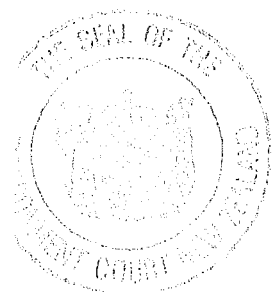
(d) grant a resource consent if the application should have been notified and was not.

We were not satisfied that the parties had been able to reflect on this issue, and to make submissions about it. In a Minute issued on 15 December 2015 we therefore asked the parties to make further submissions. We received those in early February, and we are grateful for them.

[18] For Craddock Farms and for the Council, the positions taken are, essentially, that the application was *notified* to the owners of the properties believed to be affected, notwithstanding that notification was made only to the owners of adjoining properties and not all landowners within the [correctly measured] 300m separation distance, and, that being so, this Court can take the matter no further. Their position is that only the High Court can, on judicial review, inquire into the propriety of the extent or nature of that notification. Given the simple and apparently mandatory terms of the section, we are not entirely convinced about that. However, given the view we have about the ultimate outcome of the appeal on its merits, none of the parties will be disadvantaged, and considerable further time and cost will be saved, by our accepting the position as it stands and leaving the point to be resolved, if need be, in dealing with some future matter.

*The parties' general positions*

[19] Craddock Farms advances the view that the issue which proved decisive in the Commissioners decision – ie the concern that the potential adverse effects of odour from the operation could not be adequately dealt with – has been met by modifications made since, essentially in two ways. First is the rearrangement of the positions of the sheds to give greater separation distances between them and the closest affected properties. Second is the adoption of more recent technology to

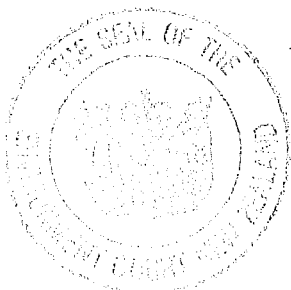


gather and expel odour-affected air from the sheds. These two measures, it says, will ensure that objectionable odour will not be an issue for the surrounding environment.

[20] The Council supports the Commissioners' decision, and does not accept that the changes made to the proposal since the making of that decision have made a significant difference to the potential odour effects. It takes the view, as do the other opponents of the proposal, that the site is simply *too small* for the scale of what is proposed, and that the end result of granting resource consents will be that the surrounding properties will bear the environmental costs, both by way of the risk of chronic and acute odour effects, and the burden of the *reverse sensitivity* provisions of the District Plan, which could prevent, or at best make difficult and expensive, a new dwelling on the affected properties. We have already expressed our view on the latter point : - see para [18].

[21] The opposing parties – Mr Ray and Mrs Peta Berry, and Mr Peter Millen, who both reside on relatively small Lots on Patumahoe Road, to the north and south respectively of the entrance to the site; and the Wai Shing interests (a grouping of family members, a family trust, and a family-owned trading company who, for convenience, we shall collectively call *Wai Shing*), whose vegetable and horticultural properties surround the site, all have the common position that the Craddock Farms site is *too small* for the operation proposed. The residents fear that their rural lifestyle properties will be adversely affected, primarily by odour, and by other adverse effects we shall mention shortly. Wai Shing is concerned about subjecting its workforce, who on occasion are required to work in the open air for long hours close to the Craddock Farms boundaries, to the same odour effects.

[22] Mr Millen also made particular mention of the reverse sensitivity issue which he sees as inhibiting the possibility of replacing the house which is on the site presently. Wai Shing raise this also, on the basis that they may at some point wish to put houses on one or more of the properties which do not presently have houses, and that the reverse sensitivity provisions will, in any event, devalue their properties. Again, we have already discussed this issue in the context of notification: - see para [18].





*Section 104(1)(a) – positive effects*

[23] There is no issue about the positive effects the proposal can be expected to have. It will be a modern operation and designed to comply with the newly introduced Code. It will supply food to its markets, and it will provide employment to those who are engaged to construct it, and to operate it once built.

*Section 104(1)(a) - adverse effects*

[24] In terms of adverse effects, a number of concerns were expressed at Council level, and in the s274 notices. They covered issues such as visual effects, traffic generation and safety, dust generation, potential effects on water supplies, noise, and odour.

*Visual*

[25] The issue of visual effects – essentially how the proposed sheds might be sheltered from the view of neighbouring properties – was considered by Mr Robert Pryor, a landscape architect called by Craddock Farms. His evidence was that planting along the boundary between the sheds and the Berry property, and alongside the acoustic fence to be provided at the entrance to the Millen property, would be effective within five years, and quite possibly more quickly than that. We note that Mr and Mrs Berry’s house and curtilage are already sheltered behind existing vegetation from the area where the sheds would be placed, and it is only the rear part of their land that would substantially benefit from the new plantings.

[26] Mrs Berry considered that the photo simulations prepared under Mr Pryor’s direction give a misleading impression of the proposed buildings when viewed from their property. We do not take such simulations as being more than indicative: - they have not taken a vital place in our considerations, and we have had the benefit of being able to see the area, including being on the Berry property, for ourselves. We note that the substantial Wai Shing packhouses and bin stacks are closer to, and are in plain view from, the Berry property, and that is not an issue for them. Mrs Berry accepts them as being part of a rural environment. Overall we need say no more than, subject to appropriate conditions and to maintenance for at least the



establishment period, we consider the proposed landscape planting would serve the purpose quite adequately.

### *Traffic*

[27] Mr Millen still has concerns about traffic issues and, while he did not call evidence about that topic, Craddock Farms called Mr Eric Hebner, a traffic engineer. In brief, his view was that while the proposal would certainly bring more traffic onto Patumahoe Road than is currently the case, the road and its layout were adequate for the purpose, and the difference would not add any appreciable level of risk. We are satisfied with that evidence.

### *Water supply*

[28] On the topic of effects on water supply in the vicinity, Craddock Farms called Mr Michael Chapman, an engineering hydrologist. His evidence was that the proposal would have adequate stormwater management, and would not adversely affect the underlying groundwater table or add to the risk of contamination of the supply of the neighbouring properties. Mr Berry was not totally convinced by his evidence, but acknowledged that he had no basis for actively attempting to contradict it. We see no reason to not accept Mr Chapman's views.

### *Noise*

[29] Similarly, on the subject of possible noise nuisance, the appellant called Ms Laurel Smith, an acoustics consultant. She saw no reason to think that either construction noise, or operational noise, would be an issue on any of the Millen, the Berry, or the Wai Shing properties, so long as adequate conditions, which she proposed, were in place. Again, her evidence was not challenged in any way and we see no reason to not accept it.

### *Conclusions on visual, traffic, water supply and noise effects*

[30] On those aspects we came to the same conclusions as the Commissioners, viz that neither individually, nor collectively, they raised cause to decline the consents.



*Odour effects*

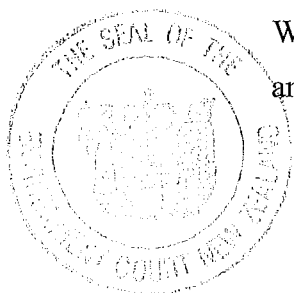
[31] As was the case in the hearing before the Council's Commissioners, it was clear that the real issue of concern was that of the odour produced by the wastes and manure from the sheds, and its potential impact on those who live and/or work near to it. Mr and Mrs Berry, Mr Millen, and the Wai Shing witnesses focussed their evidence on that topic.

*Odour at Coulston Road*

[32] As part of its evidence, Craddock Farms lodged affidavits from twelve people, all of whom are residents of the area surrounding its present operation at Coulston Road. All confirmed that they had not, during their various periods of residence there ... *experienced any offensive or objectionable odours emitting from ...* the Coulston Road operation. The purpose of the affidavit material, obviously enough, was to attempt to demonstrate that Craddock Farms has been careful and professional in its operations at that site, and that the concerns expressed about odour being an inevitable neighbourhood issue for chicken farms are perhaps overstated.

[33] Four lines of criticism were aimed at this material. The first was that it was not a neighbourhood *survey* in the suggested format for a Questionnaire contained in the Ministry for the Environment's *Good Practice Guide for Assessing and Managing Odour in New Zealand*. Patently, the affidavits are not a questionnaire or survey, but nor did they pretend to be. We see no basis for saying that only such a questionnaire/survey can provide acceptable material to assist in assessing the effects of any activity on any neighbourhood.

[34] Secondly, and related to the first, it was argued that the locations of the residences of those who made the affidavits did not include every potentially affected house in the area of the Coulston Road operation. Mr Craddock's response was that he asked the residents who were closest to the site, on the basis that if they were not affected, it would be highly unlikely that those who were more distant would be. While recognising that odour can, in some topographical and weather situations, rise and descend in plumes, that logic seems sound enough. Further, there has been the



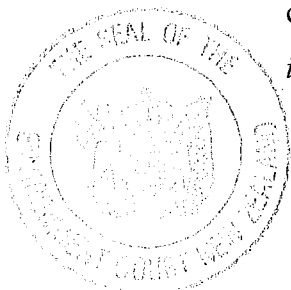
opportunity for other parties to investigate whether there are other residents affected in that way, and we heard no evidence that there were such.

[35] Thirdly, it was pointed out that in declarations from some of the same people presented at the Commissioners' hearing those persons had said that they had ... *not experienced any odour emitting from Craddock farms site* ... . There was said to be significance in the difference between ... *any odour* ... and ... *offensive or objectionable odours* ... - such that it threw doubt on the truth, or at least the reliability, of what was being said. We do not see such significance in that difference. All that can be said is that one version is absolute and the other is qualified – and one might suspect that the qualified version shows the mind and hand of a lawyer in drafting the affidavit, with the terms of the planning documents in mind.

[36] Finally, it was suggested that those who made the affidavits may have done so on the misunderstanding that Craddock Farms was looking to move its whole operation out of the area, and would be encouraged by the prospect of having them gone to sign anything that was put in front of them, whether true or not. To accept that we would have to assume, with no supporting evidence at all, that these twelve people were prepared to commit perjury. Further, the declarations were signed in 2014, and the affidavits made mid- 2015. There has therefore been ample time for any of those persons to come forward to complain of being misled, if that had been the case. That has not occurred.

[37] While we note that the deponents were not cross-examined, because none were called to give viva voce evidence, there was no suggestion that any party had asked for them to be available for cross-examination, so nothing really turns on that.

[38] In short, we see no reason not to take that material at face value. While the Coulston Road operation is obviously smaller than what is proposed, the fact that it has operated for a significant time (50 years+ in total - 10 or so years in its present configuration) with no recorded complaints, and a positive *no (offensive) odour issues* endorsement from twelve of its closest neighbours, does suggest a well-run



operation and gives reasonable grounds for an expectation that the proposed site would be well-run also.

*Odour at the proposed site*

[39] Turning now to the evidence about potential odour effects emanating from the proposed site.

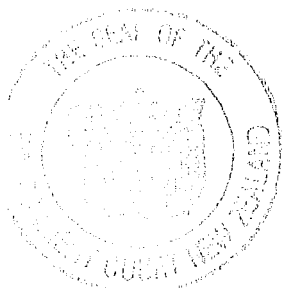
[40] The Hearings Panel declined the application because:

- They were unable to place reliance on the odour modelling
- To the extent the odour modelling could be relied upon it indicated the potential for significant adverse odour effects
- The (revised) management plan was not sufficiently robust and lacked any realistic remedies to address any adverse effects from odour if these did occur.

