

Updated Planning & Environmental Guidelines Webinar

Presented by Eugene McGahan
On behalf of AgriFutures & Integrity Ag



Welcome & Agenda



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| 1. | Welcome & introduction |
| 2. | Project background, objectives and methodology |
| 3. | Major updates and specific updates to each guide |
| 4. | Further considerations |
| 5. | Key matters raised |
| 6. | Future research recommendations and next update |

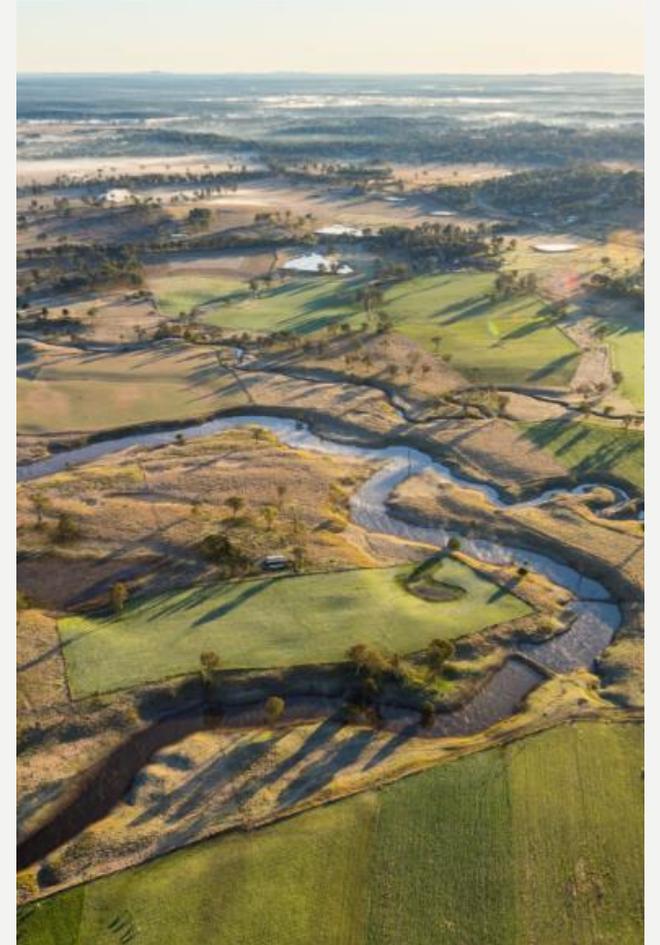
Who Are We?

Integrity Ag

- Specialist in agri-environmental consulting based in Toowoomba and Melbourne, 30 staff nation-wide.
- Environmental regulation, sustainability/LCA & GHG.
- Across all major Ag industries.
- >25 years working in the chicken meat industry on environmental management; consulting and research.
- Authors of Edition I of the chicken meat planning and environment guidelines



IntegrityAg



Project Objectives

1. Update *Planning and environment guideline for establishing meat chicken farms* to include information and criteria for proponents and regulators for greenhouse gas assessment and mitigation for new or expanding meat chicken farms.
2. Review and as necessary update the Guidelines for other planning and environmental matters.



Background

- First edition of the *Planning and environmental guidelines for establishing meat chicken farms* were released in **2021**.
- We redrafted the Guidelines (August 2025) and circulated for comment.
- Two webinars were conducted – 1 with industry and 1 with government.
- From comments received, the Guidelines were redrafted in November 2025 and presented to AgriFutures Chicken Meat Program, along with a final report.



Project Methodology

- Reviewed current and anticipated environmental regulations, focusing on GHG emissions.
- Reviewed odour impact assessment information.
- Consultation with industry and regulatory stakeholders through webinars and feedback forms, resulting in ~587 comments, of which 533 were fully implemented.
- Integrated stakeholder feedback and recent research into the revised Guidelines.



