RESOURCE MANAGEMENT ACT 1991

DECISION OF ENVIRONMENT CANTERBURY AND THE WAIMAKARIRI DISTRICT COUNCIL

ON A RESOURCE CONSENT APPLICATION

APPLICATION REFERENCE:	CRC160077 and RC155218/160322025377
HEARING COMMISSIONER	DEAN CHRYSTAL
APPLICANT:	CLARENCE HARVEST LIMITED
SITE ADDRESS:	1059 Poyntzs Road
LEGAL DESCRIPTION:	Lot 2 DP 301741
PROPOSAL:	To establish three additional sheds and an extension to the two existing sheds for a 255,000 head poultry broiler operation located at 1059 Poyntzs Road, Waimakariri.
ZONING & NOTATIONS:	Rural
TYPE OF ACTIVITY:	Restricted Discretionary
DATE OF HEARING:	2nd May and 12th October 2016
APPEARANCES:	<u>Applicant</u> Ms Ebony Ellis, Legal Counsel Mr Mark Graham, Applicant Mr Brent Cowie, Environmental Consultant Mr Michael Block, Livebird Production Manager for Tegal Mr Donovan Van Kekem, Air Quality Scientist Mr Andrew Curtis, Air Quality Scientist Mr Graeme Kelly, Real Air Solutions Limited <u>Submitter</u> Mr David Pedley, Legal Counsel for Mr and Mrs Glubb Mr Brendan Glubb Mr Richard Chilton, Air Quality Scientist <u>Council Reporting Officers</u> Mr Matthew Bacon, Planner for Waimakariri District Council Ms Shannon Ball, Planner for Environment Canterbury Mr Craig Davison, Planner for Environment Canterbury Mr Miles McCauley, Air Quality Expert for Environment Canterbury

INTRODUCTION

1. In brief the proposal is a joint application to Environment Canterbury and Waimakariri District Council for the establishment of three additional chicken rearing sheds and an extension to the two existing sheds to enable a 255,000 head poultry broiler operation at 1059 Poyntzs Road, Waimakariri.

2. Section 42A of the Resource Management Act (RMA) reports by Ms Ball and Mr Bacon provided details of the application, the notification process, subsequent amendments, other consents obtained and the relevant plan provisions including the relevant status of the activity.

3. The proposal was limited notified on the 25th August 2015. A total of 3 submissions were received opposing the application.

4. Affected parties approvals were obtained from 5 neighbours adjoining or adjacent to the proposed site, although two subsequently withdrew that approval (see below).

5. I undertook a site visit on the afternoon of the 4th May 2016 to view the site from within and from the perspective of adjoining and nearby neighbours. I also viewed a similar shed to those proposed near Springston on the 13th January and 3rd February 2017. This shed had both roof ventilation and a misting system.

6. The hearing was held in two parts as a result of a request for further information, particularly associated with odour modelling, I sought after the first day of hearing. There was subsequently extensive further information, particularly around the modelling and potential mitigation, provided over a long period up to and beyond the reconvened hearing. Much of this has been detailed information and, given the topic, very technical in nature. This has resulted in an extensive decision in order to address, cover and provide context to the various issues which have been raised throughout the process.

7. I also at this point note that this was the first of two hearings on the expansion of broiler chicken operations which I heard and am responsible for issuing a decision on. The second hearing was that of R S & K R Jones for which I have already issued a decision. Some of the participants and issues raised during the two hearings were similar, evidence was jointly made in some cases and I issued joint memorandums in some cases. As a result my discussion in this decision does at times also reflect that decision and also refers to the R S & K R Jones hearing process.

THE PROPOSAL

8. The applicants currently own and operate a 60,000 head poultry broiler operation with two existing rearing sheds at 1059 Poyntzs Road, Waimakariri being RS 37955. The current operation does not have an existing discharge consent.

9. The proposal was limited notified for 245,000 chickens however after the submissions closed, Ms Ball said she was advised that the actual number of chickens proposed was 255,000. She said that given the

small increase it was considered that re-notification would not be necessary, however as I understood it affected party approvals were re-obtained.

10. As a result of an odour assessment post notification which predicted an increase in potential nuisance effects on the neighbouring properties the Applicant amended the proposal to include the installation of roof mounted fans on the new sheds and retrofitting the expanded existing sheds with the same technology.

11. In detail the proposal at this point was to now comprise of:

- Five sheds (two expanded and three new) with a maximum of 255,000 chickens;
- Chickens reared on a litter base comprising of sawdust and wood shavings for a maximum of six weeks in every seven week period, across the five sheds;
- A bird density ranging from 18 to 20 birds per square metre, and a maximum stocking rate of 38 kg/m².
- An independently controlled ventilation system in each shed as required under the Animal Welfare (Meat Chickens) Code of Welfare 2012. The ventilation provides fresh air, and to assist in the control of temperature, moisture, airborne particles, and litter quality;
- 10 roof mounted ventilation fans at the central ridgeline of each shed positioned 5.5m above ground level. The roof mounted fans would operate in combination with four wall mounted box fans on each end of the sheds during hot/dry weather conditions; and
- A misting systems which operates during periods of high temperature (greater than 25°) minimising the use of the full tunnel mode for ventilation.

12. I was advised that the operation involved the removal of the chickens between 28 and 42 days of rearing. The females were removed at the 28 day mark and the males at the 42 day mark. This meant that post the 28 day mark the number of chickens is effectively halved. The chickens are removed from the sheds using specialist transport trucks and transported to a processing facility. Once the final chickens are removed the litter is pushed out and removed from the site by contractors and the sheds cleaned before a new batch of litter and chickens arrive.

13. I note at this point that the applicant has also applied for a discharge permit (CRC160081) to discharge washdown water containing chicken effluent and stormwater from hardstand areas associated with the proposed poultry broiler operation onto land; and a water permit (CRC160550) to take and use groundwater from M35/0061 for domestic supply, stock water and shed wash down water purposes. Both these applications have been processed separately on a non-notified basis and do not therefore form part of this hearing process and my decisions.

The Receiving Environment

14. The subject site itself has a rural zoning and contains an existing poultry operation that has been operating for a number of years. The immediate surrounding land is also rurally zoned containing a number of small farming blocks with residential dwellings. The nearest residential dwelling to the sheds are located approximately 245m and 355m to the south respectively. All dwellings have established hedges between them and the proposed sheds.

15. The site adjoins the Eyre River.

Activity Status

16. I was advised by Mr Bacon for the District Council that resource consent was required in relation breaches of the earthworks (more than 1000m^2), river setback (structures are less than 100m from Eyre River) and the fact that the proposal is within 300m of the notional boundary of an existing dwelling.

17. Ms Ball advised that consent from Environment Canterbury was required to discharge odour and dust into air from the proposed poultry broiler operation expansion. A consent duration of 35 years was sought. She identified that non-compliance with Rule AQL60A of the Natural Resources Regional Plan (NRRP) and at the time Rule 7.62 of Proposed Canterbury Air Regional Plan (pCARP) made the application a **restricted discretionary activity**.

18. Mr Chilton and Mr Pedley also referred to Rules AQL58 and 7.60 of the NRRP and pCARP respectively. These two rules relate to whether the discharge from the two existing broiler sheds is permitted. I have addressed this matter later in my decision and I note that is would not change the status of the activity and aside from two matters the matters of discretion are the same.

HEARING

19. Due to the review of odour modelling much of what was presented at the first hearing on that aspect was overcome by subsequent events. Nevertheless, I have provided a summary of relevant evidence presented at the first hearing date.

20. I note that R and T Kennard withdrew their affected party approval via a letter and email to Environment Canterbury with the email being received on the 27th April 2016 and I was advised of it on the 28th April. I was then advised at the hearing that D and L Freeman were also intending to withdraw their approval. Subsequently a letter dated 28th April 2016 was received by the Environment Canterbury on the morning of the hearing from the trustees of the Primrose Trust, Douglas and Lynette Freeman withdrawing their affected party approval. I discuss these further later in my decision.

Evidence for the applicant at the Original Hearing

21. **Ms Ellis** outlined the application and advised that the RMA formed an overarching guide to my decision making. In that regard she submitted that the proposal was consistent with s104 and Part 2 of the RMA. She said that the evidence showed that offsite odour effects would be reduced.

22. Ms Ellis said that the existing operation formed part of the existing environment given that it had obtained land use consent a number of years ago. In this regard she referred to reverse sensitivity saying that the Glubb dwelling had been established since this consent was obtained. Ms Ellis went onto say that odour effects were difficult to measure and were subjective. She submitted that in a rural environment there was a higher tolerance to odour.

23. In response to my question regarding the evolution of the existing operation Ms Ellis said it had begun as a turkey operation (between around 1994-98), progressed to a layer operation before becoming a broiler operation. She was unaware as to when the change to the broiler operation occurred but her submission was that there was a continuous level of effect in terms of odour.

24. **Mr Block** provided a description of broiler chicken farming. He said that growers receive day old chicks which are grown to a maximum of 40-42 days when they have an average weight of about 3.3kg. He said each shed holds males and females separately and that the birds are currently placed at 20 birds per square metre but it would be desirable for this to be less (on average 19 per square metre). He went on to say that the collection of birds begins with females at around 28 days at which time they are approximately 1.6kg and that birds are then progressively taken from there. Mr Block said that the requirement to start taking birds at 28 days was both market driven and to ensure that Animal Welfare Stocking Standard is met.

25. **Mr Graham**, the owner, along with his wife, of Clarence Harvest, said that in addition to the broiler chicken operation the remainder of the farm was used to farm beef cattle. He said they were passionate about economic land use and that the proposal fulfils this. He said that the current size of the business did not allow for the hiring of extra labour to help out in the chicken sheds. This meant that it was difficult to get time off from the farm with the family, and have a work/life balance.

26. Mr Graham said that the demand for chicken had increased and the gaps between runs had reduced from 10-14 day breaks down to around 8 days. He said Tegel recognise this as a problem and was seeking to have more sheds to raise more chickens. They also note that short breaks put too much pressure on the contractors and wish to be able to lengthen those breaks.

27. Mr Graham said they were committed to better animal health and have improved the animal welfare of the chickens by improving the quality of the litter they live on which also improves the odour and dust discharge by reducing the humidity in the sheds. He said the existing sheds would be upgraded to include chimney ventilation and that the new shed would be TSS5.3 which is the highest standard available at present and incorporates the new design with roof fans.

28. In terms of the consent process Mr Graham said five neighbours had signed affected party approval forms for all the consents sought. He said that post the submission period Mr Van Kekem had been engaged to undertake air discharge modelling. The initial results showed the proposal as notified to be un-consentable and that Dr Cowie had said they had three choices - abandon the project, move the

sheds about 150m further back, or change the design of the sheds. Mr Graham said shifting the sheds was an inefficient use of land and resources so they investigated a new design with chimney ventilation.

29. Mr Graham concluded by saying they wanted to get on with our neighbours, but also want to progress their business. He said that the project would cost them in excess of $5million and that they needed long term certainty to justify the capital costs.

30. **Mr Van Kekem** said initial air dispersion modelling results, with traditional tunnel ventilated sheds had shown there was potential for unacceptably high levels of odour at neighbouring properties. For this reason he said the Applicant agreed to modify the existing sheds, and the design of the proposed new sheds, to allow for roof ventilation in all but high ambient temperatures (greater than 25 ºC) when it is augmented by wall mounted ventilation. He said because this roof ventilation discharged vertically, resulting in improved dispersion, modelled ground level concentrations of odour decreased significantly versus those that occur from the existing two sheds.

31. Mr Van Kekem considered that in the case of expansion of an existing farm where predicted impacts from the existing operation at neighbouring residences are presently well above the 5 OU/m^3 threshold there was a strong case for an alternate assessment criteria, particularly as in this case where there is no history of odour complaints and the modelling shows off-site effects will be reduced substantially. He went on to suggest that existing discharges of odour and dust from the chicken sheds were permitted activities under Rule AQL59 of the NRRP and Rule 7.60 of the pCARP. These rules allow for poultry farm discharges established before 1 June 2002 to continue, provided there has been no increase in the scale of the farming activity and there are no noxious or dangerous effects. He considered this meant that the existing discharges could be considered the permitted baseline and the starting point to demonstrate that the increase in odour over the existing operation will not be detectable above the existing 'permitted baseline'.

32. Mr Van Kekem considered that in this case the proposed expansion, in conjunction with the modifications to be made to ventilation in the existing sheds, would result in a net reduction in off-site odour at the submitter's properties and therefore, the proposal easily met the proposed assessment criteria. These results showed reduced odour levels of in excess of 20 OU/m^2 for the proposed development.

33. In terms of the modelling Mr van Kekem said it was conducted on very conservative assumptions and assumed that all sheds would be producing maximum odour emissions every hour of every day, for the one year modelled.

34. In answer to my question Mr Van Kekem predicted that the two existing sheds would if reconfigured give a level of around 2 OU/m^3 at the Glubb residence. He also said that while it was possible to ground truth the model this hadn't been done in the poultry industry.

35. **Dr Cowie** said that he was more sensitive to odour than most people based on testing and that having been to chicken farms many times, he can detect little odour until the birds are 2-3 weeks old. After

that time he said the odour becomes increasingly strong, and while he would not call it objectionable, it was at least moderately offensive. He said odour was strongest when the sheds have been cleaned out, and the litter is waiting on the pads to be collected.

36. Dr Cowie referred to the 2010 report commissioned by Poultry Industry Association of NZ (Inc) (PIANZ) and the Egg Producers Federation of NZ in response to the proposed Regional Plan for the Auckland region. The report covered 36 broiler farms and 14 layer farms (and three farms of other types) over a 10 year period, and considered only verified odour complaints. Two of the conclusions reached by the report were:

- *There is no justification for setting separation distances of greater than 120m as no complaints have occurred where there is more than that distance between sheds and the nearest residence; and*
- *There is no validity in using flock size as a criterion for determining whether a farm is correctly sited to avoid complaints*.

37. Dr Cowie said there had never been a complaint about odour from the existing sheds from any party. He said when read in conjunction with the findings from the PIANZ report, this was not surprising. He did however acknowledge that in rural communities odours of various types are common place, and most people are reluctant to complain about activities on a neighbour's property. He also noted that the Applicants were awarded the "Tegel Grower of Year" in 2015, which he said was highly sought after among the grower community and he understood this reflected their commitment to improve conditions for their birds and reduce off-site effects.