The Panel recorded: *Ultimately we faced the problem that the site is only 250m wide affording a maximum separation distance only 125m*". The Panel stated *"For the absence of doubt, our concerns in relation to odour are the sole reasons for declining the application.*

[41] We note the reasons for the decision of the Hearing Panel, and we also note that what the Hearing Panel was asked to consider in terms of shed type (size and design), positioning, odour modelling, meteorology and a proposed management plan was different from that presented to the Court. Mr Clarke McKinney, the Auckland Council planning witness, provides detail of the changes in the proposal now under consideration. The proposal still involves ten sheds but the length of each shed has been increased from 79m to 85.2m and the height of the roof ridge from approx 5.2 to 6.5m. The layout and location of the sheds has been altered so that the sheds are now to be clustered closer together and further back from the road and northern boundary. The revised ventilation system involves 12 vertical stack chimneys, 10m high, at the western end of each of the sheds. There was no argument that the amended proposal is not within the scope of the original application.

[42] We had evidence from five odour experts - Ms Jennifer Barclay and Dr Terence Brady for Craddock Farms, Mr Richard Chilton for Mr and Mrs Berry, Mr



Kevin Mahon for the Auckland Council and Ms Jayne Metcalfe for Mr Millen. Dr Howard Edwards, a statistician, also gave evidence for Craddock Farms.

[43] The odour experts based their approach on the *Ministry for the Environment Good Practice Guide for Assessing and Managing Odour in New Zealand* June 2003 (the Guide) and also referred to the related *Ministry for the Environment Good Practice Guide for Atmospheric Dispersion Modelling* June 2004. The Guide notes that odour assessments can be conducted based on a combination of approaches and information from a range of sources. In assessing odour effects the experts considered six possible approaches: dispersion modelling and odour guidelines; comparisons with existing facilities; separation distances; community consultation, including review of historical odour complaints; odour surveys, and review of management plans regarding odour controls. The experts agreed that any assessment is usually based on some but not necessarily all of these items. We work through the different methods, with a focus on the areas of difference that are at issue.

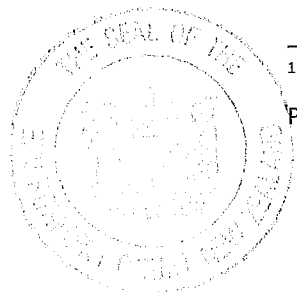
[44] We record here that that we were told that the operators did not agree to Ms Metcalfe visiting the egg layer operation at Coulston Road and as a result she did not have site specific knowledge. We were also told that Ms Metcalfe was not given permission to visit the *Zeagold* operation which was mentioned in the evidence. While we consider that to have been regrettable, we record here that we did not find that this detracted from the evidence Ms Metcalfe was able to provide.

#### *Shed Type*

[45] The Hearings Panel was presented with information about effectively a *Type D* shed similar to that reported in the *Dunlop* data<sup>1</sup>. Some of those are in operation at Coulston Road, that is a shed with battery cages, a standard tunnel ventilated system with no manure drying, and vented at a gable end. The proposal before us, we should add, does not include *Type D* sheds.

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<sup>1</sup> Dunlop 2011: Dust and Odour Emissions from Layer Sheds. Project number 04-45. Australian Poultry CRC Pty Ltd. Final report September 2011



[46] The shed type proposed to be constructed at Patumahoe is akin to the *Type E* shed reported in the Dunlop data: - that is a shed with the new colony farming system with constant manure drying (tunnel-ventilated by forced air). Some *Type E* sheds with similar characteristics are in operation at Coulston Road.

#### *Shed Positioning*

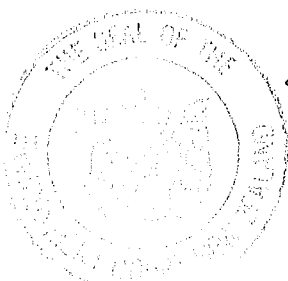
[47] The positions of the sheds have been re-arranged since the Council Hearing to give greater separation distances between them and the closest affected properties.

[48] The Council argues that the appellant has had opportunity to reduce the scale of the development but has given no consideration to this and little consideration to different layouts. Mr Brabant suggests that: *Many of the initial decisions taken by the Appellant appear to be largely if not solely driven by economic considerations.* He adds that three sheds in two or possibly three rows might help better internalise any odour problem.

#### *Odour Modelling*

[49] The experts agreed that odour modelling is a complex process but is an appropriate tool to assist in understanding odour effects. Two of what was described as state-of-science models were used – The Air Pollution Model (TAPM) to develop gridded 3-dimensional meteorological data - and the US EPA's CALPUFF model. The experts agreed that the use of the CALPUFF model is appropriate, the meteorological data used gave results that can be relied on and the topographical and land use data used is appropriate, with the area covered by the model including all sensitive receptors. The experts agree that the modelling undertaken was appropriate and represents good practice. They agreed also that the sensitive receivers shown are the closest, and therefore appropriate. The experts also agreed that the quality of the odour outputs will depend substantially on the quality of the inputs.

[50] In the Joint Expert Witness Statement on odour modelling, the experts recorded: *For the avoidance of doubt, the key unresolved issue is the reliability of the input data to provide guidance on the scenario to be used for comparison with guideline values. In other words, how many sheds could be discharging odour at*



*maximum rate at any one time. Dr Brady and Ms Barclay consider that the number of sheds discharging at the higher rate is best determined using statistical techniques based on empirical data. The other experts do not agree that there are sufficient data to allow reliable conclusions to be drawn.*

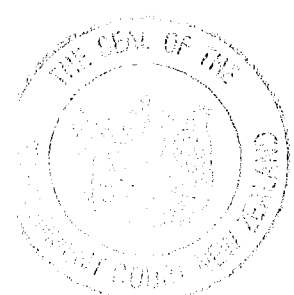
[51] Mr Chilton provided a summary of the information required for odour dispersion modelling, namely:

- How the odour is discharged (stack location, height, diameter, exit velocity and temperature of the air stream);
- Building shape, height and location;
- Meteorology (including wind patterns at the site; and
- Odour emission rates.

[52] Given that information about stack location, height, diameter, exit velocity and temperature of the air stream is known and there was agreement on the experts on the meteorological data now used, we understand that the odour emission rate is the single most important variable in the modelling exercise. We were given evidence that there is no relationship between odour emission rates per bird with shed temperature, shed ventilation rate, or season.

[53] While there was some early confusion, due to information about Type D sheds being included in the evidence, by the time of the hearing all the experts were clear that the data for a *Type E* shed alone should be used as input into the computer modelling.

[54] The odour emission data used in the modelling undertaken by Ms Barclay is based upon the *Type E* shed data (manure drying, as in the proposal for Patumahoe Rd). The 26 data points come mainly from poultry layer sheds in Queensland (referred to in Dr Brady's evidence as *Dunlop 1*) and a few data points from Craddock Farms' Coulston Road property. Dr Brady states that the extensive study carried out by *Dunlop* represents, in his opinion, the best and most comprehensive data available anywhere in the world. Ms Metcalfe notes that *Dunlop* reports the range of emission rates for the majority of the data as 50 to 500 OU/sec/1000 birds





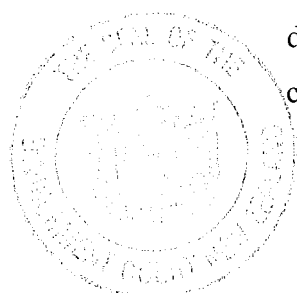
(odour units per second per 1000 birds). Data from Coulston Road included the highest recorded odour measurement of 583 OU/sec/1000 birds.

[55] Dr Brady uses the data to arrive at a conservative mean value of 300 OU/sec/1000 birds, a figure concurred with by Mr Chilton. The highest figure in the set of data was 583. Dr Brady assessed that there was a 1% to 5% chance (or probability or likelihood) of any one shed emitting at such a high value occurring, a figure he subsequently revised to 2%.

[56] Odour dispersion sensitivity modelling was carried out by Ms Barclay using the 300 and 583 odour emission rates as input. Indicative odour concentrations at the Wai Shing packhouse, the Berry house, the Millen house and the closest boundary to the poultry sheds are provided for a range of scenarios - from all 10 sheds emitting at the 300 rate, to all 10 sheds emitting at the 583 rate. The model provides hourly averaged odour concentrations for each of the 8760 hours in a year. The 99.5 percentile figure corresponds to the 43rd highest hourly odour concentration. For example with all 10 sheds emitting at the 300 rate, odour concentration at the Millen house is predicted to be above 3.43 OU/m<sup>3</sup> for 0.5% of the time or for 43 hours per year (0.5% x 8760 = 43). For all 10 sheds emitting odour at the higher 583 odour emission rates as input the corresponding odour concentration is 6.74 OU/m<sup>3</sup> at the Millen house and 5.76 OU/m<sup>3</sup> at the Berry house.

[57] Craddock Farms relies heavily on the outputs of dispersion modelling to demonstrate that unacceptable levels of odour occur relatively infrequently at the closest existing houses (on the Berry and Millen properties). Using an odour emission rate of 300 OU/sec/1000 birds, the 99.5 percentile modelled one hour average odour concentration is predicted to be below what was considered by some to be the generally accepted objectionable odour level of 5 OU/ m<sup>3</sup> – a central issue we shall return to.

[58] Ms Jayne Metcalfe, called by Mr Millen, was critical of reliance on the *Dunlop* data. In her view about 4 days of test results do not provide enough data to categorically say that between each of the sheds there will be this random variation at

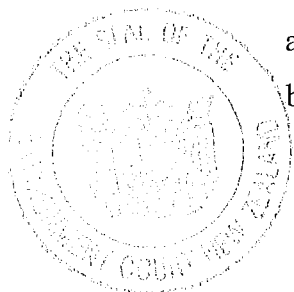


any one time. Dr Brady's assessment of the low likelihood of multiple sheds emitting at the high rate concurrently was disputed by Ms Metcalfe on the basis that conditions that result in high emissions in one shed could quite likely occur simultaneously in all sheds. She was of the opinion that 583 should not be discounted as unrealistically high. She said that a good practice approach, where there is not enough data to reliably quantify the probability, is to take the conservative end of the data, and if the 583 is considered as an outlier then one should take the next one, which is about 500. She also said that if there was a single shed she would simply assume the highest emission rate of 500.

[59] Dr Brady's evidence is that there is a very low probability of high odour emission rates (583) occurring simultaneously in two or more sheds, by considering the odour from each shed to be independent of odour from the others. Ms Metcalfe had a different opinion, stating that circumstances that resulted in high emissions from one shed could quite likely apply to all sheds.

[60] Mr Chilton also was not satisfied that all 10 sheds will behave randomly from one another. While he accepted that the *Dunlop* data was the best data he was aware of, he said it involved only in the order of 30 data points from a *Type E* monitored in an unusual year, and some of the in-shed parameters were incomplete.

