

Supplementary Officer Report for resource consent 5262-3.0

(Pursuant to section 42A of the Resource Management Act)

To The Hearing Committee
From Gary Bedford – Science Advisor
Consent 5262-3.0
Document 2978727
Date 11 February 2022

To discharge emissions into the air from a free range poultry farming operation

Introduction

1. I have prepared this supplementary report to:
 - a. provide the Hearing Committee with reports on visits by Council staff to the broiler poultry farm and its neighbourhood on Airport Drive, New Plymouth, during January-February 2022;
 - b. provide information on complaints made to the Council during this period;
 - c. respond to matters raised in statements of evidence by submitters and their experts; and
 - d. comment upon recommendations by experts acting for submitters concerning the Council's draft conditions.

2. I confirm that while this is not a hearing of the Environment Court, I have read the Code of Conduct for expert witnesses contained in the Environment Court Practice Note 2014 and that I agree to comply with it. I have identified in the Officer Report dated 24 January 2022 and in this supplementary report, the data, information, facts, and assumptions that I considered in forming my opinions. I state the reasons for the opinions I have expressed. I have specified the literature or other material used or relied upon in support of the opinions I have expressed.

3. I confirm that I have considered all the material facts that I am aware of that might alter or detract from the opinions I express. In particular, unless I state otherwise, this evidence is within my sphere of expertise and I have not omitted to consider material facts known to me that might alter or detract from the opinions I express.

Visit of Mr Cookson, Council Enforcement Officer, 31 January 2022

4. Mr Cookson, a Council Enforcement Officer, inspected the farm on Monday 31 January coincident with a bird capture (removal of female birds), to make observations of odour and ammonia concentration during this phase of the rearing cycle. Mr Whiting confirmed to Mr Cookson that bird weights and shed stocking intensity (kg/m²) were at their maximum for the rearing cycle.

5. Wind direction was from the north-west and winds were light. The ambient temperature was approximately 25degrees C, with clear skies. Mr Cookson's inspection report is attached in full. It records as follows:-
 - a. Upwind assessment at roadside location between 62 and 65 Airport Dr, at 11.18 am. No poultry odour detected.
 - b. North-eastern boundary of facility (nearest point to McDonalds' residence), 11.35 am. No poultry type odour was detected, and a measurement for ammonia gave no reading (<1 ppm).
 - c. Observation location 2, on SE property boundary corner (downwind of all sheds). A distinct poultry odour was detected at this location, odour intensity varied but he did not consider the poultry odour to be offensive or objectionable at this location, at this time. A measurement for ammonia gave no reading (<1 ppm).
 - d. Observation location 3, adjacent to extractor fan on south-eastern end of shed 4, 12.15 pm. Ammonia reading of less than 2 ppm.
 - e. Observation location 4, adjacent to extractor fan on northern wall of shed 2, at 12.40 pm. Ammonia reading of 2 ppm.
 - f. Poultry house 3 had internal ammonia readings of between 4-7ppm during the time of inspection, and House 2 had an internal ammonia reading of 10ppm. This information was collected from Mr Whiting's shed monitoring systems. House 2 had had birds removed that morning. The misters were in use.
6. I note that results (d), (e), and (f) of Mr Cookson's measurements taken in conjunction confirm that there is immediate mixing and dilution of shed air upon discharge from within the sheds into ambient air.

My visit, 1 February 2022

7. I visited the farm on Tuesday 1 February in order to ascertain the latest stage of redevelopment of the site, prior to the upcoming Council consent renewal hearing.
8. I arrived at the property at approximately 11.45 am on Tuesday 1 February 2022. The wind direction was from the north to north-east, having swung around from blowing from the south-east earlier in the morning (my personal observations).
9. I met Mr Whiting, who confirmed that all female birds had been removed from the four sheds at daybreak that morning. Birds were at their maximum weight. He confirmed the wind direction had been from the south at the time. He had not received any complaints. Male birds were to be completely removed the following week (scheduled for 9-10 February), with shed clean-out scheduled for the day after.
10. I then walked around the perimeter of the site with Mr Whiting. I noted the following:-
 - a) Three vertical exhaust funnels and one intake stack had been installed on Shed 3, on the section of the shed furthest from the property of Mr McDonald.
 - b) Each of the other three sheds had had one roofline exhaust funnel installed to date. There were a number of funnel sections on the site with a workman installing equipment into one of them.
 - c) There were four hot water boiler units on site, awaiting installation. These are to be used to supply the hot water radiators that will replace gas heaters inside the sheds.
 - d) A large number of feijoa trees were on site in pots, ready for planting out in the free-range areas.