38. Dr Cowie said that Mr Van Kekem's evidence convincingly showed that the current proposal would result in significant reductions in odour concentrations off-site. He said as existing discharges made up the permitted baseline on the site, effects will be reduced over what already exists. He also noted that there would be significant positive effects from implementing the proposal in that the applicants will be able to expand their business, work will be provided for a large team of contractors and at least two permanent staff on the farm, there will be downstream benefits for the processing industry and other chicken farmers will have less pressure on turnaround times.

39. In addressing relevant objectives and policies from the district and regional plans Dr Cowie considered the proposal was generally consistent with those he'd identified.

40. In addressing section 5 (of the RMA) Dr Cowie said the proposed addition of additional chicken sheds on the applicant's property will meet the criteria for sustainable management. In particular he considered it would allow the applicant, and downstream processors, to help provide for their economic wellbeing while avoiding or mitigating any adverse effects on the local environment. In terms of section 7 Dr Cowie considered the proposal to be an efficient use of land as it utilised land which is presently used for raising steers for intensive broiler farm production. He also considered the proposal would have only a minor effect on local amenity values.

41. In answer to my questions Dr Cowie agreed that odour could be a very subjective topic and that people had very different perspectives. However, he said that the basis for the modelling was well established and was conservative.

Evidence of submitters at Original Hearing

42. **Mr Pedley,** legal counsel for the Glubb's, opened by saying that the existing chicken farm subjected his clients to objectionable and offensive odour on a regular basis and it was therefore alarming that there was now a proposal to increase the number of birds by more than four times[1]. Mr Pedley went on to question whether the existing operation was a permitted activity. He referred to the Rules AQL58 (of the NRRP) and 7.60 (of the pCARP) and submitted that Rule AQL58 provides that discharges of contaminants into the air from intensive farming that were established on or before 1 June 2002 is a permitted activity, provide that both of the following conditions are met:

    (a) There shall be no increase in the scale, intensity, frequency or duration of the effects of the discharge of contaminants into air from the activity; and

    (b) The discharge of odour beyond the boundary of the site shall not be noxious, dangerous, offensive or objectionable to such an extent that it has an adverse effect on the environment.

43. Mr Pedley submitted that the applicant's evidence was that on this date, the existing sheds were being used for a layer chicken farm and that Dr Cowie had stated that it was his understanding that the change to a broiler chicken farm had occurred around 2004, although it was the Glubbs evidence that it occurred in 2005. He said in either event, the change in farming operation occurred well after 1 June 2002 and without resource consents being obtained from Environment Canterbury.

44. Mr Pedley submitted that there was clear expert evidence that a change of this sort would have resulted in a noticeable increase in the adverse odour effects caused by the activity. He said Mr Chilton has confirmed that it is well recognised in published literature and guidelines that broiler farms are more odorous that layer farms and that the Glubbs can attest to increasing problems with odour after this conversion occurred.

45. For the above reasons, Mr Pedley submitted that the activity failed to comply with the first permitted activity standard of AQL58. He also went onto say that there was compelling evidence that the existing chicken farm also fails to meet the second requirement. This included:

    (a) The dispersion modelling carried out by Golders;

    (b) The applicant's own dispersion modelling of the existing operation; and

    (c) The direct evidence from the Glubbs.

[1] Paragraph 3 of legal submissions by D Pedley

46. Mr Pedley submitted that the existing operation was not permitted as it failed to meet the mandatory permitted activity standards in the rules. It therefore in his view did not establish a permitted baseline that allows the existing odour effects to be disregarded.

47. Mr Pedley went on to say that the untested nature of the proposal and the applicant's failure to properly assess all potential sources of odour raised significant doubt on the claim that odour will reduce as a consequence of the proposed expansion. He said that if the applicant's predictions prove incorrect, it is the Glubbs and other neighbouring properties that will suffer the consequences with no practical remedy available.

48. Mr Pedley submitted that the appropriate assessment criterion to use is the accepted guideline of 5 OU/m^3, which has been approved by the Environment Court on several occasions for both new chicken farms and expansions, and has wide spread expert support. He said to adopt the alternative assessment criteria promoted by Mr Van Keeken would be a significant departure from this accepted approach with no good reasons for doing so. He also noted that the Glubb residence was only 240m from the existing chicken sheds, compared to a recommended separation distance of 400m to 540m.

49. Mr Pedley also said that it was overly simplistic and misleading to suggest that no complaints equates to no problem. He said there were many reasons why a person may not choose to complain, even though they may be subjected to adverse odour effects including wanting to maintain a positive relationship with their neighbour, being uncertain of who to complain to, or having little faith that a council would investigate a complaint in a timely fashion.

50. Mr Pedley went on to refer to case law he considered to be of relevance. In *Hill v Matamata-Piako District Council*[2], which involved an existing chicken broiler farm in a rural zone, the key question posed by the Court was whether it was satisfied that the applicants would be able to internalise the adverse effects of their activity, particularly the emission of objectionable odour. The Court was not satisfied that this could be achieved and reached the following finding on the importance of internalising adverse effects:

> *We reiterate again in this decision that we are of the view that adverse effects such as objectionable odour emissions should be confined on site. People living and working in rural neighbouring properties adjacent to sites where intensive farming such as broiler chicken rearing is carried out should not be subjected of objectionable and nauseating odours. It is incumbent upon the industry as a whole and upon individual farmers to so arrange their affairs in the way of siting, management, technology and feed formulations to ensure that objectionable odours are confined on site. This may well involve extra cost to the industry generally and to particular farmers. As a general principle we are of the view that such cost should be borne by the industry in the event that the siting of operations are such that there is potential to cause adverse effects.*

[2] Decision A065/99

51. Mr Pedley said the above decision was been confirmed in several subsequent cases, including the decision of *Winstone Aggregates v Matamata Piako DC*[3].

52. Mr Pedley submitted that the approach adopted in the above cases was directly applicable to the current application and it confirmed that the responsibility lies on the applicant to internalise objectionable and offensive odour within the application site, regardless of the practical consequences of this requirement. This he said includes ensuring that the block of land on which the activity is proposed is large enough to contain that odour.

53. In Craddock Farms Limited v The Auckland Council[4] Mr Pedley said the Court emphasised that the odour effects would not be internalised within the subject site and reached the following conclusion on effects:

> *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.*

54. Mr Pedley concluded by saying that to approve this application would be to depart from the significant body of well-established expert opinion and case law about the acceptability of such activities and their impact on the environment. He said the applicant was clearly not able to internalise the adverse effects of its activities and was proposing to use neighbouring properties as a buffer zone to bear the environmental costs, which he said would have very real practical consequences for the Glubbs.

55. **Mr Glubb** said that he and his wife had owned the property adjoining the application site since 1997 and built their dwelling in 2002. In that time he said the operation on the application site had changed from turkeys to a breeder farm to a broiler farm in 2005. He said that up until 2005 there was a faint odour which was not much of a problem, but with the change to the broiler operation he said they had had ongoing problems with odour.

56. Mr Glubb said they had not complained about the odour to keep up good neighbour relations. He said however that the smell increases as the chickens grow and was worse on windy days and in particular when the sheds are cleaned every 5-6 weeks. He went onto say that in summer there were days when washing could not be hung outside or windows in the house opened and that odour impacted upon their outdoor lifestyle and entertaining. In this regard Mr Glubb provided four letters from visitors to their property commenting on the odour they experienced.

57. Mr Glubb said that odour was also affecting his business as his customers have complained about it and he was concerned that there was a risk they may not come back.

58. Mr Glubb said his concerns with the expansion were the potential increase in odour, the associated devaluation of their property and the possibility of liquid effluent contaminating their water supply.

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[3] W55/04
[4] 2016 NZEnvC 051

59. **Mr Chilton** did not consider the existing operation met the conditions of the relevant air discharge permitted activity rules and therefore the permitted baseline approach should not apply. For this reason he disagreed with the alternative assessment criteria approach proposed by Mr Van Kekem.

60. Mr Chiltern while acknowledging that Mr Van Kekems projected concentrations were likely to represent a worse case combination of high emission rates and meteorological conditions that give rise to poor dispersion, said that they were 19 and 10 times the accepted odour assessment criterion of 5OU/m^3 which he considered should apply for the Glubb workshop and residence.

61. Mr Chiltern went on to say that in his opinion the modelling results did not provide evidence that concentrations would be sufficiently low to avoid offensive or objectionable odour effects. He said that in his view the modelling of the existing broiler farm significantly overstates the predicted odour concentrations when compared to the modelling of the proposed operation. He said this was due to the modelling being undertaken as 'volume sources' which do not enable the buoyancy effects of the air discharged from the chicken sheds to be taken into account.

62. Mr Chiltern reconfigured the model to allow for these effects and on the basis of that modelling considered the impacts of the expanded farm would not reduce, but would instead increase over the Glubbs property.

63. Mr Chiltern addressed published separation distances and said that distances vary between 400m and 547m in relation to a broiler farm with 255,000 birds. He went on to say that whatever the correct separation distance should be, it was clear in his opinion that the Glubb residence and workshop were well within these distances. He said that this meant there was very little 'room for error' if odour effects are greater than anticipated and that there were limited realistic options for mitigating odour beyond what was currently proposed, short of reducing bird numbers.

Officers s42A report

64. **Ms Ball**, for the Environment Canterbury, said that the modelling results for the proposal (Scenario 2) demonstrated that the nuisance effects of odour will be reduced below the current scenario (Scenario 1) at both the Glubb residence/workshop and Briden property boundary by at least 50 percent due to the improved ventilation systems in the existing and proposed sheds. She accepted that the modelling approach used conservative parameters; that the level of effects was not likely to occur the majority of the time and that given no odour complaints had been received for the existing operation. She considered the effects of odour on neighbouring properties to be no more than minor.

65. Ms Ball identified Objective 14.2.2 and Policy 14.3.5 of the Canterbury Regional Policy Statement (RPS), Objective AQL1 and Policies AQL5 and AQL6 of the NRRP, and Objectives 5.4 and 5.9 and Policies 6.5, 6.6, 6.8, 6.9, 6.10 and 6.26 of the pCARP as being relevant to the proposal. She considered the proposal to be consistent with the above provisions but did note in relation to Policies AQL5, AQL6 and 6.26 that there could be times when odour may be discharged beyond the boundary of the property which could be considered to be offensive or objectionable.

66. Ms Ball had also considered the Mahaanui Iwi Management Plan 2013 and said that she did not consider the proposal would result in the loss of air as a taonga to Tangata Whenua.

67. Overall Ms Ball considered that based on the assessment provided by the applicant and the mitigation measures proposed including conditions, the application could be granted consent.

68. In assessing the actual and/or potential effects **Mr Bacon** was of the opinion that the relevant matters were noise, odour, floodwater, visual effects and traffic generation. He went onto address each of those in turn and considered that, subject to the imposition of conditions, the effects of the proposal would be less than minor.

69. Mr Bacon identified Objectives 4.1.1, 8.2.1, 11.1.1 and 14.1.1 and related Policies 4.1.1.1, 4.1.1.3, 4.1.1.6, 8.2.1.3, 11.1.1.5, 11.1.1.6, 11.1.1.7, 14.1.1.1, 14.1.1.2 and 14.1.1.3 of the District Plan as being relevant to the proposal. He considered the proposal to be in accordance with these provisions. He also considered that the activity accorded with the overall thrust and direction of the District Plan with regards to the appropriate location for this type of activity, and noted that as a general theme, the type of activity proposed to be undertaken was enabled within the framework of the District Plan, subject to the mitigation of adverse effects that may result.

70. In response to Dr Cowie Mr Bacon agreed that his proposed conditions 4.4, 5.1 and 8.2 could be dropped.

Commissioner Minutes

71. Having considered the evidence presented a number of matters arose upon which I considered additional information was necessary. Firstly, I was unclear whether the odour modelling which had been undertaken showed an adverse effect or not and whether or not all the appropriate inputs into the model had been made. I also found the use of a 'conservative' approach claim in the modelling difficult to understand. Finally, I was unclear as to the ability to mitigate against potential offensive and objectionable odour effects should they arise and what mitigation may incorporate.

72. I therefore issued a minute on 11th May in order to:

(a) Establish a process for ensuring that the modelling was as accurate as possible and provided me with a reasonable understanding of the potential extent of odour effects;

(b) Identify what mitigation measures might be available and how these might be incorporated into an Odour Management Plan; and

(c) Seek clarification on other matters raised during the hearing.

73. For the purposes of (a) above I requested Mr John Iseli act as a mediator/advisor on the odour modelling process.

74. I subsequently issued further minutes (some jointly with the Jones application) providing directions around the process to be subsequently followed upon receipt of the above information and setting a

reconvened hearing. Within this process I note that Mr van Kekems role for the applicant was replaced by Mr Curtis. Within the above process I understand that the air quality experts met and some additional modelling scenarios were agreed and developed.

Subsequent Information and Reports

75. Prior to the reconvened hearing two reports had been prepared by Mr Curtis for the Applicant.

4 July 2016 Report

76. The first report acknowledged that the original modelling was intended to demonstrate only the difference in odour that might occur between what was already there, and what would be there with the modified farm. It went on to detail the results of various modelling scenarios for the existing and expanded chicken farms. Of particular relevance in my opinion were Scenario's 3 (the existing farm) and 6 - 9 (the expanded farm) which seemed to most closely relate to the reality.

77. Scenario 3 changed odour emission rates with bird age and assumed that the first day of the first cycle of the year occurred on 1 January. Variable emission rates were assumed to reach a maximum at the maximum allowable stocking density (approximately the 28th day of the cycle) and then remained constant until day 42 when all remaining birds are removed.

78. The results showed the existing 99.5 percentile 1 hr average odour concentrations at the Glubb residence to be 4 OU/m^3, at Glubb workshop to be 7 OU/m^3, at the Briden property to be 10 OU/m^3 and at the Hydes residence to be 3 OU/m^3.