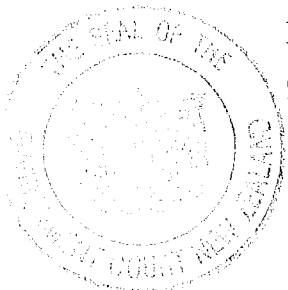
[61] Odour dispersion modelling is a technique that can be useful in providing comparative results but not one that of itself can produce definitive data. Following the 2014 Auckland Council first-instance hearing of an earlier proposal for this site, the decision said that Mr Chilton stated that modelling he had carried out indicated that with odour emission rates of 79 OU/sec/1000 birds (a figure about one quarter of the 'average' value of 300 used by Ms Barclay) ... *the Berry property could be subject to significant adverse odours from the proposed Craddock Farm layer operation*. While it is accepted that modifications were made to some aspects of the Craddock Farm proposal since the first instance hearing, this is in stark contrast to Mr Chilton's later comments that subsequent analysis he carried out was in general agreement with Ms Barclay's evidence which predicted odour concentration of between 3 and 4 OU/m<sup>3</sup> at the Berry house.



[62] In similar vein, earlier comment by Dr Brady from the first instance hearing as to the robustness of dispersion modelling data is in stark contrast to his reliance on the predictive data (based on Ms Barclay's analyses) which gives expected odour concentration for the most sensitive locations of between 2.16 and 3.43 OU/m<sup>3</sup> to conclude that the effects are predicted to be minor and well within MfE guidelines. In his evidence to the Auckland Council hearing Dr Brady is reported to have said that a study he carried out for the Poultry Industry Association of NZ (PIANZ) concluded that *odour dispersion modelling predictions for poultry sheds was completely uncorrelated with observed odour nuisance*. The hearing decision goes on to say that: *it was [Dr Brady's] view, therefore, that dispersion modelling had no real predictive value for odour emissions from poultry farms*.

[63] In addition to the odour modelling for the Patumahoe Road site Ms Barclay also carried out comparative modelling for Craddock Farms' Coulston Road operation. This modelling showed that the odour levels for an assumed emission rate of 300 OU/sec/1000 birds (the average used for the Patumahoe model) were comparatively higher at Coulston Road than at Patumahoe Road despite the fact that there are significantly fewer birds at Coulston Road than at the proposed farm. Ms Barclay gave the main reason for the higher odour concentrations as the greater dispersive environment of the proposed Patumahoe farm and the source characteristics such as stronger exit velocity and higher stacks. The other experts accepted this.

[64] The Guide refers to percentiles to be used for different sensitivities (a matter we come to shortly). It states that the percentile allows for a small level of exceedance of the predictions, to account for worst-case meteorological conditions, at which objectionable odours are unlikely because the conditions occur infrequently. The focus of the evidence was on the 99.5 percentile figure translating into the 43<sup>rd</sup> highest hourly concentrations, although Ms Barclay also provided a plot showing the 99.9 percentile (the eighth highest concentration).



[65] The Guide states that any *calculated breach* occurs for a whole hour according to the model, which predicts hourly averages, but in practice peaks will only occur for short periods. In cross-examination Ms Metcalfe explained that the percentile figure represented an hourly average but there could be peaks significantly greater than the average and that these peaks could be experienced as objectionable odour.

[66] Ms Metcalfe also stated that the higher percentile figures from the model should not be discounted as extremes that are unlikely because the conditions that produce them occur infrequently, as suggested by Dr Brady. Rather, these higher percentile figures (i.e. the 42 hourly averages above the 43<sup>rd</sup> highest) represent higher odour concentrations which again could be experienced as objectionable odour, even if they do not occur often.

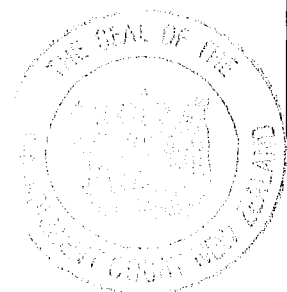
[67] We also note that the modelling does not allow for accidents, unforeseen breakdowns and malfunctions.

#### *Conclusions on modelling*

[68] We remind ourselves that while modelling makes a useful contribution to informing consideration of relative odour effects, the modelling results are not absolute, and may not be what will actually happen in reality.

[69] In summary, Ms Barclay's evidence shows the range of 99.5 percentile odour concentration modelled for a range of scenarios. The predictions based on an emission rate of 300 OU/s/1000 birds from all ten sheds and for 538 OU/s/1000 birds from all ten sheds are as follows:

Discrete Receptor	Addressee	Lowest OU m <sup>3</sup> for all 11 scenarios	Lowest OU m <sup>3</sup> for all 11 scenarios
		10 sheds at 300	0 sheds at 300 OU/s



		OU/s 0 sheds at 583 OU/s	10 sheds at 538 OU/s
Receptor 1	Wai Shing (packing shed)	2.16	4.25
Receptor 2	Berry (house)	2.93	5.76
Receptor 3	Millen (house)	3.43	6.74
Boundary	Fenceline receptor (closest to the site)	7.17	14.09

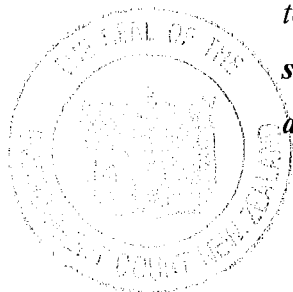
[70] Not all the odour witnesses agree with the assessment by Dr Brady and Ms Barclay of the low probability of the higher emission rate of 583 OU/s occurring simultaneously in multiple sheds.

[71] We conclude that there are significant uncertainties over the appropriate odour generation rates and therefore also the odour concentrations predicted to be received at the boundary of, and on, adjoining properties.

[72] We note that the odour modelling results presented in the table focus on the Berry and Millen houses and not on the boundary of their respective properties, nor on the other nearby properties other than the closest point to the emission source. We were given a plot of odour contours, superimposed on an aerial photograph, showing the results of the modelling of the odour concentrations of 300 OU/sec/1000 birds at the 99.5 percentile. This information assumes some importance in our consideration of effects.

*MfE Guide (June 2003)*

[73] We note the point made by Mr Savage in opening: *The Guide contains advice on how to assess the effects of odour, monitoring the effects of odour, case law, when to use dispersion modelling and how to manage odour emissions. It is careful to state that its recommendations are not legislative requirements under the RMA or any other legislation (our emphasis). It also emphasises that effects can vary*



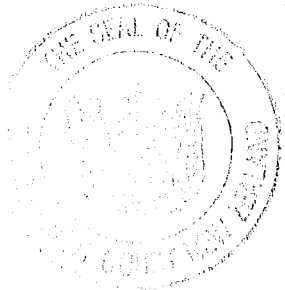
*significantly on a case by case basis and that users of the Guide should take into account the specific circumstances of each case.* We accept that the Guide is only a guideline and also understand that it is undergoing review.

[74] The thrust of the Guide is: *There shall be no objectionable or offensive odour to the extent that it causes an adverse effect at or beyond the boundary of the site.* Mr Savage submitted that: *It is usually insufficient for an odour to be simply detected at or beyond the boundary of the site. ... [t]he odour must be sufficient to create an adverse effect and objectionable or offensive in the opinion of the “ordinary reasonable person ....” Whether there is a breach is always dependent on all of the FIDOL factors.* We note that the ALW Plan (4.5.1) refers to officers generally following relevant case law and taking into account the FIDOL factors (see following paragraph) in responding to a complaint about a breach of condition concerning odour.

[75] The Guide states that whether an odour has an objectionable or offensive effect will depend on the *frequency, intensity, duration, offensiveness* (or character), and *location* of the odour event. These are collectively known as the FIDOL factors and are set out in the Guide:

Frequency	How often an individual is exposed to odour
Intensity	The strength of the odour
Duration	The length of a particular odour event
Offensiveness/character	The character relates to the ‘hedonic tone’ of the odour, which may be pleasant, neutral or unpleasant
Location	The type of land use and nature of human activities in the vicinity of an odour source.

[76] The Guide states that different combinations of these factors can result in adverse effects. For example, odours may occur frequently in short bursts, or for longer, less-frequent periods. Objectionable and offensive effects from odour can occur from low-intensity, moderately unpleasant odours occurring frequently over a long period – chronic effects, or from high-intensity, highly unpleasant odours



occurring infrequently – acute effects. The Guide also suggests that while it is useful to know what type of effect predominates, the overall impact of odour effects will often result from a combination.

[77] Dr Brady gave evidence that the FIDOL factors are, to some extent, inherent in the modelling and guideline values in the Guide. He said that frequency is partly included in the use of the percentile. He considered that while offensiveness/character is not considered, it is crudely accounted for by the odour concentrations 5 or 10 OU/m<sup>3</sup>. He referred to the duration as accounted for in the hourly average and the location as inherent in the different sensitivity categories for different land uses.

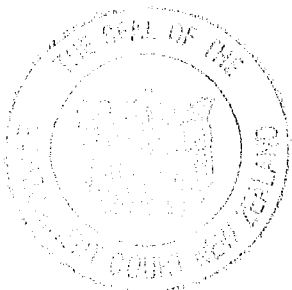
[78] The Joint Witness Statement notes that there is disagreement between the experts about the degree of sensitivity of the receiving environment and the appropriate assessment criteria to be used.

[79] Table 2.2 of the Guide provides examples of sensitivity for different land uses. The table signals both high and low classifications for Rural land use with the comments and reasons for classification that:

- Low population density means low opportunity for exposure to odour.
- People living in and visiting rural areas generally have a high tolerance for rural type odours.
- May be highly sensitive to non-rural type odours (eg rendering plant or landfill odours).

[80] The sensitivity classification for Rural residential (low-density residential, minimum property size around 1 ha) also has high and low classifications with the comments and reasons:

- Lower population density, therefore less opportunity for exposure to odour (as for Rural)
- People of high sensitivity can be exposed at all times of the day and night.
- Rural-type background odours may be present but are usually lower intensity than in a rural zone.



- Residents tend to work in cities and return home at night or weekends and may not be desensitised to rural-type odours.
- Can be sensitive to non-rural-type odours (e.g. rendering plant or landfill odours).
- Overall high or low sensitivity, depending on the circumstances of the particular area.

[81] The Guide states:

[t]he degree of sensitivity in a particular location is based on characteristics of the land use, including the time of day and the reason why people are at the particular location (e.g. for work or recreation). ... [The Guide] ... offers comment on issues that contribute to the assessment of sensitivity of the receiving environment.

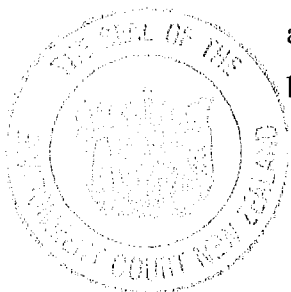
We agree with the submissions and witnesses that what was described as the *two ticks* approach with its high and low sensitivity classification is not particularly helpful, but accept that the comments and reasons or factors listed are useful and inform our consideration of the effects.

[82] The Guide sets out:

Table 4.6: Recommended odour-modelling guideline values

Sensitivity of the receiving environment	Concentration	Percentile
<b>High</b> (worst-case impacts during unstable to semi-unstable conditions)	1 OU/m <sup>3</sup>	0.1% and 0.5%
<b>High</b> (worst-case impacts during neutral to stable conditions)	2 OU/m <sup>3</sup>	0.1% and 0.5%
<b>Moderate</b> (all conditions)	5 OU/m <sup>3</sup>	0.1% and 0.5%
<b>Low</b> (all conditions)	5 – 10 OU/m <sup>3</sup>	0.5%

[83] Craddock Farms argued that the Guide provides for 5 OU/m<sup>3</sup> at a sensitive receptor and 10 for receptors in the fields. The Council argued that the modelling does show a reasonable potential for odour levels well above 5 OU/m<sup>3</sup> on a receiving environment. The Council's position in opening was that 2 OU/m<sup>3</sup> birds is the appropriate level which even in the case of odour emissions of 300 OU/sec/1000 birds from each of the ten sheds is exceeded at the Berry and Millen houses and in





any event Craddock Farm's preferred 5 OU/m<sup>3</sup> is exceeded across the subject site's boundaries.