Major changes

- A new overview of state GHG regulations and reporting requirements, with definitions and examples of Scope 1, 2, and 3 emissions relevant to chicken meat farms.
- Revision of the odour impact assessment formula, reducing its applicability from farms with 600,000 birds to those with 400,000 birds, and clarifying when more detailed modelling is required.



Major changes

- Expanded coverage of **biosecurity, emergency animal disease management**, nutrient management, water and power requirements, shed construction, and composting guidance.
- Updated figures, tables, and references throughout both the Assessment and Applicant Guides.

Other changes to both guides

- Updated abbreviations/glossary to include GHG emissions-related terminology, plus numerous stakeholder suggestions of additions and edits to ensure they matched other terminology used in the chicken meat industry.
- Updated Preface to include details on purpose, scope and audience.
- Referencing and links added throughout, including where citations / references / legislation have been superseded or updated, or new resources are available (e.g., Litterpedia).
- Expanded appendices on chicken meat industry research and extension material, with hot links added throughout both documents.

Changes specific to Assessment Guide

- Potential impacts of meat chicken farms – description of GHG emissions arising from meat chicken farms (and what Scope 3 emissions might be). Example farm carbon account (annual Scope 1 and 2 emissions) added.
- Small-scale production – added description of manure deposition in open-floored caravan systems.
- Planning scheme suitability – further example design requirements typical of local planning instruments
- Land, surface water and groundwater – included offsite removal of dead birds as an action that may have restrictions at the state level
- Environmental management – included GHG regulatory reporting requirements under sections which may be included in an EMP
- Changed all examples from 10,000 bird places to 50,000 bird shed.
- Updated several figures and new figures:

Changes specific to Applicant Guide

- Updated table on state planning permit and environmental permission triggers
- Added description of general environmental and waste duties (GED)
- Added more detail on detail in chapter on “Before you begin”
- In chapter 4 added further detail, including additional reports likely required.
- Water – added further and updated information supplied by stakeholders on water requirements and research on water security.
- Power – added new detail on power requirements an options, with changes occurring around renewable power options.
- Shed construction – further details on shed floor permeability requirements added and glossary term updated on “Compacted pad” definition design requirements.

Changes specific to Applicant Guide

- All internet resources updated and added to, as most links to government websites were broken.
- Appendix A – More details included on what is required in an environmental assessment.
- New appendix added on GHG reporting.
- Nutrient management plan appendix updated.
- Composting guidance appendix updated with links to new information on design and management added.
- Updated/new figures/tables or new one
 - E.g. Table 6 – Australian Soil Classifications added next to Soil Types

Further considerations

Final report to AgriFutures summarised key stakeholder feedback, including where issues could not be addressed within the scope of the current update and / or where this is of relevance for future research. This included:

- Consolidating the two guideline documents into one, which was not adopted due to differing audience needs.
- Suggestions for clearer recommendations and mandatory criteria, which were acknowledged but not fully integrated to maintain flexibility and relevance across jurisdictions.

Key matters raised in stakeholder feedback - odour

Agency 1 noted that:

a lot of research conducted in Victoria in 2024 indicated that if sheds are > 900 m apart the plumes rarely interact, and on average plumes from individual farm units of 4 sheds (~200,000 birds) to 8 sheds (~400,000 birds) the median distance is 421 metres at the 4-6 week mark of the growing cycle.

It was raised by Agency 2 that:

Appendix B: (S Factor equation) does not include adjustment for farm technology and management practice level. Inclusion of these factors would be very useful for estimating setbacks from a range of different farm types.

Agency 2 provided a general comment that:

A PhD thesis "Development of theory and tools for improving quantitative nuisance odour impact assessment frameworks") contains a chapter regarding an improved method to design S-factor equations so that they optimally align mathematically with modelling assessments.

Key matters raised in stakeholder feedback – single document

Agency 2 noted that:

there is a lot of repetition between the two documents. Consider ways to restructure the documents. Also there seems to be a disconnect between the assessment guide (1) and the applicant guide (2) where they should really be reading a lot of the same content, especially the criteria in the assessment guide (sections 4 and 5).