79. Scenarios 6 - 9 introduced the expanded operation based on variable odour emission rates but with different start dates ranging from 1 January to 8 February for each scenario. The results showed the 99.5 percentile 1 hr average odour concentrations at the Glubb residence to be between 8 and 9 OU/m^3, at the Glubb workshop to be between 13 and 14 OU/m^3, at the Briden property to be between 12 and 13 OU/m^3 and at the Hydes residence to be between 4 and 5 OU/m^3.

80. In the discussion which followed Mr Curtis acknowledged that the modelling presented in the original AEE was very conservative. He went onto say that regardless of how the existing farm was modelled (Scenarios 1 to 3) it was unlikely that the odour concentrations at the nearby residences would be less than the 5 OU/m^3 guideline commonly used in Canterbury. He noted that the choice of start date was important with differences up to 15% with the January start date potentially underestimating the of-site odour concentrations.

81. Mr Curtis concluded by saying that the modelling had demonstrated that there was merit in considering an alternative methodology for modelling the emissions associated with horizontal fans, but there appeared to be little merit in using variable emission rates and arbitrary start dates, compared with a fixed emission based on maximum stocking density. He said that overall the results appear to indicate that while there will be some increase in odour as a result of the proposed expansion, given the existing

odour levels are expected to exceed the 5 OU/m^3 guideline, the increase from the proposed expansion was not considered significant.

2 September 2016 Report

82. The second report followed expert caucusing. The existing scenario was rerun with an increased sampling grid resolution to improve accuracy, while the expanded farm scenario increased the height of the roof fans on all sheds to 8.2m above ground level compared 5.5m as previously modelled.

83. The existing scenario modelled was based on the same values as Scenario 3 in the 4th July report. The results showed the 99.5 percentile 1 hr average odour concentrations at the Glubb residence to be 3.9 OU/m^3, at the Glubb workshop to be 7.5 OU/m^3, at the Briden property to be 6.9 OU/m^3 and at the Hydes residence to be 2.7 OU/m^3. This modelling also included the frequency of exceedance of 5 OU/m^3 (measured in hours per year). For the Glubb residence this was 25 hours, for the Glubb workshop it was 128 hours, for the Briden property 123 hours and for the Hydes residence 7 hours.

84. The expanded farm scenario (with the raised roof fans) results showed decreases at three of the four receptors with the Glubb residence indicating 3 OU/m^3, the Glubb workshop 6.5 OU/m^3, the Briden property 6 OU/m^3 and the Hydes residence 2.9 OU/m^3. The hours exceeding of 5 OU/m^3 also decreased accept at the Hydes to 13, 108, 116 and 12 respectively.

85. Mr Curtis commented that the modelling predicted a reduction in odour to occur at the closest receptors, with the exception of a small increase at the Hydes residence, compared to the existing scenario, as a result of the increased stack height. He said the modelling also demonstrated a reduction in the frequency that 5 OU/m^3 occurs at all locations, apart from the Hydes property where there is a small increase.

Reconvened Hearing

86. The hearing was reconvened on the 12th October 2016 with the further information sought having been pre-circulated with input from all parties, including Mr Iseli.

Mr Iseli

87. Mr Iseli had been appointed at my request in order to facilitate discussions and understanding of the odour dispersion modelling assessment in relation to both this and the Jones application. In his 23rd September 2016 memorandum Mr Iseli outlined the meetings held between the air quality experts. He said in general terms substantial progress had been made between the experts in adopting an agreed modelling approach that was expected to provide a reasonable indication of the degree of odour impact. However, in relation to this application he said there had been disagreement regarding the odour emission rate calculated during the peak of the cycle (days 28-42) based on the weight of birds at 28 days.

88. Mr Iseli agreed that raised roof mounted fans would be expected to result in improved odour dispersion relative to traditional wall mounted tunnel vents. He noted that Mr Curtis's predicted odour

concentrations based on the raised roof fans were approximately 7OU/m^3 at the workshop and 3OU/m^3 at the residence. He also noted that there was a small increase at the Hydes residence but that the level was likely to be acceptable.

89. Mr Iseli went on to say that some degree of caution should be exercised when interpreting odour modelling results of this type, that odour modelling was only one assessment tool and there are numerous assumptions adopted in the model that can vary in practice. He further said that modelling does not take into account odour emissions from shed cleanouts (occurring approximately 7 times per year per shed) and abnormal operations.

Mr Chilton

90. Mr Chilton considered the emissions rates were understated by 28% given the likely bird mass in New Zealand and based on Mr Curtis's predictions he said the Glubb residence would currently be receiving 5 OU/m^3 and the workshop 9.6 OU/m^3 and in terms of the proposal they would be 3.8 OU/m^3 at the residence and 8.3 OU/m^3 at the workshop. He considered 28% was an appropriate value and did not consider this made his assessment extremely conservative but rather represented the maximum as applied for the scale of the activity.

91. Mr Chilton considered it was reasonable to model odour emissions as varying with the bird cycle, but that the start date assumed can influence how worst case emissions interact with worst case meteorology. He went onto say that despite variable start dates being modelled in the 4th July report which affected model prediction by up to 15% the latest modelling from Mr Curtis was based on a 1 January start date which presented the lowest odour unit concentrations. He concluded therefore that this was not a conservative assessment from a worst case meteorological standpoint.

92. Mr Chiltern disagreed that the Glubb workshop was not a sensitive receptor on the basis that the workshop was Mr Glubbs usual place of work, that he was frequently present at his workshop for long periods, and he would have an expectation not to be routinely impacted upon by odour.

93. Mr Chiltern then provided details of independent modelling he had had undertaken using what he said should be the same meteorological dataset from Environment Canterbury. He said part of the reason for his undertaking the modelling was the unusual nature of the spatial pattern of the contour plots presented in the 2nd September report. The model run was for both the existing and proposed scenarios and was based on constant odour emission rates rather than variable rates. Mr Chiltern also advised that his emission rates were based on the sheds being at up to 36 kg/m^2 stocking density and as a result were higher than those used by Mr Curtis by up to 28%. He also said that no account was made of treating the fans as horizontal discharge sources when temperatures were above 25° C as Mr Curtis had done and as such this should reduce the conservatism in his model.

94. Mr Chiltern said that the results of testing the benefits of the 8.2m high stacks versus the existing shed discharge configuration were that the impact of odour concentrations would increase at the Glubb residence and workshop from 3.4 to 6.3 OU/m^3 and 4.7 to 7.8 OU/m^3 respectively which were above

the 5 OU threshold. He said this was in contrast to the result presented by Mr Curtis and he was unclear why this difference should exist. He said he had not been able to review in detail the meteorological and dispersion modelling undertaken by Mr Curtis, but simply noted that they may be due to differences in the meteorological datasets used. In this context he referred to the comparable wind roses used by himself and Mr Curtis which showed significant differences.

95. In response to criticism that his fan sources were not located correctly in his model Mr Chiltern said that given how the model and its building downwash algorithm work he was of the firm opinion that the model results should not be sensitive to the precise location of the stacks as long as they were reasonably distributed along the length of the shed as he had done.

96. Mr Chiltern considered that overall his modelling was robust and could be relied upon in so far as demonstrating that odour concentrations over the Glubbs property as a result of the farm expansion will increase and will be above the 5OU/m^3 criterion.

97. Mr Chiltern went on to say that litter removal remained an aspect of the proposal where he considered the potential effects will increase in terms of the expanded farm operation. He said in his experience litter removal can be a relatively short period of increased odour.

98. Mr Chiltern considered it likely that the expanded farm operation would result in offensive or objectionable odour effects on the Glubbs should consent be granted.

Ms Ball

99. Ms Ball reassessed the proposal against the relevant objectives and policies. She said it was difficult to determine whether the proposal was consistent with these objectives and policies due to the different modelling outcomes presented by Mr Curtis and Mr Chiltern. Ms Ball concluded by saying she was unable to make a recommendation based on the current information.

Mr Bacon

100. In commenting on the additional height of the air discharge stacks Mr Bacon said he had not viewed any plans to be able to confirm the scale of any potential visual effects associated with the increase in height. He also noted that I would need to confirm whether such additions were within the scope of the application as notified, however he said that there was no height limit within the Rural zone.

101. Mr Bacon considered that if the modelling undertaken by Mr Chiltern were to be accepted then the potential odour effects on the Glubb dwelling would potentially be more than minor but they were acceptable in terms of other adjacent properties. He was also of a view that if I determined that the peak discharge generated an odour effects within the environment that is 'significant' it would likely fall outside the anticipated short term timeframe identified in Objective 14.1.1(e).

Mr Curtis

102. In his evidence for the re-convened hearing Mr Curtis initially outlined the background to his involvement in application.

103. In response to Mr Iseli, Mr Curtis said he accepted that the concentrations would be higher at the Glubb workshop, but he did not consider that this was a sensitive receptor such as a school or residence was.

104. With regards to bird weight Mr Curtis said that he was now aware that on average birds in New Zealand grow faster than those in Australia, and therefore at day 28 the average bird weight is 1.63 kg, which is 17% greater. He noted that Mr Iseli based his comments on the top end weight, which he did not consider appropriate, as the emission factors are based on average bird weight for a particular day, and already take into account the natural variation in bird weight that will occur within the shed. He said therefore it would be extremely conservative to use the top end weight to assess the odour as this would not reflect the shed emission and result in an extremely conservative assessment.

105. Mr Curtis said that based on the Australian data a weight of 1.63 kg would be equivalent to a 31 day old bird in New Zealand which has an odour emission rate of 45.9 OU/min. Therefore, he said if it was assumed that there was a proportionate increase in odour, which may or may not be the case, then there could be a 19% increase in the concentrations he had have predicted (not the 28% increase mentioned by Mr Iseli). He accepted that there is likely to be some difference in the odour concentrations per bird, but was unsure whether it is necessarily going to be as great as 19%, as there were many factors that contribute to shed odour including: the site management practices and the ventilation regime, which will not change.

106. Notwithstanding this, Mr Curtis used the 19% value to pro rata the concentrations he had predicted. For the expansion scenario these were at Glubb residence 3.6 OU/m^3, at the Glubb workshop to be 7.7 OU/m^3, at the Briden property to be 7.1 OU/m^3 and at the Hydes residence to be 3.5 OU/m^3. Mr Curtis said this change was not significant, and with the upgrades proposed for the existing sheds there would still be a significant reduction in modelled odour concentrations compared to those that are predicted for the current operation.

107. In response to the comments of Mr Chiltern, Mr Curtis said he had looked at the modelling presented by Mr Chilton and ignoring whether the emission rates will increase with the mass, the modelling presented by Mr Chilton was in his view based on the use of constant (high) emission rates, and so the results were not representative of the frequency that the concentrations predicted might be experienced at the site. He noticed that some of Mr Chilton's fan sources were not located correctly, which in his opinion could account for the fact that lower concentrations were predicted for the current configuration.

108. Mr Curtis also said that the value Mr Chilton predicts for the Glubb workshop was similar to the revised value he had presented and therefore it was surprising that the value predicted by Mr Chiltern for the

residence was almost half that he had presented. For these reasons Mr Curtis did not consider that Mr Chilton's assessment was sufficiently robust to be relied upon.

109. Finally, Mr Curtis said he disagreed with Mr Chilton's concern about litter removal. He said he had not seen any evidence that litter removal from modern chicken sheds, with the litter either removed from the sheds directly into trucks for offsite disposal or stockpiled on site for a few hours prior to being removed from site, results in any significant off-site odour effects. In addition, he said litter removal only occurs on up to seven occasions per year.

Additional Evidence and Submissions

110. In addition to Mr Curtis the Applicant provided evidence from Mr Block, Mr Kelly and Dr Cowie. Mr Block and Mr Kelly's evidence was common between this application and the Jones application.

111. Mr Block said he was concerned about the amount of emphasis which was being placed on the results of the odour modelling. He considered there were many variables involved in poultry farming which may, or may not affect the odour generation potential which are hard, if not impossible to capture within air discharge models. Further, he said his experience was that modelling tends to add uncertainty rather than provide clarity and that even though we know the figures are conservative they are still subject to debate. He was also concerned about the blanket use of 5 OU/m^3 as a threshold for assessing effects. He said this figure does not mean anything in reality and the contours are subject to significant change and therefore it should only be a guide and not a defining figure.

112. Mr Block then sought to provide me with a better understanding of what actually happens. He provided a placement summary of five shed farms. This showed the day old chicks varying in weight. Mr Block said this was important as for every gram difference at placement it will be 16 grams at the tail end of the run. The summary showed that at the 29 day point the density numbers were different.

113. Mr Block said the modelling did not account for this level of complexity and likewise it does not take into account diet formulation and raw material specification which impact on litter quality, increased focus on ventilation management and a drop in placement density. He said this demonstrated that there was too much complexity to fully model accurately and make conclusive decisions.

114. Mr Block concluded by saying that current chicken odour modelling is taken from data out of Australia from ten years ago. He did not believe it was still relevant due to all the things he had mentioned and considered this made it even more conservative.

115. **Mr Kelly** addressed the misting system. He said the system called High Pressure Cooling (HPC) can provide up to 7 degrees of cooling with outside humidity of 55% or less. The principal is for very fine droplets of water to evaporate within 2-4m thereby cooling the air within the shed. Mr Kelly said that the litter did not get wet through this process as the droplets evaporate before getting to the litter.

116. Mr Kelly advised that HPC used with low power ventilation (LPV), the main ventilation using chimney fans, provides the most efficient control within a broiler shed. He said this can provide stable conditions

for birds with outside temperatures up to 35 degrees. He predicted, based on relevant data, that in Christchurch with LPV and HPC, tunnel ventilation will only be required on average 90 hours per year.

117. Mr Kelly said that LPV plus HPC used 12 chimney fans (depending on shed size), plus 3-4 end wall fans which would provide significant dispersal of the air. He said the chimney fans are dispersing the air at 11m/s up to 5 to 6 metres above the ground. He considered this system provided the most controlled outcome for the birds with even temperatures throughout the shed for the full 42 day cycle.

118. Dr Cowie in commenting on Mr Bacons report considered that the presence of shelter belts along much of the property made it improbable that any of chimney vents at the new 8.2m height would be visible from the road and therefore any additional visual effects could be discounted.

