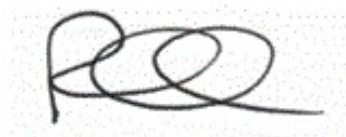




NOTICE IS HEREBY GIVEN, and Members are summoned to attend a meeting of Holbeach Parish Council Planning, Properties, Emergency Planning & Speeding Committee to be held at Coubro Chambers, 11 West End, Holbeach, PE12 7LW on Friday 22nd August 2025 at 15:00 at which the under mentioned business will be transacted.

Yours sincerely



Becky Brothwell – Deputy Clerk

PP25/6-033 Apologies

To receive and accept apologies where valid reasons for absence have been given to the Clerk prior to the meeting.

PP25/6-034 Declarations of Interest

TO RECEIVE DECLARATIONS OF INTEREST UNDER THE LOCALISM ACT 2011

PP25/6-035 Minutes

TO APPROVE AS A CORRECT RECORD THE NOTES OF THE MEETING OF THE COUNCIL HELD ON 23RD JULY 2025.

PP25/6-036 Clerk's report

1. To receive a report from the Clerk.

PP25/6-037 Planning applications

1. To **resolve to agree** the planning responses:

H09-0667-25

GATEHOUSE COTTAGE DAM GATE

Demolition of existing garden room and construction of two storey extension

H09-0705-25

Hooks of Holbeach Land Adj. & Including 45 Fleet Street

Proposed Residential Development of 9 Dwellings

H09-0631-25

Adj Woodbyne Cottage St Marks Road
Proposed 1 new dwelling

H09-0712-25

12 Fen Road Holbeach
Erection of boundary wall & gates

H09-0706-25

3c BOSTON ROAD SOUTH HOLBEACH
Change of Use from Class B8 Storage to Class E Hair & Beauty

H09-0721-25

Land South of Wignals Gate Holbeach
Development of 57 Affordable Dwellings with associated access, open space and drainage.

H09-0578-25

RIVER COTTAGE LEADENHALL ROAD
Proposed Boundary Fencing

H09-0736-25

New Buildings Eastern Road
Installation of 208x 450w Solar PV panels on South West facing roof of new agricultural building

H23-0725-25

Acorn Lodge Cranesgate North
Change of use of land to domestic & erection of workshop & stores

2. To **resolve to agree** to submit report regarding planning application
H23-0313-25 - Land At Peartree Hill Road Whaplode Drove Spalding PE12 0SL -
Provision of new poultry unit & associated works.

PP25/6-038 **Speeding**

1. To **resolve to agree** the SID locations for September.
2. To receive an update for 2 solar-powered Speed Indicator Devices.
3. To receive an update on the transport strategy report.

PP25/6-039 **Properties**

1. To receive an update on windows at 4a High Street.
2. To **resolve to agree** to get quotes for works required from electrical installation condition reports for council properties.
3. To **resolve to agree** to get quotes for Park Bungalow fence.
4. To **resolve to agree** quote for professional services in regard to council leases.
5. To **resolve to agree** to advertise empty office and rent at Coubro Chambers.

PP25/6-040 **Meetings**

1. The next meeting date for PPES Committee is Wednesday 24th September 2025 at 14:00.

PP25/6-041 Budgets

1. To receive an update on budgets.

10 Closed Session

It was resolved to agree to exclude the press and public under the Public Bodies (Admission to Meeting) Act 1960 due to the confidential nature of the Business to be transacted.