- e) Ammonia and carbon dioxide sensors had been installed in the sheds and were being used in conjunction with temperature and humidity sensors to control air flows and shed ventilation rates.
- f) In shed 3, the wall fans closest to the McDonald property were shut down and curtained off. Shed air was being expelled through the roofline vertical exhausts and the remaining side fans.
- g) Odour was distinct and noticeable immediately outside each of the side wall fans that were in use. Around the perimeter of the site, odour levels were varying from faint to noticeable. Odour was never observed to be strong enough to be unpleasant.

My visit, 8 February 2022

11. On 8 February 2022 I was forwarded an email that the Council had received from Kevin and Glenis McDonald. In it, they advised that their air quality consultant was requesting that Council officers carry out an odour survey on the McDonald property, as weather conditions meant air movement was flowing from the poultry sheds to the McDonald property (ie calm to light SE winds) and the sheds still contained final weight birds, which were due to be removed within a day or two. The consultant expressed awareness of an intention signalled by the Council to undertake an odour survey around 10-11 February. The consultant implied concern that this would be after birds had been removed. (I note that the Council's upcoming visit was intended to observe odour and any other effects during the shed clean-out of used litter).
12. In response to the submitters' request I attended the McDonald property between approximately 11 am and 11.30 am on 8 February. Phil Whelan, a compliance officer for the Council, accompanied me. Atmospheric conditions were very humid and 23°C. Air movement varied between calm and brief, light, very variable breezes.
13. We carried out static odour observations at three locations within the McDonald property and on the roadside at their driveway entrance, each time for five minutes or more. On their property, we first spent time with Kevin outside his office. The level of poultry farm odour we observed varied between mild and recognizable, and non-detectable. Kevin used the word 'mild' to describe the level of odour he was detecting. He mentioned the odour had been stronger earlier in the morning.
14. We then walked along their driveway, which is an avenue between rows of trees spaced closely together on both sides. Along the driveway, odour from the chicken sheds varied between non detectable and noticeable. Wind movement (when there was any) was from the shed towards the driveway. Shed 2's sidewall exhaust fans expel air directly towards this boundary. The chicken shed smell was wafting and intermittent. We could also smell odour from machinery working on the poultry farm premises and from the macrocarpa shelter belt. The farm odour was most distinct when we were in line with the eastern end of shed 2.
15. We conducted a second odour assessment at the NE corner of the poultry farm boundary, the point closest to the McDonald residence. We did not detect any poultry-type odour at this location.

16. We then spent time talking with Glenis outside the doorway of the house. We could not detect odour from the sheds at this location. There was a light garden odour. Glenis confirmed she was not smelling any chicken shed odour.
17. We then visited the poultry farm, with a brief conversation with Mr Whiting. He advised that all four sheds still had all the male birds in them, at their maximum weight. Shed 3 was to be emptied tomorrow (Wednesday 9 Feb), and the remaining 3 sheds on Thursday 10 Feb. The litter was scheduled for removal on either Friday 11 Feb or on Monday 14 Feb.
18. A weather station had been installed on the site. Mt Whiting undertook to provide the Council with the website link (nb since provided). Workmen were installing additional air intake structures on the roof of shed 3. An excavator was preparing ground for the free-range runs near shed 2. Odour in the NE corner of the property (the corner nearest the McDonalds) was negligible. Odour was strong when standing in the plume of the fans expelling shed air outside sheds 3 and 4, at a distance of a couple of metres from the fans. Otherwise odour varied between noticeable to faint, at various points around the site. An odour check at the SE corner, downwind of sheds 3 and 4, found no odour. I noticed the side wall extraction fans that are nearest the McDonalds on sheds 2 and 3, were blanked off.
19. Meteorological data from the Council's met station at Hillsborough, south of the area, showed that the wind direction between the hours of 5 am and 11 am had been from the SE (123'- 132'). Data from the on-site weather station indicated wind speeds of 2 km.
20. I provided a report back to the McDonalds by email following my visit.

My visit, 11 February 2022

21. This inspection was timed for the start of shed clean-out of used litter. I arrived at the facility at approximately 9.15 am. Weather conditions during my visit were humid, with light spitting rain, and warm (approximately 23 C), with calm to intermittent wafting air movement generally from the north. Misters were in action on sheds 1 and 2, and dispersion of the mists varied.
22. Mr Whiting advised me that the last shed still containing birds (Shed 1) had been emptied earlier that morning, and that Osflo were expected on site during the morning to begin removing the shed chicken litter.
23. A cluster of three contiguous exhaust fans were operating on shed 2, facing the McDonalds to the north. The visible mist clouds showed plume movement as far as the macrocarpa shelter belt on the boundary, with limited dispersion of the clouds across the 30 metres of bare land between the shed and the hedge. Odour within the plume was noticeable and moderate in strength. Outside the plume from the 3 operating fans, odour was not detectable. I then walked the length of the McDonalds driveway, but could not detect any odour on their side of the shelter belt. I spoke to Mrs McDonald, who confirmed there was no odour, but mentioned she had smelled the sheds at 3.30 am, when she had observed the wind to be from the south. Birds were being captured at that time. She did not indicate to me how strong the smell was.