119. Mr Pedley provided further legal submissions. He reiterated that the existing activity lacked the necessary discharge consents but went on to submit that it was also not authorised by the existing land use consent. Relying on information provided by Mr Bacon in a 27 May 2016 memorandum he said this was on the basis that the applicant is currently housing 60,000 chickens for a broiler operation which is clearly not the same activity for which land use consent was granted back in 1994. Mr Pedley submitted that the existing chicken farm should therefore be ignored when assessing the potential effects of the current proposal and evaluating it against the relevant planning instruments.

120. Mr Pedley then addressed the issue of scope related to the change in stack height. In this regard he said that the issue of visual effects had not been assessed and without that it was difficult for the Glubbs to provide any informed comment on how this change might affect them. He submitted that I needed to carefully consider this issue and keep in mind that any permitted baseline scenario that may be used should involve a fully permitted non-fanciful activity that would have comparable visual effects to that proposed.

121. Mr Pedley was critical of the modelling results presented by Mr Curtis saying that they were presented in a summarised form, rather than providing the source data and inputs on which the modelling was based. This combined with the unusual nature of the findings he said had required Mr Chilton to ask a number of questions and carry out independent checks to validate the results. Overall he said this created significant uncertainty in the modelling carried out by the Applicant.

122. In addressing the Glubb workshop Mr Pedley referred me to the definition of sensitive activity in the pCARP, submitting that the workshop clearly meets that definition and should not be disregarded. He also addressed the issue of litter clean out saying that while the frequency of shed clean out may not alter, the volume of material would increase by over four times and the duration of the clean out would be extended thus intensifying the offensive and objectionable nature of these events.

123. Mr Pedley concluded by submitting that the reality was that the proposal was simply not suitable in this location and that no amount of modelling or superficial amendments can remedy the inherent conflicts that exist. He said the applicant had failed to provide a robust and transparent assessment of potential odour effects and that there was no basis to confidently conclude that odour effects beyond the

boundary will be acceptable. He submitted that to grant consent in these circumstances would allow the applicant to externalise the adverse effects of their activities and place the costs and adverse consequences on the Glubbs who would in turn bear the risks of any uncertainty regarding the nature and extent of those effects.

Post Hearing Information

124. At the end of the reconvened hearing the applicant sought leave to address matters which had arisen in a written right of reply.

Metrological Data and Affected Parties

125. However, prior to that occurring Mr Pedley provided a memorandum dated 17th October 2016 bringing to my attention that the revised modelling by Mr Curtis now showed the dwelling and associated curtilage of the property at 1017 Poyntz Road (the Freeman property) were within the 5 OU/m^3 contour and subject to offensive and objectionable effects and that the contour also extended over a large portion of the property at 2700 South Eyre Road (the Kennard property), albeit with the dwelling itself sitting just outside that contour. Mr Pedley said that written approvals had initially been obtain from both parties but had subsequently been withdrawn, the Freemans on the 28th April 2016 and the Kennards on the 24th April 2016.

126. Mr Pedley submitted that the owners and occupiers of these properties were not notified of the applications and have therefore not had the opportunity to participate in the process to this point. However, the fact that these persons were not notified does not mean that the effects on them can or should be ignored.

127. The area concerned in Mr Pedleys memorandum is part of the 'bulge' of contours which projected south which I understood corresponded with metrological data used in Mr Curtis's model as opposed to that used by Mr Chiltern. As a result I considered it was important to establish which set of metrological data was correct and directed that this be determined and if Mr Curtis's data was incorrect then remodelling should be undertaken to determine whether the contours are affected by the revised data.

128. I also asked the parties to advise me as to their positions on the effects in relation to the above properties and any others which may arise out of any remodelling and, in the case of the Applicant if any further modifications to the application are proposed. I noted that subject to what was found from the review of the metrological data and potentially the contours that the appropriateness of the notification of the application may be an issue I was required to consider.

129. In response to my directions Mr Curtis provided a memorandum which concluded as follows:

> *Based on this review AECOM is comfortable that while there is a difference between the meteorological data used in the AEE, and that presented by Mr Chilton, these differences are relatively minor, with both sets of data performing similarly when compared to real data for Eyrewell.*

A review of two key parameters for data extracted for the Clarence Harvest site indicates there is little difference and therefore it is AECOM's opinion that there would be no real diffidence in predicted offsite concentrations if the revised data was used.

Therefore AECOM continue to be of the view that the dispersion modelling of the Clarence Harvest farm was fit for purpose and provides a realistic representation of the effects from it.

130. Mr Chiltern provided a response to Mr Curtis's memorandum stating that the appropriate meteorological data set for use in the modelling was that recently provided to AECOM and Golder by ECan following the reconvened hearing. He said this was not the same dataset used by AECOM for its odour modelling to date. Further, AECOM had not rerun its model using the CALMET dataset generated using the recent files provided by ECan, as directed by the Commissioner.

131. Mr Chiltern said his modelling, set out in his report of 23 September 2016, was based on the correct ECan CALMET data set. However, he said to test the significance of CALMET inputs and settings used by AECOM in its assessments to date, he had generated a CALMET data set as configured by AECOM and rerun the odour modelling for the existing and future farm (assuming constant odour emission). He said the results still confirm the findings of his 23 September 2016 report of an increase in odour concentrations over the Glubb dwelling.

132. Mr Chiltern said it remained unclear why the AECOM modelling provides different results, indicating a decrease in odour effects as a result of the farm expansion. He considered the most likely cause of this was the start date used for the growing cycle for variable emissions in the AECOM assessment.

133. Legal advice on the above was provided from Cavell Leitch on behalf of Waimakariri District Council and of particular relevance concluded that:

i. The notification decisions made in respect of the Kennards and the Freemans was appropriate given they were not at the time considered affected and both had previously provided signed affected persons approvals;

ii. Compliance with s104(4) for the withdrawal of affected persons approval is achieved by providing written notification to the territorial authorities involved, with that notification to be supplied before the date of the hearing;

iii. The Freemans did not validly withdraw their approval. However the delay was not significant and the Commissioner could decide to waive that non-compliance. But if no waiver is granted then even though they may feel aggrieved their exclusion from the resource consent process appears to have been valid.

iv. However this should be balanced against the potential that inaccurate information was provided to them when they first provided their written approval;

v. Notwithstanding that compliance in respect of the Freemans was not achieved, if the application is resubmitted the Commissioner will need to determine if there are changes that mean that the Freemans are affected and if notification is required; and

vi. The failings in how this application has been processed could conceivably provide the Freemans grounds to seek a Judicial Review.

134. As a result I issued a further minute asking legal Counsel for the Councils, the applicant and the submitter:

(a) Whether a waiver for the Freeman withdrawal under special circumstances is available or indeed warranted. This assumes that the applicant is unwilling to consent to a waiver.

(b) Whether, regardless of the above, the withdrawals have implications in terms s104(3)(d) of the RMA if I were to accept the revised odour contour now supported by Mr Curtis.

135. In summary the advice from Mr Schulte of Cavell Leitch on behalf of the Waimakariri District Council and with agreement from Ms Dysart Counsel for Environment Canterbury was:

The Commissioner is in a difficult position. The circumstances of this case and the implications of the interaction of these sections of the RMA mean that if he finds that the Kennards would be subject to minor (or more) effects, then because they have never received formal notification of the application, the mandatory requirement of section 104(3)(d) acts to prevent the grant of consent.

In our view this only applies to the Kennards as the late receipt of the Freeman's withdrawal and the absence of any evident special circumstances means that, without the applicant's agreement, a waiver of the time for withdrawing their consent is not available.

In these circumstances the only way that the consent could be granted is if the adverse effects of the activity on the Kennards were able to be avoided or mitigated to the extent that there can be no suggestion that they should have been notified.

136. Mr Pedley made a case for the waiver of the time limits for the Freeman submission to be accepted which he said were:

- they would be significantly prejudiced as the potential effects of the activity on them and their property would not be taken into account;
- the original approval was given in circumstances where the Freemans were not fully informed of the nature of the proposal or the effects it would give rise to;
- there would be no prejudice to the applicant by granting the waiver;
- declining to grant the waiver would result in an artificially limited consideration of the effects of the activity; and

- delays will not be extended or exacerbated in any way by granting the waiver for the withdrawal of the Freeman's approval.

137. In addressing the implications in terms of section 104(3)(d) Mr Pedley said that at the time the notification decision was made, the written approval from the Freemans had not been withdrawn. As such, the Councils had no legal option but to decide that the Freemans were not affected persons when making their decision on notification. Based on this he submitted that 104(3)(d) of the Act does not apply.

138. Ms Ellis submitted that the Cavell Leitch opinion had confused the issue in section 104(3)(d) and that the subsection relates entirely to the notification decision itself and whether or not this was correctly made. She said that at the time of the notification decision, both the Freemans and the Kennards had provided affected party approval and were therefore not eligible to be considered as affected parties on whom notification could be served. She went onto say that at the time notification was made, ECan fulfilled the requirements of the RMA and the notification was undoubtedly valid.

139. Mr Ellis said that Section 104(3)(d) applies where the notification decision was flawed in some way which was not the case here and the section therefore had no application.

140. In terms of the Freeman submission Ms Ellis said that there had been no request for a waiver from the Freemans, nor had there been any indication that the Freemans wish to participate in the process in anyway. She said the sole issue was whether or not the effects of the application on the Freeman's property ought to be taken into account. In this regard she noted that Section 104(3)(a)(ii) provides that the Commissioner is not to have regard to effects on people who have given written approval. This is overridden by section 104(4) which requires the Commissioner to ignore section 104(3)(a)(ii) if the approval is withdrawn by a written notice received by the consent authority before the date of the hearing. Written notice of the withdrawal was not received before the date of the hearing and therefore, section 104(4) does not apply.

141. Ms Ellis also noted that the RMA did not require that the party providing affected party approval has seen the full application and it was for the Freemans to satisfy themselves of what they were providing approval for before providing it. She said that in providing approval they were essentially waiving the right to be involved in the process in any way or to be provided with all the information of an affected party and that there are not sufficiently special circumstances in this case to allow a waiver.

Applicant's right of reply

142. In her right of reply of the 20th January 2017 Ms Ellis addressed a number of matters which I summarised below.

143. Ms Ellis briefly addressed the issue of the bundling of consents, however noted that now that the Applicant had lodged a Farm Environment Management Plan in association with the application to discharge washdown water to land that that application was now a restricted discretionary one rather

than non-complying therefore all consents were restricted discretionary. I note however that in any event those other application are not before me to determine.

144. Ms Ellis went on to submit that overall it was the case for the Applicant that the modelling is very conservative and that the issue of odour has been comprehensively considered throughout the evidence. She outlined the additional mitigation package which included:

- roof ventilation systems in all five sheds;
- misting systems in all five sheds;
- state of the art in-shed technology;
- Odour Management Plan;
- compliance with animal welfare standards;
- compliance with industry standards;
- maintenance of complaint records; and
- prompt removal of litter and shed clean outs.

145. Additionally, Ms Ellis said that the applicant is committed to ensuring the overall activity does not result in offensive and objectionable odour off site by proposing extensive upgrades to the existing sheds. She said the overall modelled discharges are predicted to be lower following the completion of the new sheds given the upgrades proposed.

146. Ms Ellis discussed whether there was an impact on a sensitive activity specifically related to the Glubb residence and workshop. She submitted that the Applicant strongly disagrees with the position that the workshop is a sensitive activity on the basis that the definition of sensitive activities in the pCARP is under appeal and that the definition in the NRRP clearly would not apply to a workshop.

147. In relation to the extent of odour and the relevance of the existing environment Ms Ellis said that the predicted odour levels were slightly above 5OU at the workshop but not at the dwelling. She submitted that the odour was not considered to be offensive and objectionable considering the conservativeness of the modelling; the property is rurally zoned and rural odours are anticipated; the workshop is not a sensitive activity; adverse reverse sensitivity effects need to be managed in the first instance and not used as a mechanism to 'defeat' otherwise appropriate development; and the level of 5OU is not a threshold or a pass/fail test, with regard needing to be had to the FIDOL factors.

148. Ms Ellis submitted that the Glubbs moved in long after a poultry farm was established and that this ultimately is relevant to the weight that is placed on any concerns they may have around odour. She said it was not disputed that the Glubbs have experienced odour effects at times, however she stressed that these may also be contributed to by other sources and that this was a very important consideration in light of the complaints that had now been made, none of which were verified.

149. Ms Ellis submitted that the prior conduct[5] of the applicant may have some relevance under the "any other matters" arm of section 104(1) so long as there was no conflict with the underlying objectives of the RMA. She said that there was no evidence that there has ever been offensive or objectionable odour beyond the boundary.

150. The right of reply set out a number of conditions including one associated with staging as discussed below.

Further Minute

151. In the right of reply the Applicants proposed a condition on a staged development as follows:

The development will be staged as follows:

(a) Stage one: Construction of new shed 1 and extension and upgrades to the southern existing shed;

(b) Stage two: Construction of new shed 2 and extension and upgrades to the northern existing shed;

(c) Stage three: Construction of the third new shed.

After completing each stage and before progressing to the next stage, the Consent Holder will run a minimum of two full bird cycles to enable the consent authority to monitor compliance.

152. As a result I sought the following further details in order to understand the proposed conditions effect and how it would operate in reality:

1. What is the significance of two full bird cycles and would that be sufficient in terms of an assessment under the FIDOL factors?
2. Who is to undertake the monitoring (is it some form of qualified person) and is more than one person required to ensure appropriate checks and balances?
3. How long is the monitoring to be undertaken (number of days) and at what time period(s) during a cycle would it be undertaken?
4. What is the requirement of any reporting on the monitoring? Would it be essentially a pass or fail system whereby if the FIDOL assessment was passed the applicant could move to the next stage and if it failed then no further development could occur under this consent?
5. What contingency would be put in place should the monitoring determine that an offensive or objectionable odour was already occurring based on the FIDOL assessment as essentially this would be a non-compliance with the conditions of a consent.
6. Is base monitoring necessary prior to any development occurring?

[5] New Zealand Suncern Construction Ltd v Auckland CC (1997) 3 ELRNZ 230

7. Would the applicant be the bearer of all costs?

8. Finally, I am interested to know whether Mr Curtis is able to provide an Odour Unit guideline for each stage as I'm am conscious that between stages one and two in the proposed condition an existing shed remains unaltered and that this has never been modelled as part of the evidence.