[84] The Joint Witness Statement contains this passage:

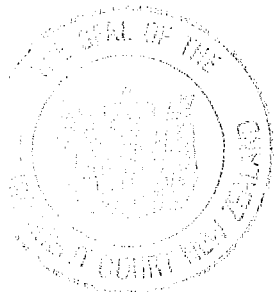
The experts agree that residences are sensitive, they also agree that there may be some enhanced sensitivity for people working in the paddocks for several hours of the day.

Experts for CFL propose the use of the Ministry for the Environment guideline of between 5 and 10 OU (which is the guideline for low sensitivity receiving environments) for all receptors in the rural zone. Mr Chilton considered 5 OU appropriate for residences and up to 10 OU for paddocks if they are not frequently used, but he has not specifically needed to consider the case of workers in paddocks. Mr Mahon and Ms Metcalfe consider that a value of 1 to 2 OU (which is the guideline for high sensitivity receiving environments) is more appropriate for residences.

[85] Dr Brady was critical of the values in the Guide, and said that a pass/fail approach to the values in the Guide was not justified and indeed the Guide itself says that. He said it was not the case that *anything goes* in terms of rural land uses but it is necessary to look at the offensiveness or nature of odour to decide whether or not people may be highly sensitive to it. He said that, in his experience, piggeries cause problems but layer farms do not.

[86] Dr Brady said there are numerous activities where the guidelines are not met, with predicted odour concentrations of 20, 30, 40 OU/m<sup>3</sup> and no offensive character to odour. He said that the Guide does not distinguish extremely offensive odours and those that are more benign. He considered the Guide to have been developed based on empirical evidence for rendering plants and wastewater treatment plants which are quite offensive odours.

[87] There was disagreement about the nature or character of the odour. Dr Brady considered the hedonic nature of the odour to be like chicken feed or grain, rather than ammonia-like, and a layer egg farm to be less odorous than a broiler farm. Mr Mahon thought that the odour would be ammonia-like.



[88] However, Dr Brady generally accepted odour concentrations of 5 OU/m<sup>3</sup> at a sensitive receptor in the rural zone, for example a residence; and between 5 and 10 for other activities in the rural zone. Dr Brady considered that 5 OU/m<sup>3</sup> at a sensitive receptor is the appropriate guide, recognised also by Mr Chilton and said to be what was applied to broiler farm proposals considered by the Environment Court in the *Rickerby*<sup>2</sup> and *Burgess*<sup>3</sup> decisions.

[89] The *Rickerby* decision involved the expansion of an existing poultry farm with 45,000 chickens reared in two existing poultry sheds by extending one of the poultry sheds to house an additional 10,000 chickens and a new shed constructed to house approximately 29,000 more chickens; making a total of 85,000 birds. That decision was influenced by the following factors:<sup>4</sup>

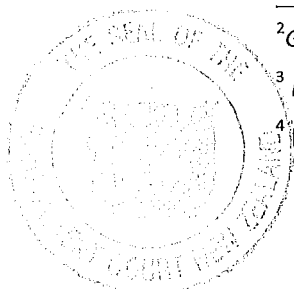
- (a) the detection of change by human receptors from odour unit levels of five to ten units is not significant;
- (b) there are no human receptors on the Wilson property within the five unit odour unit contour;
- (c) although the five odour unit contour does come close to or touch the edge of the Webb household, that effect appears to be at the level which is accepted as a threshold for a response of significant odour effects. The current situation shows that the site is within the two odour unit contour and probably receives something in the order of three odour units at the current time. We are satisfied that this change is not of such a degree as to be an unreasonable change in the rural area;
- (d) we conclude that this odour unit contour map over-estimates the levels received;
- (e) the odour is of a rural type and nature already existing in the environment.

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<sup>2</sup>*G R & RW Wilson v Selwyn District Council* C23/2004.

<sup>3</sup>*Burgess v Selwyn District Council* [2014] NZEnvC 11.

<sup>4</sup>Para [108].



For completeness we note that in relation to the *permitted baseline* the Court ruled against possible future activities on properties adjacent to the site being taken into account in establishing the *permitted baseline*, with the High Court overturning the legal basis of the ruling.

[90] With the Patumahoe site we are dealing with a new activity rather than an extension of an existing activity.

[91] Central issues in the *Burgess* decision were whether the receiving environment included a future dwelling at the appellants' preferred building site - which was a *permitted* activity (and which had a certificate of compliance) on a lot with no existing house. The applicant had applied to locate his chicken broiler farm 33m from his boundary to avoid the adverse effects of odour on other neighbours. The appellant's preferred building site was located approximately 210-225m from the broiler sheds and within the 6 – 8 OU/m<sup>3</sup> odour contour. The Court referred to being asked by the appellants to determine the appeal on the basis of whether a permitted residential dwelling within the 5 OU/m<sup>3</sup> odour contour formed part of the receiving environment.

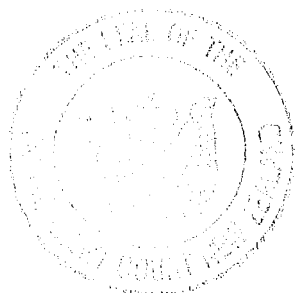
[92] We now turn to the context in which effects will be experienced in the relevant environment.

[93] Mr and Mrs Berry gave evidence. Mrs Berry referred to the indoor-outdoor flow and the way the family used their house.

Our property consists of a total of two hectares (5 acres). Our dwelling sits at the centre of the property and is c 300m<sup>2</sup>.

From each side of our dwelling we have easy access to the surrounding grounds. For example, from any side of our dwelling we walk out onto a large deck that totally surrounds the house where we frequently entertain during the summer months.

The living area at the north/west end of the home is 102m<sup>2</sup> and has large bi-folding doors on both sides of the room. When we are able to we open all three which has the effect of creating a wall-less room. It is not unusual for a fantail to fly in to the room, do several loops and then fly out the other side. To not be able to enjoy these



moments due to odour would remove our ability to enjoy the very reason we moved to the property.

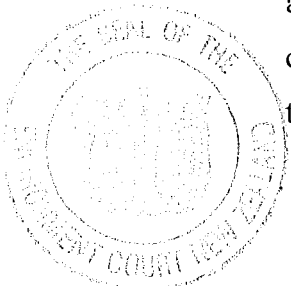
I am an avid gardener and there are established extensive gardens our property ... [taking] significant time and effort. I work in my garden largely during the summer months, but I also work in the garden in the evenings when I get home from work. .. Despite my love of gardening, the land surrounding our property is large enough that it serves more than one purpose. For instance, my washing line is located at the southern end of the main house section.

The land surrounding our home is just as important to us as our home itself.

[94] Mr Millen's concerns about the use he makes of his property and the impacts of objectionable odour on the enjoyment of his property were similar. He referred to the odours currently experienced as ... *here today gone tomorrow rural odours that are not of an offensive nature*. He mentioned the occasional whiff of a spray from market gardening and also silage, which is fed seasonally on a dairy farm with its cowshed a kilometre away, and only noticed when fed in the nearest paddocks when the wind is blowing from the southeast. Mr Millen also took issue with the suggestion that it is an accepted practice to spread chicken manure on the ground in the rural area. (Mr Wai Shing gave reasons for why that was not a practice adopted by his business and unlikely in the market gardening industry).

[95] We accept that the garden or curtilage of the house is effectively part of the house in terms of people's use of their property, whether that house is located in a rural, rural-residential, or urban area. It follows that we do not agree with the focus in the evidence for Craddock Farms on the house. Indeed Dr Brady himself referred to the potential for objectionable odour at night-time under very stable calm conditions, where the wind is not moving the odour around to allow it to disperse, to include warm nights when people might want to be outside or to have their windows open.

[96] We note from the aerial plot that the contour modelling provided by the appellant's witnesses predicts levels of 3 – 5 OU/m<sup>3</sup> (and indeed 5 on the western corner of the Millen property) and 2 - 4 OU/m<sup>3</sup> (with 4 on the southern corner) for the Berry property. We have already concluded that we have concerns about the



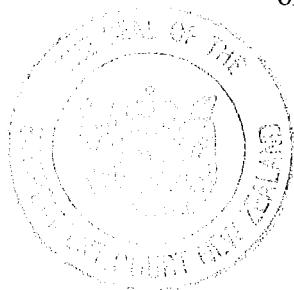
reliability of the modelling as a basis for predicting odour levels. With 583 OU/sec/1000 birds from each shed the sensitivity analysis predicts the odour level at the Millen house approaching 7 OU/m<sup>3</sup> and the Berry house as approaching 6 OU/m<sup>3</sup>.

[97] Mr Wellington Ng Wai Shing, a company director, shareholder and director of Wai Shing Holdings Ltd, gave evidence of employees working long hours on the adjoining market garden properties. Mr Wai Shing emphasised the importance of looking after the people in his business and was concerned not just about the potential for a significant adverse odour effect on people engaged in the business but about its implications for the business. In terms of the Wai Shing property the modelling of the 300 OU/sec/1000 birds scenario shows the fenceline receptor closest to the site as potentially receiving an odour concentration of 7.17 OU/m<sup>3</sup>. With 583 OU/sec/1000 birds odour emission from each shed, the model predicts employees working as close as 4 metres from the boundary being subjected to a concentration of 14 OU/m<sup>3</sup>.

[98] Dr Brady suggested that higher odour levels are less likely in the fields during the day, and Ms Barclay suggested that it might be higher in the evening or in still weather. Mr Wai Shing mentioned carrot harvesting as requiring a very early start - such as 4am in the morning - because the carrots have to be harvested fresh to ensure the necessary product quality. He also explained that because of the supply to two large supermarket chains, there is a cut-off time to meet the prompt deliveries required. For example, he said they are notified of an order in the morning and the product has to be harvested, put on trucks and transported as far as the South Island, so as to be in a central distribution centre the next day, ready for delivery to retail outlets.

*Conclusion on adverse effects*

[99] We conclude that the proposal could involve unacceptable levels of objectionable odour for the Millen property, the Berry property, and for the workers on the Wai Shing properties.



*Planning documents*

[100] The Guidelines also mention that reference should be made to the regional plans, and to district plans, where specific amenity values for various land use zones may be defined. We refer to the plan provisions further when discussing separation distances.

[101] In his opening Mr Savage argued that : ...*the nature of the proposal is broadly consistent with what is contemplated by the District Plan to occur in the Rural Zone and is in fact occurring throughout the zone.* However, the Council planner also referred to District Plan provisions that mean we need to be satisfied as to odour effects on neighbours, and their amenity. The layer farm is a *restricted discretionary* activity in the operative District Plan. We were also told that a farm housing more than 180,000 birds is a *discretionary* activity in the PAUP.