PP25/6-042 Council Properties

1. To **resolve to agree** the way forward for any council property leases due for renewal.

Coalition Against Factory Farming

Proposed Poultry Unit, Land
at Peartree Hill Road,
Whaplode Drove, Spalding

Review of Air Quality and Particulate Matter Assessments

Date: 14/7/25

Version: 3

Project Number: 262

www.odourconsultant.co.uk

www.airqualityconsultant.co.uk



**MICHAEL BULL
& ASSOCIATES**

Contents

1	Introduction	1
2	Air Quality Assessment – Background and Guidance	3
2.1	European Air Quality Management – Particulate Matter.....	3
2.2	Air quality standards	3
2.3	Environment Act 1995	4
2.4	Environment Act 2021	4
2.5	DEFRA Interim Planning Guidance	4
2.6	EPUK/IAQM Land-Use Planning & Development Control.....	5
2.7	Dust deposition	7
3	Odour Assessment Guidance	8
3.1	Guidance - Odours	8
3.1.1	DEFRA Guidance.....	8
3.1.2	IAQM Guidance	10
3.1.3	Environment Agency H4 Guidance	10
4	The Proposed Development and Surroundings	12
5	Review of Particulate Matter Assessment	13
5.1	Baseline conditions	13
5.2	Operational Impacts.....	13
5.2.1	Pollutant Emission Rates.....	13
5.2.2	Building Effects.....	13
5.2.3	Meteorological and Terrain Data	13
5.2.4	Other Model Options	14
5.2.5	Sensitivity Testing	14
5.2.6	Results – Air Quality	15
6	Operational Impacts – Process Emissions – Odour.....	16
6.1	Model Selection and Set Up.....	16
6.1.1	Odour Emission Rates	16
6.2	Guidance and Standards	17
6.3	Compliance with Guidance	18
6.4	Results	18
7	Summary and Conclusions	19

Approved for Issue



Review of Particulate Matter and Odour Assessments

Michael Bull – Director, Michael Bull and Associates

This report has been prepared by Michael Bull and Associates on behalf of the Client, taking into account the scope of works agreed with the client. Unless otherwise agreed, this document and all other Intellectual Property Rights remain the property of Michael Bull and Associates Ltd.

In the preparation of this report, Michael Bull and Associates Ltd has exercised all reasonable skill and care, taking into account the objectives and the agreed scope of works. Michael Bull and Associates Ltd does not accept any liability in negligence for any matters arising outside of the agreed scope of works.

When issued in electronic format, Michael Bull and Associates Ltd does not accept any responsibility for any unauthorised changes made by others. Unless signed for approval, this report has not been finalised and does not represent an authorised copy of the report.

Michael Bull and Associates Ltd, 16 Mount Pleasant Road, Tunbridge Wells, TN1 1QU, Company No: 13132850

1 Introduction

Michael Bull and Associates Ltd (MBAL) has been commissioned by the Coalition Against Factory Farming to advise on air quality and odour issues concerned with a planning application H23-031-25 to South Holland District Council (SHDC). This application is for “*Provision of new poultry unit & associated works*” at Land At Peartree Hill Road, Whaplode Drove, Spalding PE12 0SL.

The application has been accompanied by an odour impact assessment and an assessment of airborne emissions of particulate matter. Both were prepared by AS Modelling and Data Ltd.

MBAL has been commissioned to undertake the following tasks:

- Review the particulate matter and odour assessment and compare the approach with that suggested by appropriate guidance from the Environment Agency (EA), the Institute of Air Quality Management (IAQM) and other relevant bodies;
- Determine whether the approach taken meets the requirements of the guidance and normal industry custom and practice; and
- Consider whether the results from the assessments suggest that there would be potential significant effects from the proposals.

The Author of this report is Dr Michael Bull; his qualifications and experience are detailed below:

Michael has a BSc in Chemical Engineering from Exeter University and PhD in Public Health Engineering from Imperial College, London. He is a Chartered Engineer, Chartered Scientist and Chartered Environmentalist, a Fellow of the Institute of Air Quality Management, a Member of the Institute of Environmental Sciences and is a corporate member of the Institution of Chemical Engineers. He sat on the council of the Institute of Air Quality Management (IAQM) since its formation until 2018 and was the Vice Chairman of the Institute for 3 years until 2018. Until January 2021, he was a Director of Ove Arup & Partners Ltd and particularly responsible for leading the air quality and odour assessments undertaken by the company over a 24 year period. In January 2021, he set up and became a Director of Michael Bull and Associates Ltd (MBAL), a specialist company providing air quality and odour advice.

He has worked as a professional environmental scientist specialising in air quality and odour for approximately 38 years, having previously conducted research in environmental science for three years. He has contributed to many guidance documents including being a co-author of the RTPi Good Practice Guide on Air Quality and Land Use Planning, a contributing author to the National Society of Clean Air’s Panel guidance regarding Air Quality and Planning and a member of the group that produced the IAQM guide on Air Quality Monitoring during Construction. He was the chair of the working group that produced the IAQM Guidance on the Assessment of Odour for Planning in 2014 and updated in 2018 and was a contributing author to the book, *Designing with Smells*, published by Routledge in 2017. He has also published a paper of particulate matter impacts from poultry housing¹.