153. The Applicant responded as follows:

In relation to the first question, there is no particular significance in having two full bird cycles to allow for monitoring. It provides two periods of approximately 21 days (once the birds about three weeks old until they are all removed at about six weeks) during which odour emissions from the sheds are potentially a their greatest. The Applicant considers this gives sufficient time to assess any potential off site effects using the FIDOL factors. The Applicant would be amenable to this being extended to three bird cycles, but would not want to hold up development longer than this.

In relation to the second question, the Applicant's proposed condition provided for this monitoring to be done by the consent authority (the Canterbury Regional Council (ECan)) and that intent is confirmed. ECan has a duty under section 35(2)(d) of the Resource Management Act 1991 (RMA), and can recover its costs for ay monitoring under section 36(1)(c). ECan also has enforcement powers to require consent holders to avoid or remedy any adverse effects.

Questions three to five relate to monitoring and enforcement. The Applicant considers these are matters for ECan to detail as the entity which will be undertaking the monitoring.

In relation to question six, base modelling is not considered necessary. Mr and Mrs Glubb have made a series of unsubstantiated complaints, most of them at times when no or very young birds were present. The Applicant also notes in that the evidence is that off-site effects will be reduced as a result of the overall development.

In relation to question seven, as noted above ECan can recover the costs of monitoring.

It is not possible to provide an answer for question eight. Due to the number of variables in terms of which sheds are built and upgraded, it is not possible to provide the Commissioner with information on how the off-site odour concentrations will change through the various stages. However, it is important to note that regardless of which existing sheds are upgraded first, the concentrations will reduce to the levels predicted for the full farm, as the new sheds have negligible impact on the Glubb property. The same is true of the frequency with which the highest odour concentrations might occur on the Glubb property. This is due to the configuration of the new sheds, which means they contribute very little to the frequency of odours experienced at that property.

Closure of Hearing

154. The hearing was closed on the 13th February 2017 and on the 3rd of March I extended the time period for issuing the decision.

ASSESSMENT OF EFFECTS

155. This application has resulted in a number of competing and at times complex matters which I must consider. I have dealt with these in what I consider to be a logical format below. Although there are some other matters the primary effect I need to consider is that of odour and therefore the decision concentrates primarily on this issue.

156. The application is to be considered under Section 104 and 104C of the RMA. Section 104 sets out the matters to which I must have regard, subject to Part 2 (which contains the RMA's purpose and principles). Relevant to this case, the s104 matters include:

- any actual and potential effects on the environment of allowing the activity; and
- any relevant provisions of the regional policy statement and district plan; and
- any other matter I consider relevant and reasonably necessary to determine the application.

157. In considering this application, I am mindful that the proposal is for a restricted discretionary activity and therefore in terms of s104C of the RMA I am only able to consider those assessment matters that are specified in the relevant Plans. In assessing this proposal I am also able to have regard to the nature and scale of activities that might be permitted as of right on the site in terms of Section 104(2) of the RMA (the permitted baseline).

158. In terms of the permitted baseline I acknowledge that building height is unrestricted in the Rural zone of the Waimakariri District Plan. In that regard I accept there are buildings such as silos and barns that are likely to be around or exceed the 8.2m height of the air discharge stacks now proposed as part of the application.

Status of Proposed Canterbury Air Plan

159. The pCARP was notified in February 2015 prior to the lodging of the application. All provisions of the pCARP had immediate effect. The decisions on the pCARP were notified on the 1 October 2016.

160. Ms Ellis in the right of reply noted that the definition of "sensitive activity" in the pCARP was under appeal and in that regard the definition of "sensitive activity" in the NRRP was the only operative definition. The question is therefore one of weight particularly given the appeal against the definition of "sensitive activities" may impact on objectives, policies and rules to which the definition relates.

161. I accept that the pCARP is of relevance to my considerations and I accept that where the term "sensitive activities" is used I need to be somewhat cautious as to the weighting I give to those provisions particularly in terms of the Glubb workshop. Nevertheless, it would seem improbable that a residence or dwelling would not fall within the definition of sensitive activity and I note that under both the notified and decision version of the plan this was the case.

162. In terms of the Glubb workshop I am not convinced that it would necessarily fall within the pCARP definition, however given the status of that definition I have not consider it in this regard any further. The definition of sensitive activity in the NRRP would however exclude the Glubb workshop.

163. Based on the above, while I accept that the workshop is frequently used I do not consider it can be placed on the same level of sensitivity as the dwelling. Notwithstanding this, it remains a relevant factor.

Lawfulness and Procedural Issues

Existing Operations

164. In my minute of the 11th of May and as a result of questioning from both parties I sought information from both Councils regarding the permitted status the existing air discharge from the broiler operation in relation to Rule AQL58 of the NRRP and the lawfulness of the Glubb dwelling in terms of its being less than 300m from the poultry farm.

165. Dealing first with the former Ms Ball responded that the relevant planning provisions with the NRRP became operative on the 1 June 2002 and states that any intensive broiler operation that was established prior to 1 June 2002 did not require resource consent if the activity met the following three conditions under Rule AQL58:

1. *There shall be no increase in the scale, intensity, frequency or duration of the effects of the discharge of contaminants into air from the activity.*
2. *The discharge of odour beyond the boundary of the site shall not be noxious, dangerous, offensive or objectionable to such an extent that it has an adverse effect on the environment, to be determined in accordance with Appendix AQL5.*
3. *The dispersal and deposition of particles shall not cause a noxious, dangerous, objectionable or offensive effect beyond the boundary of the property where the discharge originates.*

166. Ms Ball went onto say that the information provided suggests that the existing poultry operation was converted from an egg laying operation to a broiler operation in either 2004 or 2005 but that no substantial evidence regarding this had been provided. She said that layer farms were generally less odorous than broiler farms, and it is likely that if that change was made then the amount of odour discharged from the site would have increased. However, she said that without a better understanding of the changes made and consequent effects, Environment Canterbury could not form a view of whether the existing poultry operation was permitted under Rule AQL58.

167. This clearly leaves some doubt as to whether the existing operation is lawfully established in terms of air discharge. Therefore, while it is not part of my role to determine one way or the other I do not believe in the circumstances that I can consider the existing operations discharge as any form of baseline in my considerations as was suggested by the Applicant.

168. The second matter concerned the location of the Glubb house within 300m of the Clarence Harvest operation. Rule 31.17.1.1 of the District Plan requires the notional boundary of any dwellinghouse to be set back 300m from a poultry farm with more than 500 birds. The poultry operation had been established via land use consent in 1994 (RC940029) for a 23,100 turkey operation or a 58,000 chicken operation. Mr Glubb stated that his house was built in 2002 which is some eight years after consent was obtained for poultry farming on the adjoining property and after decisions on the District Plan had been notified in February 2001.

169. Mr Bacon addressed this matter and essentially found that the relevant setback buffer that applied at the time building consent was applied for Glubb dwelling in November 2001 was 200m so at 220m to the notional boundary it complied. The setback appears to have been subsequently amended to 300m through the appeal process.

Withdrawal of Affected Party Approvals and Notification

170. Two parties, the Freemans and the Kennards withdrew their affected party approvals. The Kennards withdrawal was received prior to the hearing day and is therefore in accordance with section 104(4) of the RMA. The Freemans withdrawal on the other hand was not received until the day of the hearing and is therefore not in accordance with section 104(4) and I would therefore need to waive the time period in order to consider effects on the Freeman property.

171. The reason this matter assumed a greater level of importance was because the remodelled contours produced by Mr Curtis raised the potential of both these parties being affected.

172. The parties took different positions on the Freemans withdrawal of affected party approval. The Applicant and Waimakariri District Council's position was that the Freeman's withdrawal was not valid and there was no grounds for waiver. As outlined above Mr Pedley took a different view. It was accepted by the parties that the effects on the Kennard property must be considered as their withdrawal was valid.

173. The withdrawals also potentially created a rather unusual situation in that having withdrawn their approval the Kennards and, should a waiver be granted, the Freemans could now be affected parties who should have been notified and thus s104(3)(d) applied and I would have no option but to decline the application. Again the legal positions on this were split with the Councils position being the they considered the mandatory requirement of section 104(3)(d) acts to prevent the grant of consent, while both the Applicants and submitters legal positions were that section 104(3)(d) was not relevant because the affected party approvals were in place at the time of notification.

174. Turning to the first matter that of the Freemans late withdrawal of their affected party approval. Firstly, I have not received any correspondence from the Freemans seeking a waiver in the time period for withdrawing their affected party approval and regardless the Applicant is opposed to such a waiver. Further, there has not been a change in the scale or complexity of the application since the Freemans

gave their approval and I accept that it was for them to satisfy themselves of what they were providing approval for before providing it. On this basis I do not consider a waiver is appropriate.

175. Turning the issue of s104(3)(d), given the various legal opinions as to whether it is applicable in circumstances such as this or not I believe this is a matter that could only be decided in Court as there does not appear to be precedent for this. Nevertheless, I have considered the effects on the Kennards as part of my decision and found them for the reasons set out not to be affected.

Are the Amendments within Scope

176. The issue of scope associated with the increased height of the discharge stacks from 5.5m to 8.2m was raised by Mr Bacon and Mr Pedley as something I needed to consider.

177. As referred to earlier I have noted that there is no height limit in the Rural zone of the Waimakariri District Plan and I consider there are other rural activities which could reach a similar height. Further, the purpose of the increased height is to mitigate odour effects and not in any way to increase the scale of the activity. In my view therefore the increased in height is within the scope of the application. I comment on the amenity impacts of the stacks later in the decision.

Odour Modelling

178. A key issue in this application, as it was in the Jones application, is that of odour modelling and the resulting contours which are measured in Odours Units (OU/m^3). The modelling is an extremely technical and complex process and like all models dependent on the various inputs. As a result I was advised by witnesses and legal Counsel on more than one occasion that it is but one of a number of factors that need to be taken into account in assessing this application and that while it is a reasonable estimate in the end there remains a degree of uncertainty. Notwithstanding this, odour modelling has over more recent years been used as a key tool in assisting and guiding decision making including at the Environment Court.

179. The modelling is designed to predict the 99.5^{th} percentile one hour concentration of odour at ground level in odour units per cubic metre (OU/m^3). The odour dispersion modelling results in contours for concentrations of odour often expressed in 2, 5 or 10 OU/m^3. This portrays the odour concentrations that could be expected at a particular location for 0.5%, or approximately 43 hours of any year.

5 OU/m^3 Threshold

180. I was advised that air discharge decisions for broiler chicken farms[6][7], had established that a one hour, 99.5% odour modelling guideline of 5 OU/m^3 was appropriate as the threshold at which nuisance or offensive or objectionable odour effects could possibly occur. As part of my deliberations I have read these and other associated decisions. I note that these decisions were not confined to new broiler farms and I can see no reason why the 5 OU guideline should not be used in situations of farm expansion.

[6] Wilson and Selwyn District Council (C23/2004)
[7] Burgess and the Selwyn District Council v McFall (2014 NZEnvC 11)

181. I note that Mr Curtis referred to the 5 OU/m^3 guideline being commonly used in Canterbury in his 4th July report as if to suggest that it was not used elsewhere. I was unsure as to the relevance of these comments but I noted that the Jiang and Sands research Mr Curtis referred to in the Jones application had as one of the recommendations that "*A one hourly averaged odour concentration of 5 ou/m^3 at the 99.5th percentile be adopted in the development of odour impact criteria for broiler farms in temperate Australia on the basis of the assumptions used in the study*".

182. In the Burgess decision I noted that the experts were all agreed that at concentrations exceeding 10 OU/m^3, any odour would be distinct and most people would regard this as objectionable and offensive. At less than 10 OU/m^3 things were less straight forward. Experts in this case contended that the effect of odour within the 5 - 10 OU/m^3 contour is harder to characterise and its assessment must take into account FIDOL factors - Frequency, Intensity, Duration, Offensiveness and Location. I note that Mr Chilton is quoted within that decision as holding a similar view and advised that there would be a recognisable odour at concentrations from 6-8 OU/m^3 but whether this odour was objectionable or offensive depends on the frequency and the duration of exposure[8].

183. I note however that it was cautioned in Burgess[9] that a 5 OU/m^3 threshold was not to be treated as a pass or fail test, and the fact was that the model only makes predictions about the concentration of odour which may or may not eventuate. Further in Craddock Farms Limited v Auckland City Council (2016 NZEnvC 051) (Craddock Farms) the Court concluded that "*we have concerns about the reliability of the modelling as a basis for predicting odour levels*"[10].

184. I therefore accept that the 5 OU/m^3 threshold should be seen rather as a guideline for a point where odour may be discernible in certain circumstances and may be offensive or objectionable but it is not determinative of that as seemed to be suggested by Mr Pedley[11]. In other words the application in my view doesn't stand or fall on the 5 OU threshold and there are a number of other matters including FIDOL assessments that need to be considered.

Modelling of Clarence Harvest Application

185. Turning to the modelling in this application it was somewhat frustrating again that the modelled scenarios from the different experts varied so significantly in their results. There may have been a particular reason for this in relation to wind data and as a result I had commissioned further information from Mr Curtis. The response from Mr Curtis seemed to indicate that there were some differences in the data but overall this wasn't significant and no further modelling was provided. Mr Chiltern on the other hand considered the difference in data to be of some significance.

186. Mr Curtis's modelled results stemming from his 2nd September report and subsequently updated were based on variable emission rates and included a rather unusual bulge to the south. Mr Chiltern's

[8] Para 26 Burgess and the Selwyn District Council v McFall (2014 NZEnvC 11)
[9] Para 35 Burgess and the Selwyn District Council v McFall (2014 NZEnvC 11)
[10] Para 96 Craddock Farms Limited v Auckland City Council (2016 NZEnvC 051)
[11] Refer paragraph 9 of 9th December 2016 Memorandum

modelled scenario on the other hand was based on constant odour emission rates rather than variable rates. He noted that he had undertaken his modelling check due to the unusual nature of the spatial pattern of the contour plots presented in Mr Curtis's the 2nd September report.