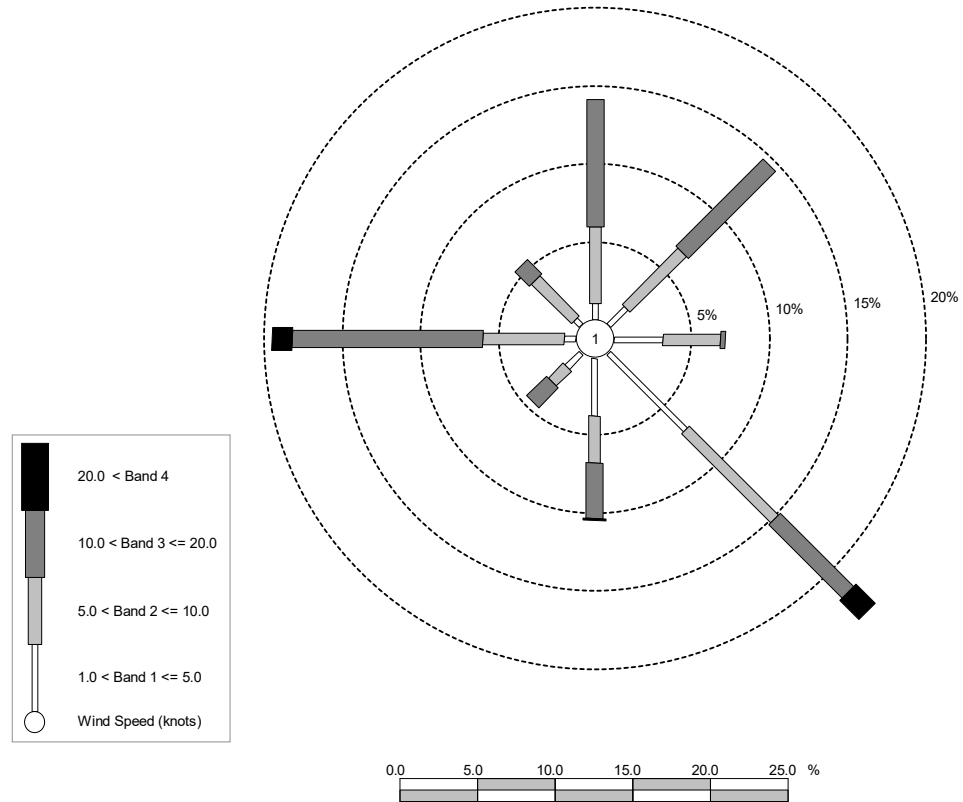
24. The nearby Council meteorological station data showed the wind direction to be from the NE at 3 am and then from 5 am onwards, having shifted to be from SE at 4 am.
25. I spent some considerable time checking odour along the southern (downwind) property boundary. Doors on both ends of Shed 4 were fully open in anticipation of the litter removal. At a distance of 10 metres downwind of the open doorway, odour was distinct and moderately strong, but not intrusive in strength or tone. Other than directly in line with the open vehicle access doors, odour along the southern boundary was mild to undetectable.
26. I noted that seven intakes were now in place along the roofline of shed 3, that these included fittings for shed air recirculation as at Midhirst, and that the boilers had been installed and hot water radiators were being piped up inside each shed.
27. Osflo arrived about 10.45 am, and were to begin by emptying shed 4. With rain setting in, I considered there would be little gain in continuing to monitor odour, and left the site about 11 am.
28. My observations on this occasion:-
 - a. confirmed the significance for reducing offsite effects, of the cessation of reliance on the sidewall exhaust fans, and their substitution by vertical roofline mounted extraction system;
 - b. confirmed likewise the importance of the perimeter shelter belts/windbreaks in reducing odour movement beyond the property boundaries;
 - c. confirmed the commitment of Mr Whiting to deliver the upgrades and innovations that have been relied on in the officers' reports.