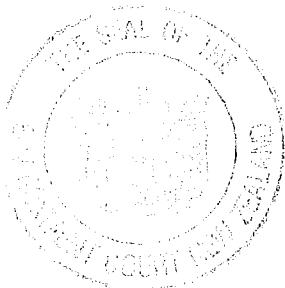
[102] The site and surrounding area is within the *Rural Air Quality Management Area* under the ALW. Craddock Farms' case was that the surrounding area is rural, with rural amenities, and that Policy 4.4.28 of the ALW provides for a greater tolerance of rural type odours in this area:

In assessing the effects of discharges into air of odour, dust, particulate, smoke, ash, hazardous air pollutants, overspray or visible emissions in a Rural Air Quality Management Area recognition shall be given to the nature of activities associated with the primary production sector and the rural character of rural areas.

[103] However, the purpose of the *Rural Air Quality Management Area* is (Para 3.13.2):

... to enable 'rural' activities to exist **whilst maintaining appropriate levels of amenity.** Activities that may discharge contaminants into air include pastoral farming, horticulture, intensive livestock farming, forestry and quarrying. (our emphasis)

[104] We had evidence related to long standing existing operations, including at Coulston Road (initially established in the 1960s) and *Zeagold* at Takanini, and



recent air discharge consenting. We heard that air discharges for older established operations only needed consent after the 1991 RMA came into force, and also that in respect of some consents the *controlled* activity status for existing operations required consent be granted. We are also aware that some of these air discharge consents have conditions requiring that there be no objectionable odour at the boundary.

[105] In *Winstone Aggregates v Matamata-Piako DC*<sup>5</sup> the Court accepted that there is a difference between existing and new facilities in terms of what may be acceptable. The Court stated:<sup>6</sup>

But there is also recognition that new chicken farms will be expected, substantially at least, to internalise their adverse effects by providing the necessary buffer zones within the farm property and not on neighbouring properties. ...

Inevitably, that will require larger and more expensive blocks than might previously have been the case but, as we have already commented, that has to be accepted as the cost of coming into an industry at a time when expectations of being an environmental *good neighbour* are higher than before.

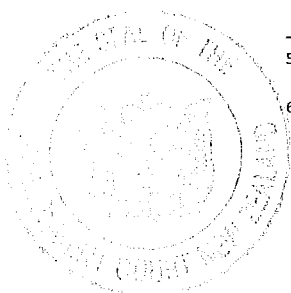
[106] As the experts kept reminding us, the numbers of birds are *key* in terms of odour effects, and the proposal is for a large farm of 310,000 birds. By any measure this is a large industrial-scale proposal, creating issues because of the size and narrow shape of the subject site - resulting in short separation distances to the neighbouring property boundaries and sensitive receivers. Unlike most odour sources within a rural environment, the 10 sheds and 120 chimneys will be a fixed, permanent source of odour, discharging all day and every day throughout the year.

[107] There is also the requirement in the District Plan for the 300m separation distance between egg layer farm buildings and a neighbouring house, which effectively places a restriction on the building of a residence on a property, taking it from a *permitted* activity to a *restricted discretionary* activity. This could potentially

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<sup>5</sup> (2004) 11 ELRNZ 48

<sup>6</sup> Paras [56] and [66].



affect alterations and extensions to existing residences, although it is more likely to affect new residences.

[108] We note the evidence of Ms Metcalfe:

... places restrictions on your property for building a house on your property and puts onus on you to demonstrate that farm isn't going to have effects and that [you] aren't going to complain which is extremely difficult given how close and large it is. It puts you in a difficult position and if I was council officer considering application [I] would want ideally to see from you a signed no complaints covenant that says 'Well I'll build this house closer but I won't complain'. So that leaves the council in a position of not having a problem to deal with ...

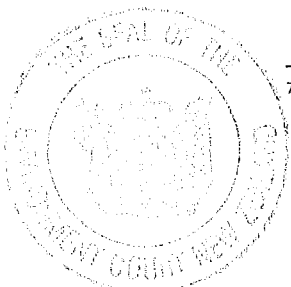
[109] Mr Millen also referred to *no complaints* covenants when cross-examining the applicant's planner, and he conceded that these were a likely expectation from the Auckland Council. We are aware that Councils commonly use *no complaints* covenants requiring property owners to be contractually required not to complain about, or take any enforcement action against, the adverse effects such as odour and noise being emitted by the existing neighbouring activities. We are also aware that some arrangements even involve financial penalties for any breach of such arrangements. Moreover the creation of such a covenant is frequently a condition of a consent under s108 RMA.

[110] As the Court said in *Ngatarawa Development Trust Ltd v Hastings District Council* W17/2008<sup>7</sup>:

Such covenants do not avoid, remedy or mitigate the primary effects – nothing becomes quieter, less smelly or otherwise less unpleasant simply because a covenant exists. On their face, they might avoid or mitigate the secondary effect of the ensuing complaints upon the emitting activity. But all they really mean is: *If you complain, we don't have to listen*, and there are issues about such covenants which have not, to our knowledge, been tested under battle conditions.

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<sup>7</sup> Para [27].



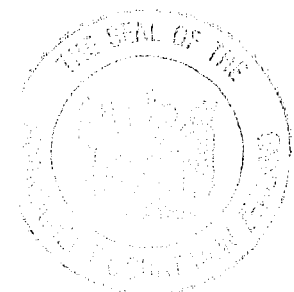


*Guidelines used overseas*

[111] Ms Barclay considered that the NZ Odour Guide is not helpful and objective enough when it provides two different assessment criteria – high sensitivity (1-2 OU/m<sup>3</sup>) and low sensitivity (5 – 10 OU/m<sup>3</sup>) for a rural area. Because of this, in her rebuttal evidence she said that it was important to look at other jurisdictions.

[112] Ms Barclay referred to the NSW odour guideline (November 2006) as a more recent document than the 2003 guideline and as containing a better approach. She said the NSW document takes into consideration the number of people impacted by the source and provided Table 1 from the guideline which suggests that 7 OU/m<sup>3</sup> is an appropriate receptor level for single affected residences. Appropriate criteria for a single affected residence – concentration of odour equal to seven times the theoretical minimum necessary to produce an olfactory sensation - expressed as 7 OU/m<sup>3</sup>. For receptors with larger populations (over 2000) in which there will be a higher number of more sensitive individuals the acceptable odour level is 2 OU/m<sup>3</sup>. She considered this to be a sensible and more objective approach as it considers the number of exposed people and the likelihood that more people will be highly sensitive as the population increases. While she pointed out that NSW had a different way of measuring odour – the nose-response-time-average – her evidence did not elaborate on this as she said she was trying to make the point of how it is problematic to look at a single residence and give it a higher or a low sensitivity and then base a separate odour assessment criterion on it. She also said that the NSW odour guidelines only relate to residences and not to people working in the fields or outside their house.

[113] Ms Barclay also claimed that other jurisdictions such as Germany, UK and Netherlands (although she provided no detail) had assessment criteria based on the source type (e.g. piggery odour), and not on the perceived sensitivity of a single receptor.



[114] When questioned she said that what she thought .. *what's happening* ... internationally is that there is a general encroachment of residential areas towards these sorts of activities, and the rule makers have been forced to a conclusion that you cannot consider every single sensitive receptor because, if you did, no facilities would ever get built. She maintained that it is very rare to come across a site that is completely unoccupied. So, she concludes, if you have one single receptor of high sensitivity, then nothing will ever get built.

[115] We do not find Ms Barclay's evidence on overseas approaches sufficient to justify downgrading the importance of considering the potential for objectionable odour effects on the existing neighbouring activities.

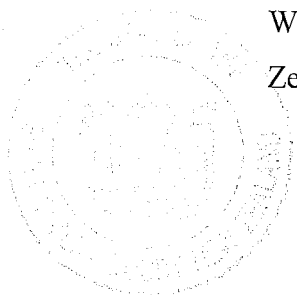
#### *Separation Distances*

[116] The Council Hearing Commissioners' Decision stated that:

...we were not convinced that this approach [modelling, comparative analysis] could be substituted for the more traditional and conservative reliance on separation distances for a very large poultry farm proposal. We were concerned that all dispersion modelling presented to us indicated we could not rule out the possibility of adverse odour effects at sensitive locations in close proximity. We were similarly not confident that the proposed management plan provided sufficient certainty of odour prevention to the extent that we could therefore set aside those other concerns.

[117] The experts agreed that where is agreement on the odour assessment criteria and reliable modelling and input data available, the model outcomes, relevant complaint history and comparison with existing similar sites, should be used in preference to buffer zones. However, in this application there is no agreement on the odour assessment guidelines or criteria or the modelled scenario to be used for comparison with the assessment guidelines.

[118] We understand that separation or buffer distances are used in different ways. We had evidence that there are currently a number of different distances used in New Zealand and overseas, and none specifically in NZ for layer farms.



[119] In the Auckland region buffer distances for chicken farms are used to determine the activity status of a consent in the ALW Plan, but there is no distinction between layer and broiler farms. Air discharges from new farms over 180,000 birds that do not meet a buffer distance of 400m from neighbouring property boundaries (from chimney stack to neighbouring property boundaries) become a discretionary activity in the ALW Plan.

[120] At the hearing we were provided with a plan which shows the closest distance from proposed chimney vents to adjoining property boundaries and the Millen and Berry houses. The distance to the nearest Berry property boundary is 171m and to the house 303m and the nearest Millen property boundary is 192m and to the house 349m. The plan shows distances to three of the Wai Shing property boundaries as 67m (the nearest chimney vent to a neighbouring property boundary), 106m and 231m but does not show the distance to the packing shed.

[121] For completeness we mention that the operative District Plan has *restricted discretionary* activity status for intensive farming and takes a different approach to the ALW Plan. The District Plan refers to poultry (within buildings) and states (among other things) that discretion is restricted to considering: ...

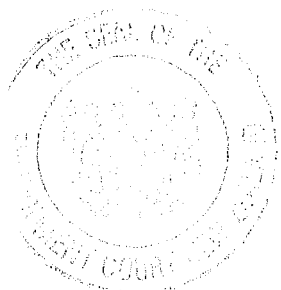
b) There are adequate measures for the control of odour ... from any aspect of the operation. The operation of the activity shall not result in an offensive or objectionable odour to the extent that it causes an adverse effect at or beyond the boundary of the site. ...

d) Conditions may be imposed on the method of farming, and the design, layout and use of all buildings and areas associated with the farming operation.

e) Buffer areas are an easy practical method to mitigate adverse effects. Buffer areas of the following distances will be used as a guideline:

All buildings and areas used for the farming operation (including areas for the treatment and/or disposal of wastes and composting) should be:

- (i) At least 500 metres from the boundary of a Residential, Village, or Rural-Residential Zone;



(ii) At least 100 metres from any existing dwelling house on an adjacent property, including those separated by a road; and

(iii) At least 20 metres from the boundaries of the site;

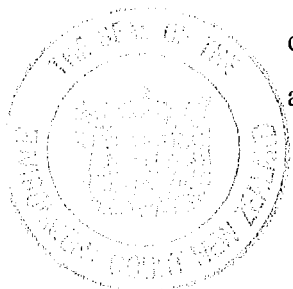
Provided that where a dwelling house has been erected on a neighbouring property after the date the intensive farming operation has been established and the intensive farming operation has been in regular operation then the 100 metres guideline does not apply.

f) Where an activity is proposed within these buffer areas the applicant will have to demonstrate that adverse effects are avoided or remedied.

