

# Expert Conclave Amendment C263gben

## Subject matter – Air Quality

Date of conclave: 2 February 2024

Time of conclave commencement: 11.00 am

Time of conclave conclusion: 1.25 pm

Attendees: Dr Iain Cowan, Mr Michael Asimakis, and Mr Peter Ramsay

Date of finalisation of conclave report: 6 February 2024

### Introduction

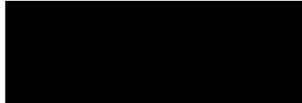
Following directions 10 to 14 of the Planning Panel hearing Amendment C263gben dated 4 December 2023, Dr Iain Cowan of Zephyr Environmental Pty Ltd, Mr Michael Asimakis of GHD Pty Ltd and Mr Peter Ramsay of Ramsay and Associates Pty Ltd met on 2 February 2024. In accordance with the directions, consideration was given to matters of agreement and disagreement in relation to the potential for impact to air quality from the Marong Broiler Broiler Farm on Amendment C263gben. In particular, and considering submission 13, appropriate separation distances from the Marong broiler farm are considered with respect to land bounded by the Wimmera Highway to the south, Landry Land to the east, McCreddons Road to the west and the railway line to the north.

Table 1 provides a series of statements to which both parties either agreed or disagreed and provides space for commentary by both experts.

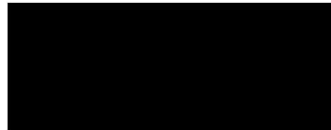
### Signatures



Dr Iain Cowan



Mr Michael Asimakis



Mr Peter Ramsay

Table 1 – Areas of agreement and disagreement

Statement		Agree /Agree in part / Disagree	Dr Cowan Comments (IC)	Mr Asimakis Comments (MA)	Mr Ramsay Comments (PR)
<b>Odour complaints relating to the broiler farm</b>					
1	No complaints have been received by EPA or Council regarding the Marong Broiler Farm in the last five years.	Agreed in part	<p>Agreed, however it should be noted that existing residents are located in a farming zone rather than a residential zone and are likely to have a different expectation of amenity.</p> <p>The GED considers that the risk of odour impact must be reduced to the extent practicable, not that it must be eliminated. Thus a facility may be in compliance with the GED but have residual odour which is why a separation distance may be required as contemplated by Draft EPA Publication 1949.</p>	-	The operator of the broiler has obligations to ensure there is no offensive odour beyond property boundary in compliance to the GED.
<b>Community view</b>					
2	A number of residents at Wilsons Hill (250 – 300 m) indicate that odour is detectable approximately every 6 weeks.	Agreed in part	<p>Whilst the existing residences that experience odour from time to time are less than 1,000 m these residences are located in a farming zone and therefore likely to have a different expectation of amenity than the proposed residential development adjacent to Precinct 1.</p>	There is an indication of odour within 250-300m, but not at a level to lodge a complaint.	Whilst the residents spoken to could detect odour, it has not led to complaints and it is within 250 m – 300 m from the broiler farm.
<b>Site inspections</b>					
3	<p>The design of the sheds is in line with modern designs (in line with the requirements of the AgriFuture Guidelines), and the farm has adopted best practices in minimising the risks of odour so far as reasonably practicable.</p> <p>Observation of odour during the site inspection on 22 January 2024 (attended by IC and James Linfoot (a representative of PJRA on behalf of PR)), odour detected up to 35m from the sheds and 105m from the manure stockpile.</p> <p>Site inspection by PJR on 15 December 2024, odour detected up to 30 m from the sheds.</p>	MA / PR Agree IC Agree in Part	<p>Agreed, however from the site inspection whilst the sheds do appear to be well maintained, they are of older design. At the time of the visit the impact of the odour from the farm was limited in distance.</p> <p>The farm did note that in the winter it was more difficult to keep the litter dry due to the higher humidity, which results in higher odour emissions, due to the shed design.</p>	-	-
<b>Relevant clauses in the Victorian Planning Provisions</b>					
4	<p>Clause 13.06-1S, Clause 13.07-1S, 17.03-1S, 17.03-2S are relevant clauses in the VPP which seek to separate sensitive uses from industrial uses and consider as relevant:</p> <ul style="list-style-type: none"> <li>Recommended separation distances for industrial residual air emissions (Publication 1518, Environment Protection Authority, March 2013)</li> </ul>	Agree	-	-	-