Meteorological conditions January-February 2022

29. The past four weeks in New Plymouth prior to 5-11 February have been hot (above 25°C for 22 of the previous 30 days) and with winds varying from calm to moderate day breezes, with conditions on only a day or two as exceptions. Predominant wind directions have been from the south for several extended periods during the last 30 days (particularly during 5-9, 13-19, 22-26, and 27-30 January). I note that these conditions are the 'worst case' scenario for odour generation and perception around broiler farms, with maximum requirements for extraction of heat from the sheds coincident with poor dispersive atmospheric conditions and the most likely occurrence of outdoor activities in the neighbourhood.
30. Set out below is the windrose for New Plymouth airport for the four weeks to noon, 10 February. This was the latest dataset available to me at the time of preparation of this report.
31. In paragraph 88 of the Officers' report, I noted that calm to slight winds (less than 5 knots, or 3 ms⁻¹) were the poorest for dispersion of air emissions. The wind rose below shows that for the two sets of octants SW-S-SE and E-NE-N, the percentages of the four weeks for which winds were critically slight and blowing towards neighbours were respectively 12.0% and 5.7%, giving (together with calm conditions for 1% of the time) a cumulative critical duration of 126 hours (18% of the entire period), or over 30 hours per week. The greatest preponderance of light winds was from the SE.

32. Prior to and throughout this period, the Council received complaints from only one party. These complaints are detailed in the next section.

Wind Direction at New Plymouth AWS
 Wind Speed (knots) at New Plymouth AWS
 From 13-Jan-2022 12:00:00 to 10-Feb-2022 12:00:00



Wind rose, New Plymouth airport, 13 January 2022- 10 February 2022

Complaints to the Council December 2021-February 2022

33. A complaint lodged with the Council on 24 November 2021 is discussed in paragraph 159 of the Officers' Report. I have viewed the Council officer's emailed response to the complainant, in which the officer reiterated to the complainant that complaints should be registered immediately by phone call if they were to be investigated. I have viewed the subsequent email response from the complainant. The complainant confirmed that they would be sure to telephone any further complaints through to the Council immediately. Since that date, to 11 January (the close of the latest Consents and Regulatory agenda for the Council), no further complaints about the Airport Drive poultry farm were made by any neighbours and no grounds for concern by Council officers noted.

34. Since November 24, the Council has received two further complaints. They were both sent by email. Both were lodged by the same party. Other than these two complaints, no submitter has lodged a complaint since November.
35. The first new complaint was sent by email to the Council at 9.12 pm on Tuesday 25 January, by the Hibells. It stated *'The air in our house is disgusting even with our windows closed. This has been going on for over an hour and smells like chicken manure. It is still wafting around our house..Last night it was bad enough for us to have to close windows and garage door at 5 45pm.'*
36. Because the complaint was sent by email, the Council was not aware of it until the office opened the following morning, 11 hours later. The Council has previously urged neighbours to lodge any complaints by phone call, at any hour of the day or night, so that a prompt response could be provided (for example, paragraph 225 of my evidence, and in other verbal and email communications). Because of the time delay on this occasion before Council enforcement officers could become aware of the situation, no meaningful site investigation and odour assessment could be undertaken in respect of the Hibell complaint.
37. The property of the Hibells lies WSW of the poultry sheds (Table 1, paragraph 101 of my evidence in chief). The wind direction at 6 pm on 25 January was from the south. It then swung through the SE and blew from the east between 8 pm and 9 pm, before swinging back to blow from the SE again. This record of wind direction shows that for the hour in question, the wind was blowing from the sheds towards the Hibell residence.
38. On 24 January, the wind directions were highly variable. At 4 pm it was from the NW; at 5 pm from the SW; it then completely reversed, to be from the NE at 6 pm through to 7 pm; it then swung again to be from SE at 8 pm. That is, from around 5.45 pm onwards for about an hour or so the wind was blowing from the sheds towards the Hibell residence.
39. Wind speeds had been low (below 8 km/hour, or 2 m/s) for an unusually prolonged period, from 22 January to 26 January inclusive, across this period.
40. I note that in paragraphs 58, 59, and 62 of his evidence in chief, Mr Jason Pene states that he conducted a comprehensive survey of odour around the Airport Drive farm on 23 and 24 January. His time on-site therefore co-incided with the first period of offensive odour alleged by Mr and Mrs Hibell (5.45 pm, Monday 24 January). His report therefore provides an expert assessment of odour at that same time, for the Committee's review.
41. In its response to the Hibells concerning this event, the Council officer reiterated the importance of lodging complaints by telephone, if the complainant expected a response.
42. From 31 January-2 February, the predominant wind direction was from the east to north-east – that is, from the poultry sheds towards the Hibells. Notably, there were no further complaints during this time, even though during this period there were times when shed doors were open, ventilation rates were high, and birds were being removed.