[122] We are of course dealing with the application on a bundled basis as being for a *discretionary* activity (as would be the case for a poultry farm of over 180,000 birds under the PAUP). In any case we note, first, the need to consider that operation of the activity shall not result in an offensive or objectionable odour to the extent that it causes an adverse effect at or beyond the boundary of the site and, second, the use of the word *guideline* in respect of the distances referred to for buffer areas. From the evidence we heard we have doubts about the soundness of some of the distances referred to for buffer areas.

[123] Dr Brady provides comparative setback distances for intensive farming used throughout the country that range from no setback requirement to 100m (from a dwelling in Franklin District) to 300m and 400m. Mr Mahon suggested that the determination of distances appeared to be “political” rather than based on science or record data. He also provides a range of separation distances (250m to 1000m) in use by the Environmental Protection Agency of South Australia and calculated that for the specifics of the proposed Patumahoe Road site the South Australian approach would recommend a 420m separation distance.

[124] We note the emphasis Mr Lee Marr, the applicant’s planning witness, gave to the separation distances set out in the Auckland ALW Plan as merely setting the status of the activity that determines whether or not it is discretionary or restricted discretionary. The same could be said of the approach in other plans nationally given any setbacks or similar approaches are generally used as a trigger for a resource



consent of different stringency. We think that is to unjustifiably downgrade the importance of the consideration that should be given to separation as an approach.

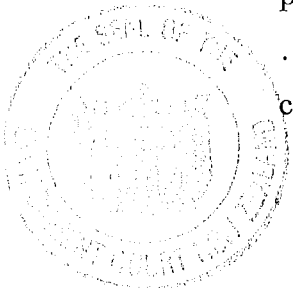
[125] The evidence for Craddock Farms attempted to draw on the *Zeagold* farm in Pope's Road Takanini that houses 450,000 birds as illustrating the lack of a need for separation. Dr Brady said that the *Zeagold* farm uses tunnel ventilation and manure drying technology but not chimneys to dispense odour but otherwise its operation is similar to that proposed for Patumahoe. Dr Brady notes that at *Zeagold* ... *there are about 25 houses within the 420 metre buffer. Some of the houses are well within 200m of the nearest discharge points ... there is no evidence of adverse odour effects from this operation and no verified odour complaints on file at the Auckland Council.*

[126] However, such a general statement is not evidence that is sufficiently robust and on which we could base a comparison with the proposal in front of us and we are also not convinced that a lack of verified odour complaints is sufficient evidence that odour may not be a problem.

[127] The proposal is for a very large facility (310,000 birds) on a narrow site – 10 sheds and 120 chimneys will be a fixed and permanent source of odour discharging all day and every day throughout the year. We are of the opinion that it would not ensure that the operation of the activity will not result in an offensive or objectionable odour to the extent that it causes an adverse effect at or beyond the boundary of the site (as referred to in the District Plan restricted assessment matters for land use.)

#### *Revised Management Plan*

[128] The applicant placed considerable reliance on a Management Plan along with a Risk Management Programme that will be registered with MPI as being the way to counter adverse effects. We note that the first objective of the Management Plan provided is to ensure there is no objectionable odour ... *beyond the site boundaries* ... and Mr Craddock drew to our attention the last objective which is 'to enhance the concept of a *good neighbour*.'



[129] Mr Ian Johnson, A consultant planner called for the Berrys, notes that ... *the cause of acute events are likely to be able to be established and corrective action taken*, and notes *the management Plan identifies possible causes and suggests corrective action*. There was general agreement that the revised Management Plan presented to the Court was more comprehensive than that presented at the Council hearing. However, Mr Johnson concludes that the Plan ... *should have specific measures and actions to immediately deal with any unexpected events of odour discharge*.

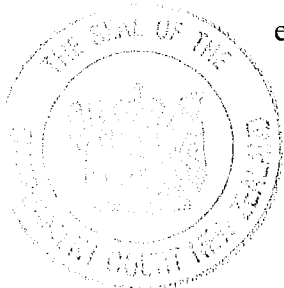
[130] Mr Brabant notes: *There appears to be agreement that the modern operating methodology (incorporating computer control, conveyor belts and manure drying) is a significant improvement on previous methodologies. However once that best practice has been achieved, essentially all ammunition has been spent in the war on odour*.

[131] Craddock Farms acknowledged that refinements to the Management Plan were needed. However, no refinements can overcome the fundamental problems with the proposal. We do not find that relying on the revised Management Plan, or indeed any improved Management Plan, without more certainty as to the odour outcome that can be achieved in terms of the operating procedures, monitoring requirements, remedial and corrective measures. As, for the reasons to be set out, we find against the proposal we do not analyse the revised Management Plan or require changes to be made to it.

#### *History of odour complaints*

[132] The experts agree that since 2008, layer farms are not associated with significant odour complaints based on Auckland Council records.

[133] The experts for Craddock Farms noted that the affidavits reflect the observations of a number of close neighbours of the Coulston Road farm. The experts do not know how the neighbours were selected, but agree that this does not



constitute a formal survey as referred to in the MfE guideline. We dealt with this issue earlier.

*Conclusion*

[134] The proposal is for a very large facility on a narrow site, resulting in very short distances between the source of odour emissions and the adjacent boundaries and sensitive receivers.

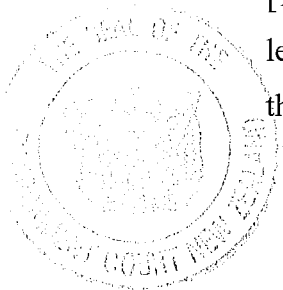
[135] While the site and receiving environment are zoned *Rural* and primarily used for rural purposes, there are existing sensitive uses, the Millen and Berry dwellings and associated land, and the Wai Shing market gardening operation, in close proximity to the site.

[136] The residents of houses could reasonably be expected to be regularly present for extended periods as part of the normal pattern of the use of their land, and could reasonably expect enjoyment of a high level of amenity. The gardens around the Millen and Berry houses are effectively part of their living area and experience.

[137] There is the potential for objectionable odour to be experienced by those present on the Berry and Millen properties, whether in their houses, gardens or fields. That is also the situation for people working in the fields as part of the Wai Shing market gardening operation, where the odour level could be much higher.

[138] The applicant relies heavily on theoretical dispersion modelling for which there is uncertainty over the appropriate odour generation rates to be used. Dr Brady proposes an odour generation rate that Mr Chilton, Mr Mahon and Ms Metcalfe consider too low given the limited base data and also the assumptions Dr Brady makes on the low probability of higher generation rates occurring simultaneously in multiple sheds.

[139] In any event the sensitivity modelling shows that there is potential for odour levels to exceed what the applicant proposes as the appropriate guideline level for this environment of 5 OU/m<sup>3</sup> at the houses.



[140] The odour effects will not be internalised within the subject site and moreover because of the very short separation distances there is no ‘room for error’ which is particularly concerning given the very limited options available to remedy odour effects should they occur.

[141] Houses are permitted on a number of the adjacent sites that will no longer be a permitted activity if the egg layer facility proceeds.

[142] We conclude that even if the objectionable odour occurred infrequently only there is a high potential impact involving significant adverse odour effects that are beyond the extent and level a reasonable person should have to experience on neighbouring properties.

*Section 104(1)(b) – regional planning documents*

[143] We have already discussed some of the provisions of these documents when considering the issues associated with odour. We now deal with further matters that arose in respect of these.

*Auckland Council Regional Policy Statement (ACRPS);*

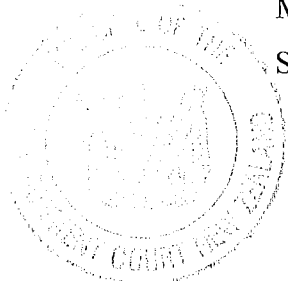
[144] An issue identified in the Regional Overview and Strategic Direction is:

2.4.4 Rural resources enable people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety. However, the effects of some activities on the resources and the environment of rural areas, including cumulative effects, can be significantly adverse.

[145] The Strategic Objectives 2.6.1 include:

8. To protect the rural land resources from the adverse effects of inappropriate subdivision, use or development.
9. To protect amenity values, rural character ... from the adverse effects of inappropriate subdivision, use and development.

Mr McKinney considered the land use component of the proposal consistent with the Strategic Objectives set out in Objectives 2.6.1.8 and 2.6.1.9 in that the development





is considered to be an appropriate use of the rural land resource. However that is only where the amenity values and rural character of the area will not be compromised.

[146] The Air Quality Chapter 10 has as an Objective 10.3.1:

To avoid, remedy, or mitigate deterioration of air quality in the Region.

There is Policy 10.4.1 to give effect to it which includes – ...

(2) A precautionary approach to air quality management shall be adopted where relative contributions of sources of contaminants and the nature and extent of the adverse effects are uncertain.

There is also a *method* set out, which is to review any regional plan that relates to sources of contaminants shown to have adverse effects on Regional air quality.

[147] Objective (10.3.2) is: - *To avoid, remedy, or mitigate the adverse effects that arise from the discharge of contaminants to air ...* . The planning witnesses considered that Policy 10.4.7 on industrial emissions giving effect to Objectives 10.3.1 and 10.3.2 was also relevant. Mr McKinney did not agree with Mr Marr that the proposal would meet what he considered key policies, and said that the intent of Policy 10.4.7.1 is that adverse effects from discharges into air are to be minimised and Policy 10.4.7.4 states:

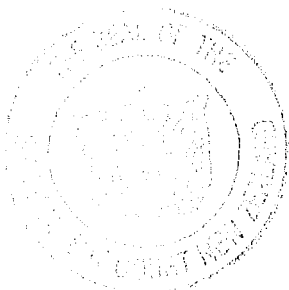
Adequate separation distances shall be maintained between industrial or trade premises that discharge, or have the potential to discharge, noxious, dangerous, offensive or objectionable contaminants to air and adjacent land uses.

[148] We assume that the ALW Plan has given effect to the objectives and policies through its provisions, and now turn to that document.

*Auckland Council Regional Plan: Air, Land and Water (ALW);*

[149] The Air Quality chapter of the ALW contains two issues of relevance that the subsequent objectives and policies seek to address:

4.2.3 Individual activities that discharge contaminants into air in the Auckland Region, such as ... *intensive livestock farming* and *industrial processes*, if not adequately managed, may cause localised adverse effects on human health, *amenity* and the environment.



4.2.4 Adverse effects on air quality can be exacerbated by land use, such as the inappropriate location of activities that are discharging contaminants into air or the inappropriate location of parties sensitive to activities that discharge contaminants into air (*reverse sensitivity*). Population growth within the Auckland Region is intensifying pressure on competing and incompatible land uses.

[150] Objectives with a particular focus on the matters in contention drawn to our attention are:

4.3.2 To avoid, remedy or mitigate significant adverse effects from the discharge of contaminants into air on human health, *amenity* and the environment. In particular: ...

(c) To maintain existing levels of *amenity* within ... Rural Air Quality Management Areas ... .

4.3.5 To avoid *reverse sensitivity* conflict from the discharge of contaminants into air where sensitive activities that have differing air quality expectations are located in close proximity to activities that discharge contaminants into air.