187. As a result I am left in the position of having to determine whether the two different modelling scenarios provide me with any relevant information in the circumstances or choosing between the modelled scenarios. In the end I consider there are potentially flaws in both modelled scenarios however due to the rather unusual nature of the contour plots presented in Mr Curtis's scenarios and because he chose not re-test his model against the revised metrological data to verify these I tend to favour that produced by Mr Chiltern in his 23rd September report although I am not convinced that a scaling up of 28% in terms of bird weight is appropriate as this seems overly conservative.

Differential Start Dates

188. Mr Chilton expressed concern about the modelling not considering the impact of different start dates for each cycle. In his 23rd September evidence he said the start date assumed for the growing cycle can influence how worst case emission rates interact with worst case meteorology. He noted that such scenarios had been modelled by Mr Curtis in his 4th July letter and that a scenario with a start date of 8 February gave the highest model prediction of odour and 1 January the lowest with the start date affecting the model predictions by up to 15%.

189. Having reviewed Mr Curtis letter of the 4th July report I accept he does state that "*the choice of start date for the variable emissions file is important with differences of up to 15% apparent"*. However he goes on to say that "*it is also apparent that in some cases the use of the 1 January start date gave the lower predicted off-site concentrations in this case than other start date options and therefore potential [sic] underestimates the potential off-site concentrations*". [Emphasis added]

190. My review of the modelled scenarios in this case (scenarios 6 - 9 in the Clarence Harvest 4th July report) also showed that at some receptors 1 January had the highest levels equal to 8 February and that the difference at each receptor for each scenario was no more than 1 OU. Mr Curtis in his conclusion to that letter had stated that there "*appears to be little merit in using variable emissions rates and arbitrary start dates, compared to with a fixed emission based on maximum stocking density*." Mr Curtis also stated in his 2nd September report that he had assessed the impact different starting dates has on predicted concentrations and found that it had little effect.

191. On this matter therefore I am not convinced that further modelling of different start dates would, given the circumstances, provide me with any better understanding of the potential odour effects, particularly in a situation where the modelling is seen as a guide.

Use of Misting System

192. A misting system was proposed in each shed as a mitigation measure with detailed evidence on the system being provided by Mr Kelly at the reconvened hearing. My understanding was that the system

would help provide a controlled environment for birds with even temperatures throughout the shed. Mr Kelly explained that the droplets sprayed out from the system would evaporate before they hit the ground.

193. Since issuing my decision on the Jones application I have been able to visit and watch the misting system in full operation at the Springton site. At the time of my visit the female chickens had just been removed. From my observations there were no water droplets hitting the ground and the litter appeared to remain dry. There was a noticeable reduction in temperature inside the shed after a few minutes of the misting system being in operation. I was also able detect the odour outside the shed with the misting system and another shed without the system. While I could not distinguish any difference in odour between the two sheds I accept I am no expert in this field.

194. Both Mr Chilton and Mr Iseli expressed concerns with regards the effectiveness of the system in reducing odour, with Mr Chilton suggesting that it may result in increased odour through increased shed humidity. Having viewed the system I accept its ability to help better control the environment for the birds. What remains unclear in my mind, and indeed there was no supporting evidence, was whether the system actually helped in reducing odour. At this stage without substantiated evidence that odour effects are reduced, and if so by what sort of level, I am reluctant to give the misting system any significant weight in terms of reducing odour effects.

195. I summary it would at least appear that the misting system could have a positive effect in reducing odour however in my view further analysis and field assessment is necessary before it could be used in evidence.

Criticism of Modelling

196. Mr Block's criticism of the modelling at the reconvened hearing is noted and I understand his frustration but I believe it is somewhat misguided. While I acknowledge the various points he makes, odour modelling, like other air discharges, has become an accepted tool, including by the Environment Court, in the overall evaluation of proposals. As I referred to in the Jones decision in my view it is perhaps time for the industry to embrace it further and ensure that the model is updated, appropriately calibrated and the corrected values are agreed. I also consider that if more appropriate, correct and realistic values had been used in the modelling in this case in the first place then perhaps the time and extensive input (and expense) which has resulted may not have eventuated.

Conclusion

197. Overall, given the variables involved, the inability to incorporate certain aspects and the lack of agreement between experts as to the relevant inputs or modelling scenarios I have accepted that the modelling is a tool in understanding odour effects and forms a guide in my assessment, but that it may not represent the reality on the ground. In other words the results do not set absolutes or some sort of pass or fail test which I need to decide upon. I also tend to accept that there may be an element of conservatism in the modelling, given Mr Block's comments about the complexity of the operation, the

elements which are not accounted for and the changes to placement density. The degree of that conservatism however remains unclear.

198. Notwithstanding the above, for the purpose of my assessment using Mr Chilterns modelling as discussed above, the odour modelling of the existing chicken farm indicated that levels 3.4 OU/m^3 maybe being received at the Glubb residence, with much lower levels at the Kennard and Hyde residence. The Glubb workshop is appears to receive around 4.7 OU/m^3, and the edge of the Briden property around 6 OU/m^3.

199. Mr Chilterns modelling indicated that with the proposed development the Glubb residence would receive 6.3 OU/m^3, with levels at the Kennard residence being around 4.5 OU/m^3 and Hyde residence over 8 OU/m^3. The Glubb workshop would receive around 7.8 OU/m^3, and the edge of the Briden property around 10 OU/m^3. The most affected residence in terms of Mr Chilterns modelling is actually the Hyde residence who I note also submitted in opposition to the proposal.

Offensive or Objectionable Odour Conditions

200. Most air discharge consents involving odour rely heavily on a condition requiring that the activity not result in an offensive or objectionable odour beyond the boundary of the site or some other point such as a notional boundary. The offensive or objectionable effect threshold is determined by what is known as the FIDOL factors referred to earlier which stem from a Ministry for the Environment Good Practice Guide for Assessing and Managing Odour in New Zealand (2003).

201. The flaw in this condition it seems to me is that the current process of establishing whether there is an offensive or objectionable odour event relies in the first instance on a complaint being made. The complaint however does not in itself mean that there is an offensive or objectionable odour occurring. That needs to be determine by a qualified expert normally from a Regional Council, because as Dr Cowie said offensive or objectionable odour is different to different people and is dependent on their sensitivity. There seems to be no regular monitoring process set up to review whether odour discharges are complying with the offensive or objectionable conditions unlike say noise in similar situations. I note that this matter was raised in the Craddock Farms case but was seen to be fraught with difficulties.

202. I accept that those living in a rural environment will be subjected to various odours and to a large extent that needs to be seen as an accepted part of living in such an environment. I also accept as Mr Glubb said that as neighbours they do not like to complain.

203. I suspect this is not uncommon and indeed similar sentiments were expressed in the Jones hearing. As Mr Chilton noted "*there are many reasons why persons might not complain about a neighbouring activity, even though the odour may annoy them. Reasons can include wanting to maintain a positive relationship with their neighbour, being uncertain of who to complain to, or having little faith that a council would investigate a complaint in a timely fashion*"[12]. I also note that in the decision on Craddick

[12] Para 17 of R Chilton evidence

Farms the Environment Court was not convinced that a lack of verified odour complaints was sufficient evidence that odour may not be a problem[13]. For these reasons I am left somewhat sceptical of the PIANZ report referred to by Dr Cowie and have not considered it further.

204. Notwithstanding Mr Glubbs comments on not complaining, the offensive or objectionable condition in such environments does present a problem when it comes to complaints because unless a qualified expert is on the spot relatively quickly to assess the compliant they are difficult to verify as conditions may have changed. Further, it would seem unlikely that a call would be made as to an offensive or objectionable odour based on one single event and that because frequency is an important determinant it would require continued monitoring for a period of time in line with FIDOL factors to establish this. Overall this seems likely to take some time, let alone finding solutions should they be deemed necessary.

205. This scenario actually played out during this hearing process. Perhaps as a result of evidence delivered at the original hearing the Glubbs began lodging complaints with Environment Canterbury's Pollution Hotline about receiving offensive odour from the Clarence Harvest operation. These were detailed in Ms Ball s42A report of the 4 October. Between 11th June and 8th August 2016 ome nine complaints were logged. Ms Ball said that none of the complaints had been substantiated by the monitoring officer on duty. However this was not surprising as the only time a monitoring officer visited the site in response to a complaint (12th July 2016) was some eight days after the compliant had been received on the 4th July 2016.

206. I queried **Mr McCauley** on this and he agreed the situation was not really acceptable from Environment Canterburys point of view.

207. Further to the above, Dr Cowie countered the complaints by advising me that on four of the days that complaints were made there were no chickens on site, one of the other days the chickens were only a day old and on another they were 10-11 days old. He said a number of the complaints are clearly therefore unfounded and showed the difficulty of differentiating between different odour sources.

208. All of the above reinforces my view that despite the backstop of a condition it is important to reach a point in circumstances such as this, particularly given the limited level of separation, where I am convinced the odour effects will not be offensive or objectionable. In circumstances where this is not the case I find it difficult to foresee how an offensive or objectionable condition would work unless it is linked to a regime of monitoring for a period of time or a staged approach to development. In my view it should not be left to a situation of complaints to trigger an investigation of such a condition. As shown above this is not an effective approach.

[13] Para 126 Craddock Farms Limited v Auckland City Council (2016 NZEnvC 051)

Adverse effects

209. As the application falls to be considered as a restricted discretionary activity under all Plans accordingly my evaluation is limited to the matters to what discretion has been restricted.

Regional Plans

210. For the air discharges the matters of discretion are:

NRRP

- The quantity, quality and type of discharge and any effects arising from that discharge.
- The methods to minimise the discharge and avoid, remedy or mitigate any adverse effects of the discharge including the adequacy of the control measures for the collection, containment, management and treatment of the discharge, as well as the type and adequacy of control equipment and preparation of management plans.
- The relevant zone(s) and associated provisions in the Operative District Plan.
- Available measurements, samples, analyses, surveys, investigations, or inspection.
- Provision of information to the consent authority at specified times.
- Compliance with monitoring, sampling and analysis conditions at the consent holder's expense.
- Duration of consent.
- Review of conditions of consent and the timing and purpose of the review.

Proposed Canterbury Air Regional Plan (pCARP)

- The quantity, quality and type of discharge and any effects arising from that discharge, including cumulative effects; and
- The methods to control the discharge and avoid, remedy or mitigate any adverse effects, including the odour and / or dust management plan; and
- The location of the discharge, including proximity to sensitive activities, wāhi tapu, wāhi taonga or sites of significance to Ngāi Tahu; and
- The matters set out in rule 7.2. (which include the lapsing period, the term of the resource consent, the review of the conditions of a resource consent, the need for a bond or financial contributions, and the collecting, recording, monitoring and provision of information concerning the exercise of a resource consent).

211. I have grouped these relevant assessment matters under headings below.

Quantity, Quality and Type of Discharge

212. Odour from chicken farms is often described in character as an ammonia type odour, which depending on the intensity can be offensive. In the case of broiler chicken farms odour is not continuous. There are times when there are no chickens in sheds and other times when chickens are small and odour is limited. The key period for more intensive odour was described in the evidence as being the period between 4 and 6 weeks as the birds reach maturity and on the day the litter is cleaned out of the sheds. The dispersal of odour from the sheds and thus its potential effects is highly dependent on the type of ventilation provided and whether conditions.

213. Notwithstanding the above, I note that in Craddock Farms the Environment Court stated that "*we conclude that even if the objectionable odour occurred infrequently only there is a high potential impact involving significant adverse effects that are beyond the extent and level a reasonable person should have to experience on neighbouring properties*"[14] .

214. In terms of the key receptors I consider the quantity and quality of odour received by the Kennards as a result of the proposal to be within acceptable limits having regard to the modelling, the separation distances and the shed design features. In terms of the other receptors being the Glubb residence, the Hyde residence, the Glubb workshop and Briden property I consider, based on the modelling and other evidence before me, that the quantity and quality of odour received is likely to increase from the expanded operation and may not at times meet an acceptable level and could therefore be considered an effect which was more than minor and potentially at times a significant adverse effect. In other words I am not convinced in the circumstances that odour at an offensive and objectionable level will not occur at key receptors if tested against the FIDOL factors from the expansion and development of the entire proposal.

215. I accept however that the mitigation measures including the increase stack height in particular, has been shown, at least via the modelling, to significantly reduce the predicted level of odour impact. In that regard I accept that the upgrading of the existing two sheds would result in reduced levels of odour concentration at the key receptors compared to those that are predicted for the current operation.

Location of the Odour Discharge, including its Proximity to Sensitive Activities and Methods to Minimise Odour and Avoid, Remedy or Mitigate any Adverse Effects

216. In addressing these matters there have been two principles of note established by respective Environment Courts which I consider provide important guidance. These are as follows:

1. In Winstone Aggregates v Matamata-Piako DC (paragraphs 56 & 66) the Court accepted that there was a difference between existing and new facilities in terms of what may be acceptable. The Court stated:

[14] Para 142 Craddock Farms Limited v Auckland City Council (2016 NZEnvC 051)

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.

2. There is no requirement in the RMA that effects must be completely contained within a site. In this regard the Environment Court has recognised that having done all that is reasonably achievable, total internalisation of effects within the site boundary will not be feasible in all cases.[15]

217. I also note that in Craddock Farms the Court accepted that the garden or curtilage of a house is effectively part of the house in terms of people's use of their property[16].

218. Separation distance is clearly one method of minimising odour effects. However the existing sheds and at least the first of the proposed sheds are less than 300m from the garden or curtilage of the Glubb residence and much closer to the workshop. The other recognised methods are improvements in shed design and ventilation as proposed here and changes to litter content and feed.

219. I accept that the roof mounted fans system provides much better dispersion of odour emissions, through elevated unimpeded vertical discharges, compared with historical tunnel or cross vented shed designs. However I have been unable to determine on the basis of what is before me that the cumulative impact of discharges associated with the increased bird numbers from all five sheds will be able to meet the no offensive or objectionable threshold at the boundary let alone at the key receptors.

220. I have considered the issue of litter removal from the proposed sheds. I accept this is a period when odour is likely to be distinctive. While I accept the amount of litter and the time it takes to remove it would increase I also note that it occurs only once every seven weeks and over a relatively short period of time in one day in what is a reasonably controlled manner. Given this and a requirement for detailing how litter removal would occur within an Odour Management Plan leads me to a conclusion that its effects can be appropriately managed.