43. The Hibells lodged a second complaint with the Council, on 8 February at 5.39 pm. Again the complaint was by email sent after the close of office hours, rather than by telephone at the actual time of the incident (stated by Hibells as 4.30 pm).
44. As noted above in paragraphs 11-20, I had co-incidentally conducted an odour survey earlier on the day in question (just before noon), at the specific request of the submitters' air quality expert. My observations on that occasion of mild poultry farm type odour at most, beyond the boundary, were confirmed by Mr and Mrs McDonald. Given the time delay between the odour incident outlined in my previous paragraph and the Council's receipt of its notification the following day, any further Council investigation would not have been meaningful.
45. The Council has not received any other complaints from any other neighbour throughout January and early February (to 11 February, the date of preparation of this supplementary report), despite the circumstances of the adverse prevailing meteorological conditions coinciding with the most critical stages of bird rearing activities, and the Council's repeated urgings to submitters to voice any complaints.

Matters raised in statement of evidence by submitters or the applicant, and their respective experts

46. Many of the statements of evidence canvas the same or similar matters. I have summarised the points raised, and my response to them, in the table below for ease of reference.

Point of contention	Response
Choice not to complain (Several submissions)	In its general public information, the Council is explicit about the incident response service it offers to the public. More specifically, submitters and complainants have been repeatedly urged by Council officers to lodge any complaints immediately upon detection with the Council.
Complaints have not been made because Council won't respond in a timely manner eg 'takes hours'. (Hibell)	The details of complaints and Council responses are set out in full in the Officers' Report. The allegation re Council response times is not accepted. The Council has a round-the-clock on-site incident investigation service. While breezes do shift over time, and hence odour effects will change, the Council's stated performance requirement is that all complaints are responded to within 4 hours. The record shows that on occasion Council staff have been on site within 45 minutes. Complainants have made the choice to use alternative means of notifying the Council after a delayed period, instead of immediate contact. Council is unable to respond in a timely manner under those circumstances of the complainants' making.
Behaviour of previous farm owner (Karen Brown)	Irrelevant
Offensive odours when wind is from the sheds (all submitters)	The Council has conducted multiple assessments of odour, during 3 separate bird rearing cycles, and has not found the poultry farm to generate odours that are offensive offsite. Proven offensive odours in the vicinity, blamed by neighbours on the poultry farm, were found to be sourced from a neighbouring

	property where chicken litter was being spread. The Council took enforcement action in this case, because the effect was in breach of the RAQP.
Noise (N Hibell)	Irrelevant
Any removal of offsite shelter belts will aggravate odour effects (Hibell)	Contradictory stance by submitters. Some argue that the shelter belts trap the odours, preventing dilution/dispersion and thus aggravating the situation. I note that in any case if the recommended conditions are accepted, (1) the applicant would be obliged to maintain boundary shelter belts (plantings or windbreaks) on their property; and (2) the applicant proposes to plant orchards of feijoa trees throughout the free range zones, which would if anything serve to retain groundlevel air movement to within the property. It is generally recognised that shrubs and trees serve to reduce airborne contaminants, through absorption and adsorption, although the effect may be small overall.
Odour diary of Lloma Hibell: record of strong odour events	6 October- Council investigations found non-compliance with RAQP on neighbouring farm- chicken litter spread in a manner breaching the Plan. Infringement notice issued. Poultry sheds were empty. 21 October- no on-site Council information for this day. Council wind record shows wind direction from SE that day. 5, 15 November- Council survey on 19 November found no offensive odours offsite 24-25 January- notification by email the day after the event in question. No meaningful Council investigation possible. [9 February- a further complaint emailed in after hours- see paragraphs 33-34 above].
Odour diary of Glenis McDonald: record of odour events	Multiple entries for events recorded post 16 September 2021, the date at which the Council urged submitters to contact the Council immediately so that events could be assessed. Only one notification subsequently received (emailed 24 November) from the McDonalds in the 5 months since- see paragraphs 225 and 159-160 of the Officers' Report.
No information provided re a reported incident on 4 August 2020 (Officers' report para 220) (D Backshall)	Complaint was received 20.50 pm on 4 August and a Council officer conducted a site investigation. He found that an odour was present but was not considered to be offensive or objectionable at the location.
Adverse health effects (Glenis McDonald)	Council report has assessed emissions from the farm in terms of recognised international criteria for adverse health impacts (ammonia) ¹ . Multiple Council surveys of boundary conditions have never found ambient conditions that are recognised as giving rise to health impacts. The Council has to balance any reality of other health-related consequences, such as individual psychosomatic effects, against what the representative 'ordinary' person might experience.