Dr Bull has been an advisor on air quality matters on numerous major projects in the UK and overseas, these roles include being HS2’s main air quality lead consultant between 2012 and 2021, lead air quality consultant for Gatwick and Stansted airport, acting as an advisor to Highways

¹ Bull, M. (2008) Investigation of the impact of intensive broiler rearing on local fine particulate matter concentrations, *Water and Environment Journal*, Vol 22(1) p25-31.

England (now National Highways), Transport Scotland and the Welsh Assembly and have provided expert evidence on over 70 occasions for planning appeals, in court and to Parliamentary committees.

2 Air Quality Assessment – Background and Guidance

2.1 European Air Quality Management – Particulate Matter

In 1996, the European Commission published the Air Quality Framework Directive on ambient air quality assessment and management (96/62/EC). This Directive defined the policy framework for twelve air pollutants known to have harmful effects on human health and the environment. Limit values (pollutant concentrations not to be exceeded by a certain date) for each specified pollutant were set through a series of Daughter Directives, including Directive 1999/30/EC (the 1st Daughter Directive) for PM₁₀ amongst other pollutants.

In May 2008, the Directive 2008/50/EC on ambient air quality and cleaner air for Europe came into force. This Directive consolidated the Air Quality Framework Directive and most of the Daughter Directives, made provision for extended compliance deadlines for PM₁₀ and introduced standards for PM_{2.5} concentrations. The Directive was transposed into national legislation in England by the Air Quality Standards 2010 (amended in 2016). The Secretary of State for the Environment has the duty of ensuring compliance with the air quality limit values.

2.2 Air quality standards

Some pollutants have standards expressed as annual average concentrations due to the chronic way in which they affect health or the natural environment (i.e. effects occur after a prolonged period of exposure to elevated concentrations) and others have standards expressed as 24 hour, 1 hour or 15 minute average concentrations due to the acute way in which they affect health or the natural environment (i.e. after a relatively short period of exposure). Some pollutants have standards expressed in terms of both long term and short term concentrations.

In this assessment, the term ‘air quality standard’ has been used to refer to both the UK objectives and European limit values. Table 1 sets out the air quality standards for particulate matter relevant to this study.

Pollutant	Averaging period	Air quality standard
Human health		
Particulate matter (PM ₁₀)	Annual mean	40µg/m ³
	24-hour mean	50µg/m ³ ^[1]
Fine particulate matter (PM _{2.5})	Annual mean	25µg/m ³
^[1] not to be exceeded more than 35 times a year (90.4 th percentile)		

Table 1 Air Quality Standards

2.3 Environment Act 1995

Part IV of the Environment Act 1995 places a duty on the Secretary of State for the Environment to develop, implement and maintain an Air Quality Strategy with the aim of reducing atmospheric emissions and improving air quality. The Air Quality Strategy for England, Scotland, Wales and Northern Ireland provides the framework for ensuring compliance with the air quality limit values based on a combination of international, national and local measures to reduce emissions and improve air quality. This includes the statutory duty, also under Part IV of the Environment Act 1995, for local authorities to undergo a process of local air quality management and declare Air Quality Management Areas (AQMA) where necessary.

2.4 Environment Act 2021

The Environment Act 2021 committed the government to set new targets for PM_{2.5}, this has now been set in the Environmental Targets (Fine Particulate Matter) (England) Regulations 2023 which gives a target for annual mean PM_{2.5} of 10µg/m³ to be met by the year 2040. An interim target is detailed in the Government's Environmental Improvement Plan 2023 of 12µg/m³ to be met by the end of January 2028.

2.5 DEFRA Interim Planning Guidance

Following the introduction of the Regulations detailed in Section 2.5, Defra released interim planning guidance² detailing how the matter should be considered in planning decisions. These state that:

"The purpose of the targets is to improve air quality by reducing levels of PM_{2.5} across the country, therefore improving public health. While achievement of the targets will be assessed at relevant monitoring sites, the targets apply to ambient (outdoor) air throughout England. Applicants and Local Planning Authorities should therefore consider the impact of developments on air quality in all ambient air, whether a monitor is present or not.