Zoning

221. The relevant zone is the Rural zone in the Waimakariri District Plan. The site is located within that zone as are the surrounding properties and is an appropriate zone for the activity proposed. Notwithstanding this, the notional boundary of the Glubb dwelling is less than 300m from the nearest existing and

[15] Catchpole v Rangitikei (W35/2003) and Winstone Aggregates v Matamata-Piako DC (W55/2004)
[16] Para 95 Craddock Farms Limited v Auckland City Council (2016 NZEnvC 051)

proposed chicken sheds which does not meets the setback requirement of Rule 31.17.1.2 for an intensive farming activity.

Consent Duration, Review Conditions, Monitoring

222. The applicant seeks a 35 year duration for the discharge consent. I my view the starting point under the RMA for this is section 123 which provides for a duration for discharge consents of 35 years unless there is sound reasoning that warrants a shorter period. In this regard I accept that there is a need for long term certainty given the substantial investment involved. I also note that there are significant costs involved in re-consenting applications.

223. I can see no reason in terms of environmental effects to shorten the duration if all potential adverse effects are appropriately addressed either through the design of the sheds, the management of the operation or conditions of consent.

224. In terms of monitoring and/or review, the conditions proposed by the Council and the Applicant have been limited to review the conditions to deal with any adverse effects arising and requiring the adoption of best practicable options to remove or reduce any such effect. Also proposed is a condition requiring the three yearly review of the Odour Management Plan.

225. I have considered whether given my concerns I could impose a directive monitoring that might ensure that odour effects were within acceptable levels. Such a regime might involve regular odour assessment in line with the FIDOL factors for a period of a year to ensure that offensive or objectionable odours weren't occurring. The difficulty in this situation however is that if odour effects are greater than anticipated there are limited realistic options for mitigating odour short of reducing bird numbers.

226. Notwithstanding the above, I consider improved self-monitoring would be appropriate and I have considered this further below. I also note that as part of the Odour Management Plan details of contingency measures that will be taken in the event of odour or dust becoming offensive or objectionable beyond the boundary of the property are required.

<u>District Plan</u>

227. For the District Plan the relevant assessment matters include:

- The impact of any earthworks
- For the setback from the Eyre River
- For the setback from notional boundary of any dwellinghouse

228. Which regard to these I have no concerns with earthworks or the setback from the Eyre River and consider these can be appropriately managed.

229. I terms of setback from the notional boundary of any dwellinghouse I have already outlined my concerns with regards the proximity of the Glubb dwelling to the existing (which are to be expanded) and proposed sheds.

230. I have also considered any effects on amenity of the sheds and associated structure themselves. In this regard given the existing and proposed location of the chicken sheds, their distance from the road and the vegetation that exists between them and neighbouring properties I do not consider the sheds or the height of the air discharge stacks will impact on amenity values.

Staging of development

231. As referred to above the Applicant in the right of reply offered a staged approached to the proposed expansion and I subsequently sought clarification of a number of matters. Given the concerns I have I consider a staged development offers an opportunity in a circumstance such as this to provide a managed approach to ensure that the effects of odour do not reach the offensive or objectionable threshold before a subsequent stage was commissioned. Such an approach however in my view would need to be carefully set out as to the actions to be undertaken and as to how the consequences of those actions were addressed. For example who would undertake monitoring, what period of time would be needed to undertake any monitoring to ensure the offensive and objectionable threshold in terms of FIDOL was not meet, what is the requirement of any reporting on the monitoring and would it be essentially a pass or fail system whereby if the FIDOL assessment was passed the applicant could move to the next stage and if it failed then no further development could occur, what contingency would be put in place should the monitoring determine that an offensive or objectionable odour was already occurring based on the FIDOL assessment as essentially this would be a non-compliance with the conditions of a consent; and would base monitoring be necessary prior to any development occurring?

232. While the Applicant via Ms Ellis sought to answer the matters I raised they seemed on the most crucial issues to miss the point. For example it was considered that the questions relating to monitoring and enforcement were matters for Environment Canterbury to detail as they would be the entity which will be undertaking the monitoring.

233. My concern with the Applicants proposed staging condition was that it did not to set out in detail how the monitoring and approval would take place in order to be satisfied to move to the next stage and what the various consequences were. In my view a staged approach is effectively a certification and not a monitoring or enforcement of conditions as seemed to be being suggested. It is in my opinion for the Applicant and not Environment Canterbury to detail how such a staged condition might be structured and how the associated certification process for each stage would take place with associated checks and balances. Environment Canterbury's input on such a condition might then be sought.

234. At the end of the day while I consider it may have been possible to craft a suite of conditions which might have enabled a stage approach to development to occur which would have addressed my concerns this was not forthcoming from the Applicant and as a result I can take this no further.

Positive effects

235. It is normally appropriate to take positive effects of a proposal into account in determining a resource consent application. However, in the case of restricted discretionary activities I can only consider under

this section those which might stem from the matters of discretion. In this regard I accept that on their own the upgrading of the two existing sheds would reduce existing odour effects. I note however that the High Court has concluded that Part 2 matters are relevant considerations to the grant of a consent.

Conclusions on effects

236. Overall I agree with Mr Chiltern that in this situation where there is a limited separation distance there is very little 'room for error' if odour effects are greater than those anticipated and that there are limited realistic options for further mitigating other than reducing bird numbers. I therefore need to be virtually certain that odour will not reach the offensive and objectionable threshold across the boundary. That is not to say that no odour can cross the boundary as the Environment Court has accepted "*that having done all that is reasonably achievable, total internalisation of effects within the site boundary will not be feasible in all cases and there is no requirement in the RMA that that must be achieved"*[17].

237. I have concluded, based on the evidence before me, that the proposal for three new chicken sheds and the upgrading of two existing sheds has the potential to increase odour effects in the surrounding environment to the degree that it may be offensive or objectionable. I have also concluded that upgrading of the existing sheds even with an increase in bird numbers would result in reduced levels of odour concentration at the key receptors.

238. I note that it's possible that the odour being received by the Glubbs from the existing sheds could potentially be at an offensive and objectionable level based on the statement of Mr Glubb and associated statements from friends. However this has not been professionally substantiated against the FIDOL factors by Environment Canterbury, the applicant or the submitter. Therefore, despite the Glubb's first hand experience it cannot be claimed categorically that they are being subjected to objectionable and offensive odour (as those terms is used in the relevant statutory documents) on a regular basis.

OBJECTIVES AND POLICIES

Regional Policy Statement

239. Objective 14.2.2 seeks to enable discharges provided there are no significant adverse effects, while Policy 14.3.5 requires that new discharging activities be located away from sensitive land uses. In my opinion the proposal is inconsistent with the policy as the new discharges are not located sufficiently away from sensitive activities if the 300m separation threshold in the District Plan is accepted. I note however this is not necessary a determining factors if effects can be mitigated. In this regard, I consider the upgrading of the two existing sheds would reduce odour effects compared to the current situation.

[17] Paragraph 9 Winstone Aggregates v Matamata Piako DC W55/04

Natural Resources Regional Plan

240. Objective AQL1 seeks that localised discharges into air, either on their own or in combination with other discharges, do not result in significant adverse effects on the environment, including offensive and objectionable odour. Policy AQL5 specifically addresses odour nuisance and requires that discharges from new activities shall not be offensive or objectionable to the extent that it has, or is likely to, cause an adverse effect on the environment beyond the boundary of the site where the discharge originates.

241. As referred to above, I cannot be certain that no significant adverse effects will result from the proposed development overall. However I consider that expansion and upgrading of the existing sheds would on their own not reached an offensive or objectionable level beyond the boundary of the site.

Proposed Canterbury Air Regional Plan

242. The pCARP has a greater array of relevant objectives and policies than the previous two documents. Some of these are generic to air quality and other more specific to odour. In summary the objectives seek to maintain amenity values, ensure appropriate location of discharges in relation to sensitive activities and avoid offensive and objectionable effects. The policies are quite directive stating:

- Offensive and objectionable odours are unacceptable.
- Discharges from new activities are appropriately located and adequately separated from sensitive activities.
- Longer consent durations may be available to provide on-going operational certainty to appropriately located activities.
- Minimise cumulative effects by requiring resource consents to apply the best practicable operation.
- Adverse effects of odour from farming activities are managed through performance standards or conditions on resource consents that ensure the amenity values of the area in which the discharge of odour occurs are maintained and effects on sensitive activities are minimised.
- Discharges associated with farming activities do not cause offensive or objectionable effects beyond the boundary of the property of origin.

243. Based on the information before me I am not confident that entire proposal would be consistent with the above objectives and accord with the general policy framework of not causing offensive or objectionable effects.

Waimakariri District Plan

244. The objectives and policies relevant to this application are contained in Chapters 4, 8, 11, 12 and 14 of the District Plan.

245. Chapters 4, 8 and 11 relate to land and water margins, natural hazards and utilities and traffic management respectively. I accept Mr Bacons conclusions in relation to these provisions.

Chapter 12

246. Chapter 12 was not addressed by Mr Bacon however I consider it is of particular relevance. Objective 12.1.2 seeks that the establishment and expansion of farming activities in a way which gives consideration to existing activities while maintaining a quality environment appropriate for the zone. Subsequent Policy 12.1.2.1 encourage farm activities to avoid or mitigate adverse effects through appropriate management, siting and design of operations while Policy 12.1.2.3 requires the protection of lawfully established dwellinghouses and other sensitive land uses from the significant adverse effects of future farm activities.

247. The following explanation specifically refers to odour and notes that when a farming operation is proposed the separation distances detailed are not the optimal buffer areas. Larger distances may be appropriate and consideration should be given to relevant guidelines.

248. These provisions are followed by those specifically dealing with air. Objective 12.1.3 seeks to protect people from the adverse effects resulting from the discharge of contaminants to air. Policy 12.1.3.1 requires activities that lead to the discharge of contaminants to air to be located so that any adverse effects on people are avoided or mitigated.

249. The following explanation states that "*many adverse effects can be avoided with the use of separation distances between incompatible activities, such as between a discharge to air and a dwellinghouse*".

250. In my opinion the proposal sits somewhat uncomfortably with these provisions on the basis that the separation distances are less than the District Plans standard combined with the fact that I have not, despite the mitigation measures proposed, been able to be entirely satisfied that significant adverse effects in the form of odour will not occur from the development in its totality.

Chapter 14 - Rural Zones

251. Objective 14.1.1 and Policies 14.1.1.2 and 14.1.1.3 emphasise the continued dominance of the rural character of rural zones, characterised by the dominant effect of agricultural, pastoral, and horticultural activities; and including clean air – but with some significant short term and/or seasonal smells associated with farming activities.

252. The nature of the proposal is such, that in terms of visual impacts, it does not in any way detract from rural amenity values. The proposal will also maintain a rural character, however air quality for nearby neighbours may be compromised.

OTHER MATTERS (S104 (1)(c))

253. I do not consider there are any other matters I need to consider.

PART 2 RESOURCE MANAGEMENT ACT

254. Part 2 of the Act sets out its purpose and principles. The purpose of the RMA is the sustainable management of natural and physical resources. Section 5(2) enables people and communities to provide for their social, economic and cultural welfare, and for their health and safety, subject to the qualification that adverse effects on the environment be avoided, remedied, or mitigated.

255. There are no matters of national importance under Section 6 or treaty issues under Section 8 of the RMA, which are relevant to determining this application. With respect to Section 7, there are three sub-clauses that I consider are relevant to have regard. These are as follows;

(b) The efficient use and development of natural and physical resources;

(c) The maintenance and enhancement of amenity values;

(f) The maintenance and enhancement of the quality of the environment.

256. I consider the proposal would provide for the economic wellbeing of the applicant, provide employment opportunities and help meet demand in the poultry industry. The proposal does result in an agricultural use continuing in terms of efficiently using the rural land resource. Indeed chicken farming can be seen to constitute a highly efficient and economic use of land.

257. Based on the information before me I consider that the proposal overall may compromise amenity values and quality of the environment. However I consider the upgrading of the existing sheds would result in improved amenity values and quality of the environment.

258. On balance therefore I am not satisfied that the proposal in its entirety is in accordance with Part 2 of the RMA in promoting sustainable management whilst avoiding or mitigating any adverse effects on the environment. Therefore, I consider that the purpose of the Act would be better served by not granting consent to the application as a whole. However, I am able to consider a lesser level of development and as I have already eluded to I consider, subject to a range of conditions, that the upgrade and expansion of the existing sheds will in all likelihood result in improvements to the odour environment in the immediate surrounding area.

Conclusion

259. Overall I am not satisfied on the basis of the information provided that consenting the full development would be capable of achieving the threshold of no objectionable and offensive odour at the boundary of the property (the test applied) or for that matter the notional boundary of the Glubb and possibly the Hyde dwellings. I accept however that the expanded and upgraded existing sheds would likely achieve that threshold. The only way I can foresee that I could have been satisfied that the full development could have been consented was on the basis of a staged approach which established a degree of certification that the objectionable and offensive odour threshold was achieved before proceeding to the next stage along with a monitoring regime post the final stage. Unfortunately the

applicants proposed staging regime in my opinion fell well short of providing me with the level of certainty I required in order to grant the full consent.

260. I accept that such an approach comes with a reasonable level of cost and timing delay however in circumstances such as this where a lawfully established dwelling is well within 300m of the nearest chickens shed that is perhaps the price that needs to be paid to ensure that the odour effects will not reach the objectionable and offensive odour threshold. To put it another way I am not prepared to grant consent with a condition requiring there to be no objectionable or offensive odour beyond the boundary when I am uncertain as to whether this can actually be achieved.