¹ Paragraph 138 of Officers' Report

	<p>The health effects as described are non-specific and the only association with the poultry farm that has been offered is that of proximity. I acknowledge that all livestock and wildlife carry a theoretical risk of passing infectious diseases to humans- cows, horses, sheep, pigs, poultry, dogs, cats, pigeons, doves, budgies, and wildfowl (pukekos, sparrows etc). However, in respect of the AFT activities, it is particularly noted that (1) the routine stringent hygiene requirements, shed and yard sanitisation processes, and prevention and elimination of disease within the bird flock through application of preventive antibiotics, actively control any risk of occurrence or transmission of infectious illnesses; (2) Further, the replacement of sidewall exhaust fans (with maximum air flow velocity at litter level and amongst the birds) with rooftop vertical exhausts (with maximum air flow velocity at the apex of the sheds), reduction in shed humidity, and recirculation of air instead of cross-flow ventilation to continuous external discharge, will substantially reduce further any residual risk of pathogen transmission; (3) reduced stocking rates reduces risk of disease outbreak.</p>
<p>Questions over approvals given for previous consent processes. In particular, McDonalds deny ever having given written approval.</p>	<p>Council officers have excluded any previous affected party approvals from their considerations (paragraphs 216-219). However, in passing it may be noted that McDonalds have in fact given written approval previously (see attached), while in 2011, they were notified but did not submit and played no part in the renewal providing neither support nor opposition.</p>
<p>Lack of consultation by TRC (Glenis McDonald)</p>	<p>Neighbours chose for many years not to communicate any concerns to the Council. Notwithstanding their reason for doing so, the Council notes that (1) the submission process has given opportunity for full consultation, and (2) since 16 September 2021 the Council has repeatedly urged neighbours to contact it re any specific incidents, with minimal uptake.</p>
<p>Not enough monitoring of odour beyond the farm boundary (several)</p>	<p>The primary emission sources are the sidewall exhaust farms. Council monitoring has focused on dispersion of these emissions from point of discharge out to the boundary. It is hard to conceive that odour concentrations would subsequently increase. On-property monitoring has been from the road side to around the sheds and the property boundary, and so attenuation over an extended distance has been routinely part of the Council assessment.</p>
<p>Community understanding that the farm would close in 2026 (most)</p>	<p>It appears that at 2011 application, the owner at the time gave a verbal undertaking that he would not seek renewal beyond 2026. This was offered on a 'goodwill' basis, and was not required or provided for within the consent as renewed. The farm has since passed through two more owners and the exit undertaking has not been part of those sale and purchases. I am not aware of any legal barrier to the current owner seeking to renew the resource consent beyond 2026.</p>
<p>Deodorants should not be used to reduce odour (Glenis Hibell)</p>	<p>Deodorants that react with (not just mask) odorous compounds are recognised as safe for human health. I am happy for Mr Backshall, air quality expert for Mrs Hibell, to give evidence on this matter. The issue is whether neighbours will allow the</p>

	<p>applicant to have the full suite of odour-reducing techniques available. The applicant has not sought to initiate the use of deodorants. My view is that other innovations being implemented will provide a substantial reduction in any case, and renewal of the consent should not be contingent upon the use of odour reactants.</p>
<p>No idea, data, or information on the consequences of the change to free range; odour will get worse (G Hibell, B Dodunski)</p>	<p>This is addressed in the officers' report, especially paragraphs 188-193 and 234-237.</p>
<p>RAQP buffer distances not being observed (C Twigley)</p>	<p>This is addressed in the Officers' report, especially paragraphs 14-15; 184-193; and 238-244.</p>
<p>Dust (K McDonald)</p>	<p>Evidence of Mr van Kekem is that Mr McDonald states '<i>the dust is no longer an issue after recent improvements to dust control.</i>' (4.22)</p> <p>Dust has never been the subject of complaint, and has never been observed by Council officers monitoring the site to pose a concern. In any case is addressed through a recommended consent condition and can be managed through established processes eg a water cart or tanker for vehicle tracks; misters for shed outlets (already being installed).</p>
<p>PM10 dust (K McDonald, D Backshall)</p>	<p>The statement of Mr Backshall for the submitters is acknowledged: <i>I would not expect PM10 emissions from an operation of the scale of the Airport Drive poultry farm to result in health effects</i> (4.57).</p> <p>Inhalable dust (particulate matter of effective aerodynamic diameter of less than 10 microns, or PM10) and respirable or fine dust (particulate matter of effective aerodynamic diameter of less than 2.5 microns, or PM2.5) are invisibly small suspended particles with a recognised risk for public health because of their ability to penetrate deeply into lungs.</p> <p>Council studies show that PM10 in Taranaki is predominantly composed of mineralised aerosols of sea spray. Other sources include combustion products of solid and liquid fuels including vegetation burnoffs, and condensed aerosols of volatile vegetation oils (relevant for the application in hand, given the considerable foliage of shelter belts and orchards in the vicinity). Indoors, levels of PM10 would approach or exceed national standards where there is cooking by grilling, frying, or toasting; home heating by a wood burner; or candle or incense burning for ambience; as well as any personal smoking or vaping.</p> <p>Inhalation of PM10 dust is a recognised workplace hazard in broiler farms, consisting of disintegrated faecal matter and pellet feed, skin debris, broken feather filaments, and bacteria. It is controlled at source by managing bird stocking intensity, feeding rates, shed humidity, and litter moisture; its release from within</p>