These targets require a different approach to that used by applicants and Local Authorities in response to existing air quality legislation.

The new approach moves away from a requirement to assess solely whether a scheme is likely to lead to an exceedance of a legal limit and instead ensures that appropriate mitigation measures are implemented from the design stage, streamlining the process for planning and ensuring the minimum amount of pollution is emitted and that exposure is minimised.

Pending publication of the new guidance, applicants are advised to provide evidence in their planning applications that they have identified key sources of air pollution within their schemes

² <https://uk-air.defra.gov.uk/pm2.5/targets/planning> Accessed 13/6/25

and taken appropriate action to minimise emissions of PM_{2.5} and its precursors as far as is reasonably practicable. If quantitative evidence is not available, a qualitative approach can be taken. This applies to all developments which would normally require an air quality assessment. More detailed assessments are expected for developments which are closer to populations, and those which are likely to have higher emissions”.

2.6 EPUK/IAQM Land-Use Planning & Development Control

The 2017 Land-Use Planning & Development Control guidance document³ produced by Environmental Protection UK (EPUK) and the IAQM provides a framework for professionals operating within the planning system to provide a means of reaching sound decisions, having regard to the air quality implications of development proposals.

Where modelling of pollutant concentrations is carried out, the guidance also provides an approach for describing the scale of impact of changes in pollutant levels. The predicted concentration change is assessed as a percentage of the Air Quality Assessment Level (AQAL) which is the relevant air quality standard for the pollutant. This is then considered alongside the total predicted pollutant concentration as a percentage of the AQAL as shown in Table 2.

Long term average concentration at receptor	% Change in concentration relative to Air Quality Assessment Level (AQAL)			
	1	2-5	6-10	>10
75% or less of AQAL	Negligible	Negligible	Slight	Moderate
76-95% of AQAL	Negligible	Slight	Moderate	Moderate
95-102% of AQAL	Slight	Moderate	Moderate	Substantial
103-109% of AQAL	Moderate	Moderate	Substantial	Substantial
110% or more of AQAL	Moderate	Substantial	Substantial	Substantial

Table 2 EPUK/IAQM Impact Descriptors

However, it should be noted that the IAQM has recognised that this guidance document is now dated⁴ and the focus of air quality assessment is changing (as also indicated in the Defra Interim {Planning Guidance}). A full review of the document is now being carried out and specific reference is made to the methodology for defining the impact descriptors (including the approach detailed in Table 2 above). One of the main reasons that Table 2 is no longer valid is that it is recognised that there are no lower thresholds where health impacts are not observed for many pollutants. Therefore, relating the impacts of pollutants to their air quality standard is no longer a logical

³ EPUK/IAQM, (2017) Land-Use Planning & Development Control: Planning for Air Quality (Version 1.2)

⁴ https://iaqm.co.uk/wp-content/uploads/2025/02/IAQM_Briefing_Land-use_Guidance_25.pdf accessed 29 May 2025

approach for assessment (as also stated in the Defra Interim Guidance) and the focus should be on human health effects.

The World Health Organisation⁵ provides air quality guidelines but also, they summarises the health impacts resulting from exposure to particulate matter. Figure 1 is taken from Figure 3.5 of the WHO document and shows the association between long-term particulate matter exposure and mortality from 41 studies.