[151] The objectives referred to above are also supported by range of general and specific air quality policies that include:

4.4.5 The discharge of contaminants into air shall be considered inappropriate where:

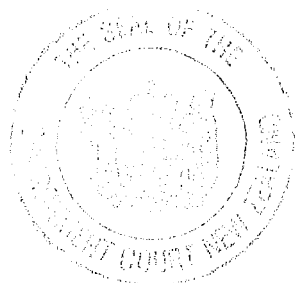
(a) It causes, or is likely to cause, noxious, dangerous, offensive or objectionable odour, dust, particulate, smoke or ash, beyond the *boundary* of the premises on which the discharge is occurring;

4.4.7 To avoid or minimise adverse effects from competing and incompatible land uses, including *reverse sensitivity*, activities shall:

(a) Locate within the Air Quality Management Area suitable to the nature of the activity; and/or

(b) Manage the effects of their discharges of contaminants into air in a manner that is commensurate with the receiving environment (including the relevant provisions of the underlying District Plan zones); and/or

(c) Maintain adequate separation distances.



4.4.10 A precautionary approach shall be adopted where there is scientific uncertainty and a significant risk of serious effects or irreversible harm to the environment from any proposal to discharge contaminants into air.

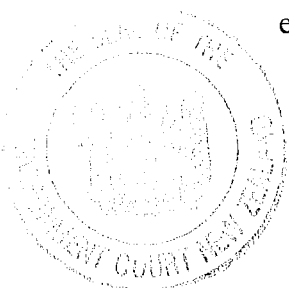
4.4.28 In assessing the effects of discharges into air of odour, dust, particulate, smoke, ash, hazardous air pollutants, overspray or visible emissions in a Rural Air Quality Management Area recognition shall be given to the nature of activities associated with the primary production sector and the rural character of rural areas.

[152] As we have said the site and its surrounding area is within a *Rural Air Quality Management Area* under the ALW. That has as its management approach (3.13.2):

The purpose of the Rural Air Quality Management Area is to enable ‘rural’ activities to exist while maintaining appropriate levels of *amenity*. Activities that may discharge contaminants into air include pastoral farming, horticulture, *intensive livestock farming*, forestry and quarrying. Many of these discharges into air are permitted activities subject to conditions which aim to protect human health and achieve an appropriate level of *amenity* for people who live and work within these areas. ...

It is important to recognise that conflicts along boundaries where expectations of *amenity* levels are likely to differ need to be managed.

[153] We do not accept the proposition that the Rural Air Quality Management Area and Policy 4.4.28 in any way trump the objectives and policies in the ALW and our need to consider the potential odour effects on the neighbouring properties. In considering the Plan provisions we also disagree with the emphasis Mr Marr put on the dwelling as the most frequently used part of the property and therefore is the most important factor, and that the owners and occupiers need to acknowledge that the localised degradation of air quality is part of living in a rural production area. We do not consider that even if the acute/objectionable odour turned out to occur only infrequently, there is not a high potential impact involving significant adverse odour effects that are beyond the extent and level a reasonable person should have to experience on their neighbouring properties.



[154] For the reasons we have set out, we conclude that the proposal does not meet key odour-related objectives and policies.

*Auckland Council Regional Plan: Sediment Control (SCP)*

[155] There was no suggestion there were any issues in relation to this regional plan.

*Section 104(1)(b) – local planning documents*

*Auckland Council District Plan: Franklin Section (District Plan)*

[156] There was some disagreement between the witnesses on what was relevant but the following objectives and policies were drawn to our attention:

Part 17A Strategic Rural and Coastal Areas and Villages Objectives:

5. *To recognise and provide for the life supporting capacity of versatile land and its contributions to the economic and social well being of the District; ...*
7. *To enhance opportunities to utilise the productive potential of natural resources in an environmentally sustainable manner.*

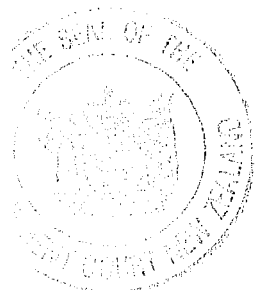
Objectives Part 17C.2 Key Rural – Coastal Zone:

1. *To maintain and enhance opportunities for rural activities that utilise soil resources in a sustainable manner and for activities which rely on natural and physical resources.*
2. *To manage landuse activities, subdivision and development carefully so that versatile land resources are not compromised, reverse sensitivity issues are minimised and rural character and amenity values are maintained or enhanced. ...*
4. *To avoid, remedy or mitigate the adverse effects of reverse sensitivity between agriculture and horticulture activities, mineral extraction sites, rural industry, major industrial activities and countryside living opportunities. ...*
8. *To recognise and provide for the sustainable management of natural resources.*

Objective 17C.3.1.2:

*To manage conflicts between different productive primary activities and with residential activities while recognising that a certain level of noise, odour and other adverse effects are characteristic of the rural and coastal environments.*

Policies 17C.3.1.3:



1. *Activities in the rural area shall not create effects of noise, odour, dust, and spray that would not normally be expected from a predominantly rural environment.*
2. *Activities in the rural area shall not cause an adverse effect that would result in activities which are dependent on the productive potential of land and soil resources being prevented or constrained from operating.*
3. *Mechanisms such as setbacks and buffer distances will be used to manage the potential for conflicts between urban, villages, and intensive farming operations. The main concern outside the buffer distances shall be to mitigate any adverse effects.*

#### Objectives 17C.3.2.2 – Coastal and Rural Amenity and Character

1. *To avoid or minimise the adverse effects of activities on outstanding natural features and significant habitats.*
2. *To manage other effects on rural and coastal landscapes, character and amenities.*
3. *To maintain and/or enhance the character of rural and coastal zones.*

#### Policies 17C.3.2.3:

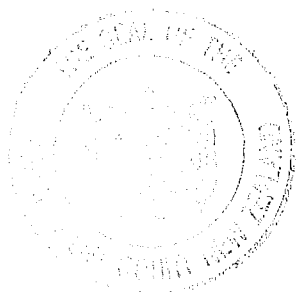
1. *New activities, subdivision or development should have regard to the way proposed use, subdivision or development relates to the rural or coastal character of the locality so as to avoid, remedy or mitigate adverse effects on the rural or coastal character.*
2. *New activities locating in the rural and coastal zones shall be of a nature, scale, intensity and location that maintains and/or enhances rural and coastal character.*
3. *Recognition shall be given to the type of amenity, rural nuisance effects and rural visual form, that are typical of and exhibited by permitted primary production activities.*
4. *Building and structures be sited and designed so that they do not visually compromise outstanding natural features or the values of significant habitats of indigenous fauna as identified in Schedule 5A, or the natural character of the coastal environment.*

#### Objectives 17E.2.3 – Central Rural Management Area

1. *To promote the protection, enhancement and restoration of ecological values, where possible.*

#### Policies 17E.2.4

4. *Control the establishment of new land uses and the expansion of existing ones, which do not meet the standards for permitted activities in the Rural Zone, to ensure versatile land is protected*



*for productive uses, the safeguarding of the life supporting capacity of the soil for rural productive uses, that rural amenity values are not compromised and adverse effects on roading and other infrastructure are avoided.*

Objective Part 15.5.1(1) – Earthworks throughout the District

*To achieve development which avoids, remedies or mitigates adverse effects from Earthworks on historic heritage, water quality, significant infrastructure and adjoining properties.*

Policies Part 15.5.1(1)

1. *Subdivision and development should avoid, remedy or mitigate siltation and sedimentation of waterbodies and adjoining properties arising from earthworks.*
2. *Subdivision and development should utilise appropriate site management practices to manage earthworks activities.*
5. *Earthworks should be undertaken in a manner that does not affect the integrity and operation of significant infrastructure located within the Franklin District.*

[157] Mr McKinney considered that the proposal would not achieve the odour-related objectives and policies of the District Plan, and for the reasons discussed earlier, we agree with that.

*Proposed Auckland Unitary Plan (PAUP)*

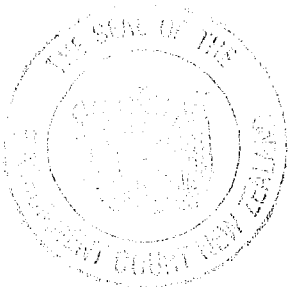
[158] We were not given evidence on the objectives and policies in the PAUP probably because of the early stage this Plan is at and because the land use activity would be a discretionary activity under it.

*Part 2 RMA*

[159] No matters of particular interest to Maori under s8 or s6(e) were brought to our attention, nor were there other matters of *national importance* under s6. Section 7 contains matters to which decision-makers are to have *particular regard*, and the relevant portions of that section are these:

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to —

- (a) kaitiakitanga:
- (aa) the ethic of stewardship:



- (b) the efficient use and development of natural and physical resources: ...
- (c) the maintenance and enhancement of amenity values: ...
- (f) maintenance and enhancement of the quality of the environment:
- (g) any finite characteristics of natural and physical resources: ...

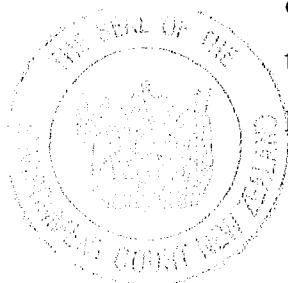
[160] For present purposes, the concept of kaitiakitanga, and the ethic of stewardship, might be regarded as more or less synonymous – capturing the need for resources to be treated and used with care, and with a consciousness of the needs of future generations to have access to them, to the degree that is reasonably possible. In absolute terms, the proposal will not foreclose options for the more distant future. Buildings can always be removed or adapted to another use.

[161] The real import of s7 matters comes in looking to paras - (c) *the maintenance and enhancement of amenity values*: ... and to - (f) *[the] maintenance and enhancement of the quality of the environment*. The opposing parties raise exactly these issues. The term *amenity values* is defined in the RMA as:

... those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes

[162] As the terms of the planning documents well recognise, those who choose to live in rural areas must expect the consequences of the rural activities that occur there – the noise of stock and agricultural tools and machinery, the dust from harrowing and ploughing, and so on. Unpleasant odour is one such possible issue – it may arise from stock, from silage, from sprays. Those are all to be expected, and tolerated, within reason, and that of course is the very reason why planning documents contain reverse sensitivity provisions: - to avoid the situation of existing rural activities being hampered or even forced to cease operations because of complaints from incoming incompatible neighbours.

[163] What the potential neighbours complain about here is that the odour they are concerned about will not come from what they see as a truly *rural* activity. Rather, they see it as being, in reality, the introducing of an industrial activity involving placing literally hundreds of thousands of birds into confined spaces, where the



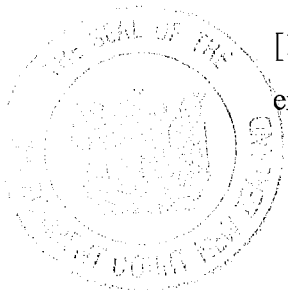
odour they and their wastes naturally produce is concentrated and intensified to the extent that, when expelled from the buildings, it will seriously affect people unfortunate enough to be in its vicinity. While the separation distance of that vicinity may be somewhat hard to quantify, and may be arbitrarily set by regulators in some instances, the fact that distances of, eg, 300 and 400 metres are used in the planning documents to trigger consent requirements can be taken as working indicators of the area of likely effect.

[164] There can be no reasonable argument of course that having the odour of chicken manure as a chronic, or acute, presence around a home or a workplace would certainly harm the characteristics of an area that might otherwise ... *contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes*. In short, its *amenity values* would be irretrievably compromised; -indeed some would say, not unreasonably, they would be destroyed.