	<p>sheds is governed by ventilation rates and design; and downwind concentrations determined by dispersion.</p> <p>In the case of the AFT application, potential PM10 release will be managed through (1) monitoring and controlling shed humidity; (2) the replacement of sidewall exhaust fans (with maximum air flow velocity at litter level and amongst the birds) with rooftop vertical exhausts (with maximum air flow velocity at the apex of the sheds), the removal of gas-fired combustion in-shed heaters and replacement with hot water radiators, and the recirculation of air instead of cross-flow ventilation to external discharge; (3) significantly reducing stocking intensity including providing exterior free-range access; (4) minimising bird disturbance through lighting and temperature controls; (5) the use of misting sprays on exhausts and shed openings during periods of heightened dust potential (bird capture, litter removal); and (6) matching used litter removal operations to favourable weather conditions (wind direction away from residences).</p> <p>In summary, the Council does not see the justification for a PM10 condition, but on the other hand there is no disadvantage to the applicant by imposing one. The Council recommends adopting the current national standard for protection of exposed public communities as a boundary condition: PM10 shall not exceed 50 micrograms per cubic metre expressed as a 24-hour mean when measured on the boundary of the property, more than once in any 12 month period.</p>
Opposing possible use of herbicide sprays (K McDonald, supplementary)	Use of herbicide sprays on production land is regulated by and must be in accordance with Rule 56 in the RAQP. It is noted the McDonald property adjoins grazing pasture and cropping land, where the same controls already apply.
Recommendation for minimum ground cover requirement (Van Kekem, 8.16)	Needs to be discussed further. The significant feijoa tree plantings proposed by the applicant for shading purposes will reduce grass growth.
Recommendation for Air Quality Management Plan (AQMP) (Van Kekem, 8.16, 9.4)	The applicant has provided comprehensive details setting out how the facilities and activities are to be managed. RMA requires an applicant to subsequently operate in accordance with the information supporting a consent application. An AQMP may not therefore offer a significant advance in environmental performance and best practice, in practical terms, but the Council sees no disadvantage either, and would support this recommendation in principle.
Extended consent condition re Council response to a dust episode (Van Kekem, 9.3)	Opposed. (1) A consent condition should not be used to dictate what the consent authority (as distinct from the consent holder) must or must not do. (2) The Council already has an adopted Enforcement Protocol and established investigative practices that are implemented on a case by case basis, taking the unique features of each situation into account. A constrained response would not be helpful to the Council's general obligations and functions of investigation and enforcement under the RMA.

Proposals for amendments to various draft recommended conditions (Van Kekem, 9.6-9.10, 9.12)	These proposals would be acceptable to the Council. For clarity, it should be noted that the recommended condition 8 refers specifically to 'dwelling house', not to 'house and curtilage' (Van Kekem query, 9.8). This is consistent with the definition of 'dwelling house' in the RAQP.
Complaints notification from consent holder to Council (Van Kekem, 9.11)	The Council wants all parties to be clear that complaints should be lodged directly with the Council, for follow-up. The purpose of this condition as recommended by the Council was to promote communication between neighbours and the consent holder, including the opportunity for prompt corrective interventions if needs be, and not for the consent holder to be made the conduit for channelling complaints to the Council. The Council has comprehensive existing powers of investigation under the RMA, including seeking information from any party. I am concerned that if the Council's recommended condition is amended as proposed, imposing an extended administrative burden upon the consent holder, it could be mis-used by complainants for vexatious and punitive purposes. The Council therefore opposes the suggested amendments.
6-monthly reviews (Van Kekem, 9.13)	Opposed as unnecessary. This is an established poultry farm, with demonstrated environmental performance and agreement from all experts (for submitters, applicant, and Council) that changes being implemented will significantly improve environmental performance. A consent applicant is entitled to a degree of enduring certainty as to what is required. The Council has a range of intervention and enforcement tools at its disposal that can be applied at any time in any case (abatement notices, infringement notices), and the power to review the consent at any time if it is found the applicant has misled the Council.
Amendment to dust condition (Pene, 107)	The Council's draft condition as stated is an instantaneous criterion. Mr Pene's condition is for a short term average criterion. The distinction is minor in terms of environmental effects. In terms of amenity value, the short term average probably has greater weight. The Council would accept an amendment.