	<ul style="list-style-type: none"> <li>Environment Reference Standard (Gazette No. S 245, 26 May 2021)</li> </ul> <p>Draft EPA Publication 1949 is intended to replace EPA Publication 1518 when it is finalised, and this is expected in May 2024.</p>				
<b>EPA Publication 1518</b>					
5	EPA Publication 1518 references the Victorian Code for Broiler Farms in defining the relevant separation distance.	Agree	-	-	-
6	Where the separation distance cannot be met, EPA Publication 1518 recommends the use of a risk assessment, which is considered in this instance to mean EPA Publication 1883.	Agree	-	-	-
<b>Victorian Code for Broiler Farms 2009 plus 2018 Amendments (Broiler Code)</b>					
7	The Broiler Code is a relevant document for determination of the separation distance under EPA Publication 1518. The Broiler Code is for new and expanding farms only, but also discusses the establishment of sensitive uses near broiler farms in Section 11.	Agree	-	-	-
8	Formula 1 in Section 5 of the broiler code is a relevant determination of the appropriate separation distance from a proposed residential use to an existing broiler farm.	IC Disagree MA and PR Agree	Section 11 of the Broiler Code specifically excludes the use of separation distances defined by Formula 1 in Section 5 of the Broiler Code for the use of defining a separation distance for the Marong Broiler Farm as the application of the formula to farms older than 2001 is considered problematic.	Section 11 considers that Formula 1 can be used as a guide to identify the locations where a future sensitive use may be adversely impacted by broiler farm emissions.	Agree with MA
9	The separation distances for the broiler farm calculated using Formula 1 is 472 m for 200,000 birds.	Agree	-	-	-
10	<p>Section 11 of the Broiler Code references Element E1 M1.1 which provides a setback distance of 1,000 m from the new and expanding broiler sheds to the boundary of</p> <ul style="list-style-type: none"> <li>a residential zone, urban growth zone or other urban zone where housing is a primary purpose</li> <li>future residential area, shown on a plan or strategy incorporated in the planning scheme.</li> </ul> <p>The setback distance is the appropriate mechanism for setting a separation distance for farms built prior to 2001 under the code.</p>	IC Agree MA and PR Disagree	Where a setback distance is applied for new farms, older farms typically have poorer performance and therefore to allow a less setback distance for older farms than provided under E1 M1.1. does not follow a logical planning approach.	Agree with PR	Section 11 of the Broiler Code states ' <i>For farms approved and built under the Code (or under the previous 2001 Code), planning authorities should avoid encroaching on the separation distance of an existing farm and maintain the setback requirements of Element 1 for urban and rural living zones</i> '. As the farm was built prior to 2001 Element 1 does not apply.
11	Section 11 of the Code considers that historical performance of farms, built prior to 2001, in	Agree in part	Agree however, the context of the use of the surrounding land compared to the use of the land	Agree with PR	Complaints history is the key indicator of historical odour management performance of a broiler farm.

	relation to the management of odour will be well established, and the responsible authority may be able to consider the need to maintain an adequate separation distance with the site specific knowledge of the broiler farm's likely impact.		proposed needs to be considered when understanding the historical performance through complaint history. Alternatively, the historical performance can be understood through the use of a risk assessment completed in accordance with EPA Publication 1883.		
12	For rezoning or subdivision Section 11 of the Broiler Code states that the planning authority should generally not support establishing a residential zone, Rural Living Zone or other urban zone within the setback distance or separation distance of an existing broiler farm and should only be allowed if there are sound planning reasons to do so and it is supported by a risk assessment.	Agree in part	Agree, but the separation distance does not apply, and the setback distance does apply.	Agreed however the setback distance does not apply and the 472 m separation distance as recommended by the Broiler Code is met.	Agreed however the setback distance does not apply. However, as the recommended separation distance of 550m is met, a risk assessment is not necessary.
<b>Draft EPA Publication 1949</b>					
13	Draft EPA Publication 1949 is intended to replace EPA Publication 1518, and it is expected to be released in its final form in May 2024. EPA notes in Draft EPA Publication 1949 that after it is finalised, EPA expects that it will be referenced in the Victorian Planning Provisions.	Agreed	-	-	-
14	Draft EPA Publication 1949 references the Planning and Environment guideline for establishing meat chicken farms (Guide 1 – Assessment guide) (2021) to derive separation distances for everything except Special Class farms and farm clusters (of which the Marong Broiler Farm is neither).	Agreed	-	-	-
15	Where a separation distance cannot be met, Draft EPA Publication 1949 recommends the use of EPA Publication 1883 to define the odour separation distance.	Agreed	-	-	-
<b>Planning and environment guideline for establishing meat chicken farms (Guide 1 –Assessment guide) (2021) (Broiler Assessment Guide, also referred to as the AgriFutures Guideline)</b>					
16	The Broiler Assessment Guide is a relevant document for determination of the separation distance under Draft EPA Publication 1949. The Broiler Assessment Guide (also referred to as the AgriFutures Guideline) is for new and expanding farms only, but also discusses the establishment of sensitive uses near broiler farms in Section 3.2.1.3.	Agreed	-	-	-
17	In defining a separation distance the Broiler Assessment Guide (also referred to as the AgriFutures Guideline) uses a three-tier approach with the largest distance from each of the tiers used to define the separation distance.	Agreed	-	-	-