[165] Mr Craddock explained the choice of the site. Knowing that the Coulston Road site was at capacity and did not allow for business expansion, the business began a search for another site. The basic criteria were; a size sufficient to construct the required number of sheds and ancillary buildings – 50 acres (16.16ha) of flat to rolling topography; a locality within reasonable distance of both markets and of suppliers and contractors to minimise transport time and cost, and a locality within reasonable reach of its workforce.

[166] Obviously enough, a business of this nature would be faced with manifest difficulties in an urban setting – it requires a rural setting, subject of course to the actual surrounding environment which might have, or have the potential for, rural residential uses and for concentrations of workforces, as in the Wai Shing instance. Where those factors exist, potential issues for an adverse effect-emitting operation are starkly obvious so that, even in a rural setting, potential conflicts between uses must be factored in to site selection.

[167] Two or three possibilities were explored, with the present site being, obviously enough, chosen and purchased. It certainly meets the criteria mentioned at para





[165] and the initial evaluation by the company's planning consultant supported the viability of obtaining consent. The Council planner's report to the panel of Commissioners recommended granting consent but, for the reasons they gave, the Commissioners had strong concern about the effects of odour on the occupants of nearby properties.

[168] We had evidence on the site selection process from the applicant and the applicant's planning witness. There was criticism from the other parties that only three sites were seriously considered, one of which was the appellant's existing Coulston Road site. Also the suggestion was made that the applicant had not involved the appropriate odour experts early enough in the site selection process and in the design of the egg laying farm. Another concern was that no options to reduce the number of birds on the proposed site had been considered.

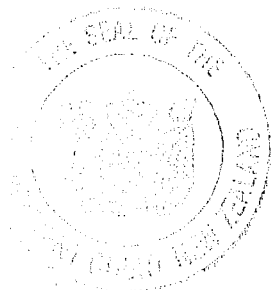
[169] We accept that the consideration of options as part of the site selection process may have seemed to be somewhat limited and self-serving, but nothing hinges on that aspect and we do not take it further.

*A staged establishment process?*

[170] As a variant of a cautious approach to the question of odour, the suggestion was made that the Court might approve a staged establishment of the layer operation, with monitoring of each stage to check that cross-boundary effects were not reaching adverse levels.

[171] Mr Chilton was of the view that if development was to be done in stages, a three-stage approach (ie 3, 3 and 4 sheds) with a 12 month pause between each stage, would be the preferable approach. His reasoning was that three stages would allow better measurement of incremental changes, if any, in effects. A 12 month gap between each stage would allow monitoring (to be done independently) over the full cycle of a weather year.

[172] Mr Craddock was not, in principle, averse to the concept of a staged development, but pointed out that three stages, with the sheds scattered, rather than



being together in *blocks*, would be difficult and expensive to service in terms of feed supplies, the harvesting of eggs, and the removal of manure and litter. Further, he believes that a three-stage development would not give an economically viable production unit for at least the first stage. He saw a two-stage operation, with the first comprising of five sheds, as being the viable approach.

[173] During the hearing the Court asked Dr Brady some questions about the efficacy of a staging approach and the applicant responded by putting forward a two stage approach, involving the five sheds in a row located to the north of the site in the first stage, which we now look at. We were provided with modelled predictions for this proposition of an odour emission rate of 300 OU/sec/1000 birds of 1.7 OU/m<sup>3</sup> at the Berry house, 2 OU/m<sup>3</sup> at the Millen house, 1.5 OU/m<sup>3</sup> at the Wai Shing packing shed and 6.05 OU/m<sup>3</sup> at the boundary at the 99.5 percentile. We were also provided with a plot with indications of the spread of the odour contours under this scenario.

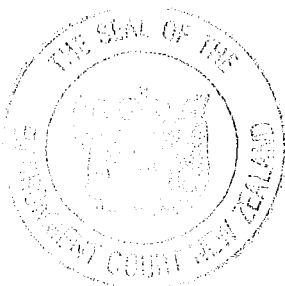
[174] Unlike the resource consents for air discharges from chicken farms given to us, there is no proposed condition specifically requiring that there be no objectionable or offensive odour beyond the boundary. Ms Chelsea Gosden, a Consents and Compliance Advisor for the Auckland Council, had recommended in her input to the s42A report on the application:

Beyond the boundary of the site, there shall be no ... odour caused by discharges from the site, which in the opinion of an enforcement officer, is noxious, offensive or objectionable.

That report states:

These conditions are similar to conditions which have successfully mitigated air discharge effects at other poultry farms in the Auckland region.

[175] Neither set of conditions provided to us late in the hearing contained a condition in this form. However the monitoring conditions proposed by the applicant during the hearing set this as the threshold for progressing with the Stage 2 sheds. It required that four months after the populating of the fifth shed a report be submitted for the approval of the Team Leader to show that the necessary monitoring had been undertaken ... *and that no offensive or objectionable odour has been detected beyond the boundary of the site, or that the cause of any potentially offensive or*



*objectionable odours detected have been identified and have been remedied.* Mr Savage explained that the purpose of the monitoring regime is to confirm the operation is doing what is expected in terms of outcomes; and then the rest of the proposal can proceed.

[176] The odour monitoring proposed was:

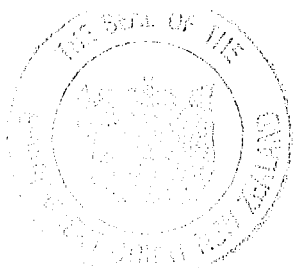
- on a daily basis by the operator for a minimum period of 3 months and then may be reduced in consultation with the Team Leader – Air Quality (the other parties considered this should be twice daily).
- independent odour monitoring on a monthly basis for a minimum period of 12 months from the populating of each shed and then may be reduced after this period in consultation with the Team Leader – Air Quality.
- Both sets set of monitoring are to involve a daily boundary survey and accord with the Farm Management Plan procedures as agreed by the Team Leader – Air Quality.

The applicant proposed that no further sheds are to be populated until it is determined that the requirements of the above conditions have been met to the satisfaction of the Team Leader – Air Quality.

[177] The other parties considered that if the Court was minded to approved a staged approach, Stage 1 should only comprise 3 sheds and that the time period for the report should be twelve months and that there should be a Stage 2 involving a further 3 sheds and a Stage 3 of 4 sheds. The applicant opposed this, maintaining it could get the data needed on Stage 1 and tantamount to refusal of Stage 2. The applicant was also concerned that the conveyor belt systems stringing across the site would cause operational difficulties.

[178] The other parties considered there should also be a condition requiring that:

In the event of any verified complaint ... twice daily monitoring shall commence for a period of one month from the date of corrective action, following which a report shall be submitted for the approval of the Team Leader – Air Quality showing that the monitoring has been undertaken and that no offensive or objectionable odour has been detected beyond the boundary of the site, or that the cause of any potentially



offensive or objectionable odours detected have been identified and have been remedied.

The applicant initially responded that this was unnecessary and unreasonable, but Mr Savage then said that perhaps it was not *so bad* because the complaint needed to be verified.

[179] The applicant was particularly opposed to the addition of the further condition proposed by the other parties:

If at any stage the monitoring undertaken in relation to conditions [the preceding conditions] ... indicates the occurrence of chronic odour causing offensive or objectionable odour effects beyond the site boundary, the priority for corrective action shall be an immediate reduction in stocking rates to a level that demonstrates through twice daily monitoring using the methodology set out in [earlier conditions], that such effects have ceased for a period of at least one month. A record of the occurrence and the corrective actions taken shall be provided to Auckland Council within 24 hours of the occurrence being identified.

[180] The applicant opposed this as not being a valid, proper or practical condition for an egg laying farm. It raised questions about what to do with 30,000 birds and also the 30,000 birds being reared in train. Mr Savage submitted that a condition should not mandate a full or partial closure. He said that there are other provisions in the RMA available to bring the facilities into compliance with conditions. The applicant suggested there could be standard practices to deal with the issues in a Management Plan. As we have said, we find that reliance on a Management Plan is too uncertain an approach to take, and one which unreasonably transfers the risk to the neighbours.

[181] Ms Metcalfe had serious reservations about the staged approach proposed. One issue is monitoring to establish whether or not the future full site is likely to have effects based on half or third of a site would be exceedingly difficult, if not impossible, short of *camping out* there. She considered the chances of being able to quantify and understand odour effects likely to be emitted when the operation doubled in size would be quite difficult.



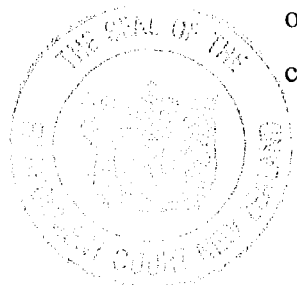
[182] Ms Metcalfe gave evidence that:

Well just generally demonstrating an effect the adverse effects of odour is difficult and takes time so I think there was evidence from somebody saying if there's an effect people will complain and that hasn't been my experience at all. We've dealt with sites over the years that have had effects that ... have gone on and on and people rarely complain. So there isn't a good sort of handle on the effects that sites are having until somebody sort of comes to the fore and complains. And when that happens it, just the physical process of the complaint ... rings the council, the council gets there, it's an hour later, the smell might have gone or it might be a faint smell that the officer at the time thinks isn't too bad but they've been experiencing it for days, and it's just quite difficult to quantify the effect, especially independently. And I think the proposal here is to have somebody walk around the boundary twice a day possibly and to use as a quantification of the effects of the first phase. But again that's the chances of that representing the effects of being able to extrapolate that to the full proposal are difficult.

[183] She said it is a lengthy process, being especially difficult and fraught for neighbours who are living in an uncertain environment with a really difficult onus on them to say whether it's acceptable or not. She said that there should be a straight out grant or refusal of consent. Her opinion is that the site is too constricted; the separation distances are inadequate and that the proposal should be refused.

[184] We do not consider that the staged approach is acceptable. We need to be satisfied that the proposal could achieve *no objectionable odour* on the neighbouring properties. Otherwise part of the proposal could establish 5 or 3 sheds (depending on which staging approach was adopted) creating problems for the neighbours which could not be rectified.

[185] We conclude that a staged approach has major limitations and does not overcome the concerns we have about the potential for objectionable odour that would be experienced by the neighbours. It also puts heavy pressure on and relies on the co-operation of the neighbours to undertake the monitoring in unreasonable circumstances.



*Section 290A – the Council’s decision*

[186] The decision made by the Commissioners appointed by the council makes it very clear that it was only the issue of odour that was decisive in their declining of the application. Section 290A requires the Court to have regard to that decision. That does not raise a presumption that the decision is correct, but requires us to genuinely examine the reasoning of it.

[187] We accept that the proposal has major differences from the initial proposal and have considered it on that basis, taking into consideration the concerns expressed in the first instance decision. For the reasons we have set out, we nevertheless agree with the first instance decision that the application should be refused

*Result*

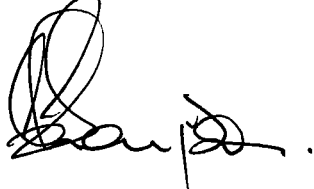
[188] For those reasons, the appeal is declined.

*Costs*

[189] For the moment, costs are reserved. Any application should be lodged and served within 15 working days of the issuing of this decision, and any response lodged and served within a further 10 working days.

Dated at Wellington the 18<sup>th</sup> day of March 2016

For the Court



C J Thompson  
Environment Judge