Conditions

261. Having concluded that only a partial grant of consent is appropriate subject to conditions I am generally satisfied with many of the conditions proposed by Ms Ball and Mr Bacon and subsequently in Ms Ellis's right of reply. There are however some areas of difference between the parties and some areas where I consider amendments are appropriate based on the evidence. I have dealt with these in turn below:

a. Odour Management Plan

262. The proposed Odour Management Plan condition included identifying emission sources with the potential to generate odour, and the measures in place to avoid, remedy, or mitigate those discharges. I consider it would be appropriate to include within this condition the requirement for regular boundary inspections during each cycle.

b. Chicken Numbers

263. In line with the partial grant of consent a condition has been included limiting the chicken numbers to 90,000 which was identified in the AEE for the expanded sheds.

c. Access and Traffic Management

264. Given the reduced scale of the proposal I have consented I do not consider any access or traffic management conditions are required.

DETERMINATION

For the forgoing reasons set out above, having regard to Part 2 of the RMA, and in accordance with the provisions of ss104, 104C and 108 of the RMA, I have determined that resource consents CRC160077 and RC155218/160322025377 to establish three additional sheds and extend two existing sheds of a poultry broiler operation located at 1059 Poyntzs Road, Waimakariri be partially granted by enabling the extension to the two existing sheds only, subject to the conditions set out in **Appendix A and B** below.

Dean Chrystal
Hearings Commissioner
27 March 2017

APPENDIX A

CONDITIONS

1. Other than necessary to give effects to the conditions set out below, the activity shall be carried out in accordance with the approved plans attached as **Appendix C**.

Limits

2. The discharges into air shall be only odour and dust originating from a poultry broiler farm operation, located at 1059 Poyntzs Road, Horrellville, legally described as RS 37955, at or about map reference NZ Topo50 BW23:4392-9924, and labelled "Broiler Poultry Farm Operation", on Plan CRC160077 in Appendix C, which forms part of this consent.

Poultry Numbers and Production Cycles

3. a. The maximum number of broiler chickens housed in the two poultry sheds shall not exceed 90,000 during any production cycle, and the stocking rate shall not exceed 38 kilograms of live weight per square metre.

   b. Broiler chickens shall be housed in each shed for no more than six weeks in every seven week period.

4. Each poultry broiler shed shall be fitted with a ventilation system comprising of:

   a. 10 roof mounted chimney ventilation fans along the central ridgeline of both sheds, which shall be a minimum of 8.2 metres above ground level; and

   b. 4 box fans at the end of each shed.

Odour and Dust Management

5. The discharges referred to in Condition (2) shall not cause odour or particulate material, which is offensive or objectionable, as determined by an officer of the Canterbury Regional Council, beyond the boundary of the property on which this discharge permit is exercised.

6. The consent holder shall take all practicable measures to ensure compliance with Condition (5). Such measures shall include, but not be limited to:

   a. Removal of all animal waste and litter from the poultry sheds at the end of each growing cycle with off-site disposal within 24 hours of removal of the final birds from the sheds;

   b. Twice daily checks of the poultry sheds for deceased birds and feed or water spillages;

   c. Prompt removal, freezing and off-site disposal of all deceased birds from the poultry sheds;

   d. The use of formulated feed;

   e. Maintenance of shelter belts between the poultry sheds and the south western property boundary; and

   f. Regular maintenance and monitoring of the ventilation systems.

7. The consent holder shall keep records of all visual inspections and checks undertaken in accordance with Condition (6) above, and at the start and end dates of each growing period. These records shall be provided to the Canterbury Regional Council on request.

8. This consent shall be exercised in accordance with an Odour Management Plan (OMP). The Odour Management Plan shall include the measures that will be taken to ensure compliance with the conditions of this consent, including but not limited to:

    a. A description of the poultry broiler operation;

    b. A description of the measures to be undertaken to achieve compliance with the conditions of this consent;

    c. Identifying emission sources with the potential to generate odour, and the measures in place to avoid, remedy, or mitigate those discharges, including details of regular boundary inspections during each cycle;

    d. Operation and maintenance procedures for the ventilation systems;

    e. Complaints and response procedures;

    f. Details of routine and contingency inspections of the sheds, chickens and litter;

    g. How the moisture content, condition and depth of the litter will be managed to minimise odour and dust;

    h. Details of cleaning of the inside of the sheds and removal of litter off-site following each batch of chickens; and

    i. Details of contingency measures that will be taken in the event of odour or dust becoming offensive or objectionable beyond the boundary of the property on which the discharge permit is exercised.

9. The Odour Management Plan prepared in accordance with Condition (8) shall be submitted to the Canterbury Regional Council, Attention: Regional Manager RMA Monitoring and Compliance, at least twenty working days prior to the commissioning of each expanded shed.

10. The Odour Management Plan prepared shall be reviewed once every three years, and updated as required, and the outcome of the review, and any update, shall be provided in writing to the Canterbury Regional Council, Attention: Regional Manager RMA Monitoring and Compliance by 1 September.

11. The consent holder shall maintain a record of any complaints relating to odour and dust from the broiler poultry farm operation. For each complaint, the record shall include:

    a. The location where the odour or dust was detected by the complainant;

    b. The date and time when the odour or dust was detected;

    c. A description of the wind speed and wind direction when odour and dust was detected;

    d. The most likely cause of the odour or dust detected; and

e. Any action taken by the consent holder to minimise or cease the odour of dust detected by the complainant.

The record of complaints shall be provided to the Canterbury Regional Council by 31 July of each year, and otherwise on request by the Regional Manager RMA Monitoring and Enforcement Manager, Canterbury Regional Council.

Administration

12. The Canterbury Regional Council may annually, on any one of the last five working days of May or November, serve notice of its intention to review the conditions of this consent for the purposes of:

    a. Dealing with any adverse effect on the environment which may arise from the exercise of this consent; or

    b. Requiring the adoption of the best practicable option to remove or reduce any adverse effect on the environment.

13 The lapsing date for the purposes of Section 125 of the Resource Management Act 1991 shall be 30 September 2026.

APPENDIX B

Conditions

THAT pursuant to section 104C of the Resource Management Act 1991 consent be partially granted to extend the existing chicken broiler operation at 1059 Poyntzs Road, Horrellville, being RS 37955 as a restricted discretionary activity subject to the following conditions which are imposed under Section 108 of the Act:

1. Except as where necessary to give effect to the following conditions, the activity shall be carried out in accordance with the approved plans attached as **Appendix C**.

2. Standards

2.1 All stages of design and construction shall be in accordance with the following standards (and their latest amendments) where applicable:

Council Standards

- Waimakariri District Council Engineering Code of Practice.

3. Construction Earthworks

3.1 The height of any temporary earthwork stockpiles shall be limited to 8.0 metres above surrounding ground level.

3.2 Within 1 month of the completion of construction works, all rubbish, organic and any other unsuitable material for the creation of the building platforms shall be removed and disposed off-site to an approved disposal facility.

4. Construction Environmental Management Plan

4.1 Prior to any works commencing on site the consent holder shall provide an Environmental Management Plan (EMP) detailing the methodology of works and the environmental controls in place to limiting effects from issues involving flooding, dust, noise, refuelling operations and disposal off site of waste material.

4.2 The EMP shall specifically discuss proposed measures that shall be in place to prevent sediment migration from the site.

4.3 The consent holder shall submit the EMP to the Council, in writing for approval at least 20 working days prior to site works commencing. If the Council has not responded to the submitted EMP within 10 working days of it being submitted, that EMP will be considered to be approved. The consent holder shall be responsible for installing and maintaining the sediment control devices, including making regular inspections.

4.4 Site works shall cease when winds are of such magnitude to create a dust nuisance.

4.5 Construction noise shall not exceed the recommended limits specified in, and shall be measured and assessed in accordance with, the provisions of NZS: 6803: P1999 "Measurement and Assessment of Noise from Construction, Maintenance, and Demolition Work". Adjustments and exemptions provided in clause 6 of NZS: 6803: P1999 shall apply.

5. Existing overland flowpaths

5.1 Any defined localised overland flowpath which is impeded by the proposed buildings shall be redirected to clear the proposed works.

6. Noise

6.1 The operation of the farm shall comply with the following noise controls that are to apply along the notional boundary of any neighbouring dwelling house when measured and assessed in accordance with NZS 6801:1991 "Assessment of Environmental Sound":

a) Daytime: 7am to 7pm Monday to Saturday, and 9am to 7pm Sundays and Public Holidays: 50dBA L10.
b) Other times: 40dBA L10.
c) Daily 10pm-7am the following day: 70dBA Lmax.

7. Operational Mitigation

7.1 No litter shall be disposed of within the application site and all litter shall be removed off-site to an approved facility within 24 hours of removal of the final birds from the sheds.

7.2 The total number of birds on the site at any one time shall not exceed 90,000.

8. Review

8.1 In accordance with Sections 128 and 129 of the Resource Management Act 1991, the Council may serve notice of its intention to review this consent within 6 months after the commencement of the consent and thereafter at 12 monthly intervals. Any review is at the Consent Holder's expense.

9. Visual Amenity

9.1 The consent holder shall retain the two existing row of shelterbelt trees located approximately 50 metres south of the existing sheds as shown on the approved application plan in **Appendix C** for a minimum length of 450 metres from the boundary of Poyntzs Road to a minimum height of 3 metres and maximum tree spacing of 1 metre.

9.2 Any dead, dying or diseased trees within the shelterbelt shall be replaced by the same species of tree within 3 months. The minimum height at planting for the replacement trees shall be 1 metre.

10. Conditions Auditing

10.1 The Council, on an actual cost basis, will audit compliance with the conditions of consent by site inspections and checking of associated documentation to ensure the work is completed in accordance with the approved plans and specifications and to Council standards.

10.2 The consent holder shall notify Council at least five working day prior to commencing various stages of the works. This is to enable audit inspections required by the consent to be performed.

The minimum level of inspection shall be as follows:

Environmental Management Plan

- Following set up of erosion and sediment control measures as per approved plan.
- Upon Completion.

Earthworks

- During stripping of topsoil and stockpiling.
- On completion to final levels.
- At the completion of the works.

11. Inspection

11.1 Compliance with the above conditions shall be verified by inspection by a Council Officer pursuant to Section 35 (2) (d) of the Resource Management Act 1991. The consent holder shall pay to the Council charges pursuant to Section 36 (1) c of the Resource Management Act 1991 to enable the Council to recover its actual and reasonable costs in carrying out the inspections.

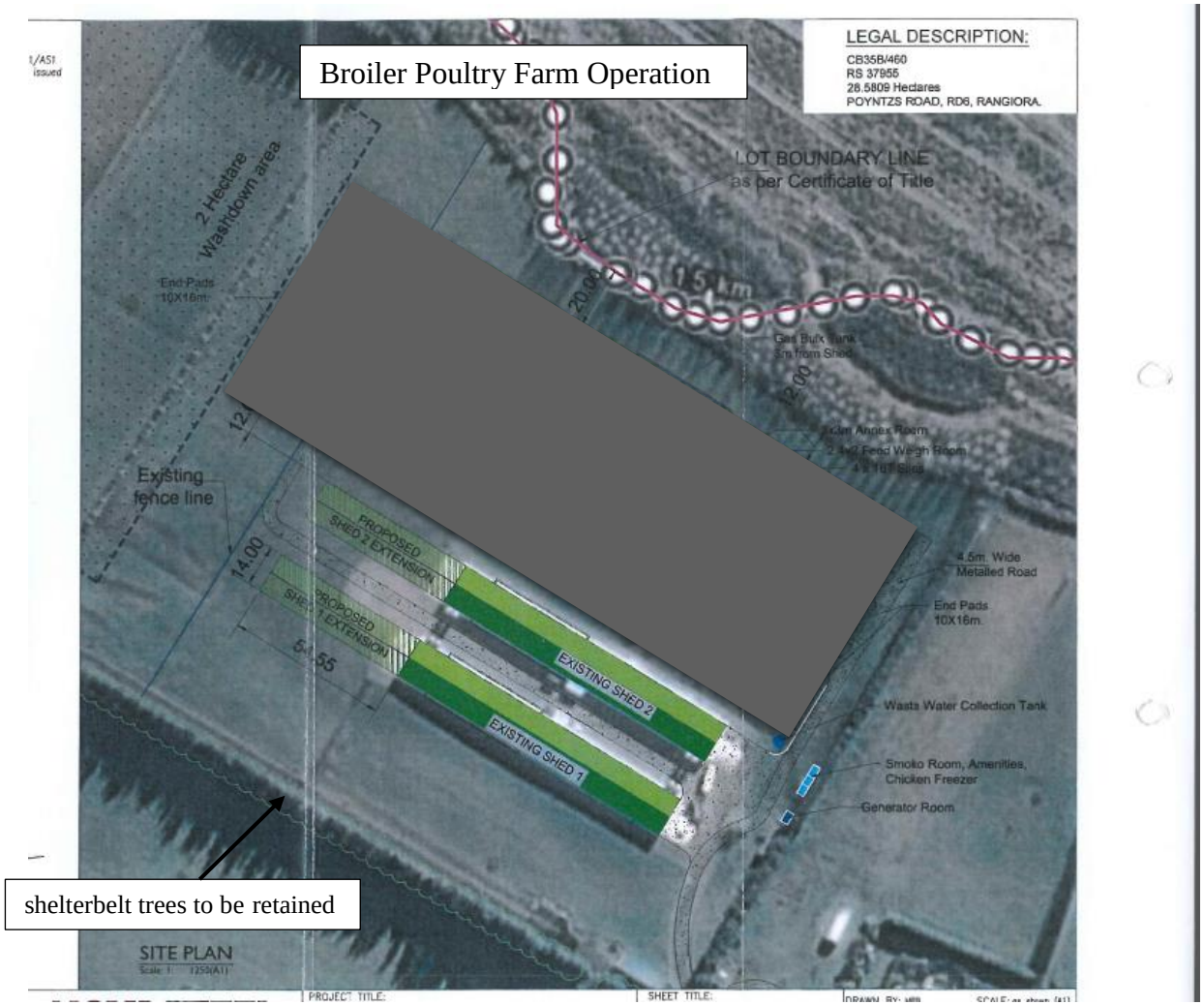
ADVICE NOTES

a) The existing buildings discharge stormwater to ground. The applicant proposes that stormwater discharge from the new buildings will be direct to ground. This is an acceptable solution in this location.

b) The applicant is made aware of the requirement for a building consent for the new and extended sheds.

APPENDIX C

Site Plan - CRC160077 and RC155218/160322025377



Elevation Plan - CRC160077 and RC155218/160322025377