There was a lot of repetition in the different sections of the Applicant guide which were also often covered in less detail in the assessment guide. The appendices seemed relevant across both documents too, rather than exclusively to assessors or applicants (appendix C in the assessor guide for example is needed by the applicant). Hence a single document makes sense.

Key matters raised in stakeholder feedback – document structure

It was raised by Agency 2 that:

different requirements for burial pits are discussed in different sections of the Assessment Guide and that it might be better to centralise recommendations into one location in the document and list all the requirements for burial pits and refer the reader to that section of the guide.

Key matters raised in stakeholder feedback – need for additional regulator consultation

Agency 2 commented:

1) *The guideline needs to find its "voice" and make clear recommendations on what it thinks **should be the national guideline for poultry meat farms that are useful and applicable** by state and local governments. Currently, recommendations are vague and the criteria given to meet the goals are high-level and **aren't useful** Giving "examples" of detailed criteria is confusing as it implies a "short non-exhaustive list to build reader context". Instead, we would have liked the guidelines to explicitly recommend a complete list of the criteria needed to meet the goals of the guideline. Hence in our view, **the guidelines do not give clear recommendations or criteria to assess risks of impact**, particularly for offsite impacts to surface and groundwater water environments.*

2) *"A substantial body of **research exists but has not been adequately synthesised or incorporated into the guidelines**, particularly the criteria to meet goals (Applicant guide sections 4 and 5)."*

3) *"It appears that there has been a lesser focus on the potential water quality impacts in this guideline than say odour. However, nutrient impacts appear to be common amongst past research (Appendix D Guide 1). Hence, the potential water quality impacts of farms with and without best practice siting/design/management should be clearly established and based on scientific literature. Also, the losses from free range areas and compost application areas need to be made more explicit. It would be incredibly useful to compare (a graph or table) the range in nutrient exports from poultry meat farms (with/without free range and compost application) to other land uses (e.g., caged egg, free range egg, dairy, beef grazing, feedlots, piggery farms). This sort of discussion would be valuable in section 2 guide 1."*

4) *"Given the body of research undertaken to date, much of it by the authors of this, we can **see the potential of these guidelines**. Hence there is great value in spending the time to refine their content. This would benefit state and local governments by reducing duplication, promoting consistency, and improving clarity for both applicants and regulators.*

Key matters raised in stakeholder feedback – climate change

Agency 3 recommended that:

*the guidelines **consider future sustainability and climate change impacts** on poultry farm facilities. They noted: that all land to be developed may need to be subjected to a comprehensive public health impact and human health risk assessment, so that foreseeable climate change impacts and health risks can be assessed and mitigated. Factors may include:*

- a) Increased frequency and intensity of heat / cold and high-wind events, flood, bushfire and drought events, groundwater / surface water pollution, algal blooms, mould, erosion, and subsidence incidents.*
- b) Increased instances of food crop / livestock disease, vector / water borne diseases, and food safety and security issues.*
- c) Damage to critical infrastructure (water supply, power, communications, transport).*
- d) The socio-economic and mental health impacts of climate change, including increased future costs of protecting property against future climate change induced events, and the ability to obtain and afford appropriate insurance from the impact on declining resale value of property left vulnerable to climate change induced events.*

Future research & Recommendations

- Recommendations for future research on:
 - odour assessment methods,
 - nutrient fate in free-range production,
 - climate change impacts, and
 - updating the National Environmental Management System (EMS) for meat chicken farms.

Propose a major review and update to guidelines in < 5 years

Where available

Second edition of the Guidelines have just been released – see AgriFutures:

Guide 1 -

<https://agrifutures.com.au/product/planning-and-environment-guideline-for-establishing-meat-chicken-farms-second-edition-guide-1-assessment-guide/>

Guide 2 -

<https://agrifutures.com.au/product/planning-and-environment-guideline-for-establishing-meat-chicken-farms-second-edition-guide-2-applicant-guide/>