	A tier 3 assessment is not required, as the farm is less than 600,000 birds				
18	Tier 1 considers that where distances are not specified by state and local government departments and agencies, minimum fixed separation distances are used which in the case for the Marong Broiler farm is 500 m.	Agree in part	The Broiler Code is an incorporated document to the Planning Scheme and is therefore the relevant State based guidance for broiler farms referenced within the Broiler Assessment Guide. As such the minimum separation distance specified in the Broiler Assessment Guide (500 m) does not apply, and E1 M1.1 applies instead providing a minimum separation distance of 1,000 m.	The Broiler Assessment Guide takes precedence over the Broiler Code as it represents the best available science, and therefore the minimum separation distance is 500 m.	PR agrees with MA
19	The tier 2 method adopts a separation distance formula comprising five site specific factors. The fifth factor uses a frequency of wind speeds less than 3 m/sec which is optional.	Agree in part	The minor variations between adopting a five year dataset between 2016 to 2020 (Asimakis) or 2018 to 2023 (Ramsay) results in a calculated separation distance that varies between 452 m and 550 m respectively. That a single factor changes the separation distance by nearly 100 m for data from the same meteorological site provides lower confidence in the methodology that an appropriate separation distance can be calculated.	Agree with PR and adopting the wind frequency factor represents best available science.	PR assessment was based on wind data based on 5 years of data from 2018 to 2023. Minor variations in the meteorological files are expected based on the differences in the sample period.  Application of the wind frequency factor in the formula is recommended to provide a representative indication of a suitable separation distance in the context of the site.  Not applying the wind frequency factor would be overly conservative as it would result in an over estimation of the impact of the farm. Removal of the factor would result in an overly conservative outcome.
20	The tier 2 method results in separation distances of 452 m calculated by Asimakis and 550 m calculated by Ramsay.	Agree in part	The method has been appropriately applied, however as above I consider it a concern that the same method results in a difference in separation distance of nearly 100 m.  When the optional wind frequency factor (which is the component providing the difference in estimated separation distance) is removed, the tier 2 recommended separation distance is 1,408 m, which would then become the recommended separation distance from the Broiler Assessment Guide.	See above	Further to the above comments, the difference in the sample periods between PR and GHD lead to my separation distance being larger, and to be conservative, this has been adopted rather than the separation distance calculated using Formula 1 from the Broiler Code of 472m, which currently applies.
<b>Risk assessment</b>					
21	Need for further risk assessment	IC – Agree MA & PR - Disagree	There is a need for a further risk assessment as E1 M1.1 applies and therefore the proposed extension to Precinct 1 falls within the set back distance of 1,000 m. Such an assessment would require a level 3 assessment under EPA Publication 1883.	There is no need for a further risk assessment in line with EPA Publication 1949 or EPA Publication 1883, based on the separation distance as calculated by the Broiler Code and AgriFutures guideline being met and additional evidence including the odour performance of the farm at the proposed extension to Precinct 1.	There is no need for a risk assessment in accordance with EPA Publication 1883 as the separation distance is achieved at the proposed extension to Precinct 1. This is verified by the lack of complaints in the past 5 years, and the broiler farm is operating in compliance with GED.
<b>Constraint of site</b>					

22	The proposed separation distance within the Amendment C263gben is appropriate.	IC – Agree MA & PR - Disagree	The proposed separation distance within Amendment C263gben is appropriate as it is in accordance with the setback distance prescribed in E1 M1.1 of the Broiler Code which applies to farms built since 2001, but should also apply to farms built prior to 2001 as they typically have older sheds with a potential for a worse odour impact. The requirement for the 1,000 m should be further tested using a risk assessment.	It is not appropriate as E1 M1.1 of the Broiler Code does not apply and the recommended separation distance is 500 m in accordance with the AgriFutures Guideline.	It is not appropriate as E1 M1.1 does not apply to the Marong broiler farm and the recommended separation distance is 550 m.
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