Conclusion

47. Having taken into account all information made available to me through the provision of statements from submitters, the applicant, and their experts, and through additional observations by me and other Council staff, I continue to recommend that the application to renew consent 5262-3 is granted, on the term as officers recommend and on conditions to be finalised taking into account my comments above.

Gary Bedford
Science Advisor
Taranaki Regional Council

Attachment: Written approval provided by Mr K McDonald, 1997

RECEIVED
22 DEC 1997
TARANAKI REGIONAL COUNCIL



NON-NOTIFIED APPROVAL FORM

In accordance with the Resource Management Act 1991, in order for resource consent applications to be processed without public notification, the written approval of **every person who may be adversely affected by the granting of consent** must be obtained. Applicants should obtain such approvals on this form.

If the required approvals are not obtained, the application will be publicly notified. This will involve additional cost to the applicant.

TO BE COMPLETED BY APPLICANT:

File: TRK _____ Application No: _____
Applicant: KC - S A GREEN
Proposed Activity: Broiler chicken production

TO BE COMPLETED BY PERSONS WHO MAY BE ADVERSELY AFFECTED:

I approve the non-notification of the application for the above activity.

Name: N M Graham
Address: Airport Rd
Signature: N M Graham Date: 20/10/97

Name: Renee Winters
Address: 42 Airport Drive
Signature: R Winters Date: 20/10/97

Name: KJ McDonald
Address: 62 Airport Drive N.P
Signature: KJ McDonald Date: 20/10/97

NOTE: If you are uncertain of whose approval to obtain, please contact the Consents Office of the Taranaki Regional Council for guidance.



Private Bag 713 | 47 Cloten Road | Stratford 4352 | New Zealand | T: 06 765 7127 | F: 06 765 5097 | www.trc.govt.nz

R

Inspection Notice

Under section 332 of the Resource Management Act 1991

Consent Number: R2/5262-2.1
Consent Name: Airport | Discharge to air | Poultry | 58 Airport Drive, Bell Block
Contact Name: Airport Farm Trust Limited
Postal Address: 58 Airport Drive, New Plymouth 4373
Site Location Address: 58 Airport Drive, Bell Block

Inspection Number: OBS-2022-97174
Inspection Type: Compliance Monitoring Insp.
Inspection Date: 31 Jan 2022
Inspection Time: 11:18

Weather Details:
Rainfall: None
Wind Direction: NW
Wind Strength: Light

Samples Taken: Ammonia Tube x 4

Consent Purpose: To discharge emissions into the air from a poultry farming operation and associated activities including waste management activities

Conditions Assessed: 4 of 8

Overall Compliance Status: Compliance

Inspection Comments: Purpose of today's site visit, was to check compliance with resource consent conditions.
Odour survey and ammonia survey was undertaken as follows.

11:18 am. Upwind odour assessment @GPS 1701465e-5680004n (approximately @ 65 airport drive) observed, light North-west wind, clear skies and an outside temperature of approximately 25degrees C.

I detected no poultry odour at the time.

11:35 am. Odour and Ammonia survey #1, @GPS 1701615e-5680022n, North boundary of the facility.

No poultry type odour was detected at this location and no visible readings on the ammonia tube.

11:55 am. Odour survey and Ammonia survey #2 @GPS 1701677e-5679859e, southeast boundary of the facility.

A distinct poultry odour was detected at this location, odour intensity varied but I did not consider the poultry odour to be offensive or objectionable at this location, at this time.

Ammonia tube #2, no visible readings.

12:15 pm. Ammonia tube #3 location, House 4A extractor fan @GPS 1701659e-5679874n.

Slight visual effects observed, reading below 2ppm

12:40 pm. Ammonia tube #4 location, House 2A extractor fan @GPS 1701554e-5679971n.

Visual effects observed, reading 2ppm.

During the site inspection, Ed advised each shed has birds and has been at a mass density of between 34kg/m² to 35kg/m², for each shed, which is the max Ed said he will go to.

Poultry house 3A had an internal ammonia reading of between 4-7ppm during the time of inspection and House 2A, had an internal ammonia reading of 10ppm. This information was collected from Ed's systems. House 2A had birds removed that morning.

Misters where in operation at the time and works where being carried out to upgrade the air delivery and extraction systems.

On today's visit, the site appears to be operated with best industry practice and the conditions of this resource consent.

Photographs taken, odour survey sheets completed.

Further Actions Advice: Nil

Signed:

Council Officer: James Cookson

Officer Warrant Number: 225

Disclaimer: The compliance rating reflects the warranted Officer/s observations at the time of inspection and does not provide a comprehensive assessment of compliance with the consent. Therefore the compliance rating is limited to the exact period during which the inspection was undertaken as well as the specific aspects that were inspected.