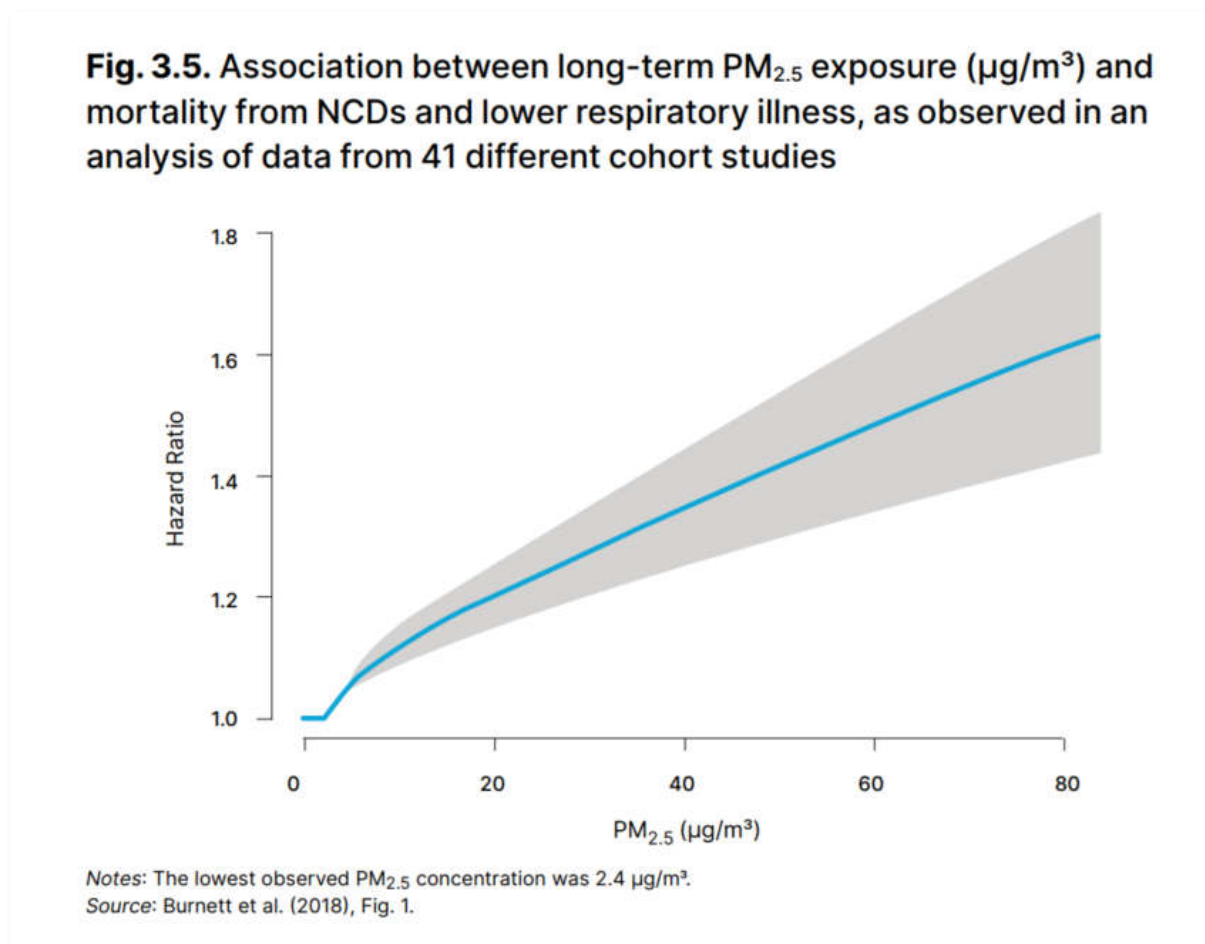


Figure 1 Extract from WHO guideline showing associated between mortality and exposure to PM_{2.5}

The WHO estimate an increase in mortality of 1.06-1.09 per 10µg/m³ increase in exposure to PM_{2.5} and also noted that this increase was higher when PM_{2.5} concentrations were low. It can also be seen from this figure that once concentrations are above around 5µg/m³, an incremental increase in particulate matter concentrations results in the same increase in mortality whatever the initial concentration. This is the reason why the IAQM guidance is now considered not to be appropriate as this is based around compliance with air quality standards and not human health impacts. To place this in context, it is estimated that the exposure to particulate matter in a moderately polluted city will result in a shortening of life expectancy of around 2.2 years⁶.

5 WHO, WHO global air quality guidelines, 2021

6 Pope, C.A. and Dockery, D.W. (2025). Particles of Truth, The MIT Press, Cambridge Massachusetts.

Exposure to particulate matter therefore can result in extremely serious health impacts and, as the Defra Interim planning guidance notes, actions and measures should be taken to reduce exposure to PM_{2.5} and these should be considered in planning decisions.

2.7 Royal College of Physicians – A Breath of Fresh Air

The significant health impacts resulting from exposure to air pollutants is also highlighted in the very recent Royal College of Physicians report “A Breath of Fresh Air” published in June 2025. The report highlights top association between exposure to PM_{2.5} and cardiovascular conditions, asthma, lung cancer and overall life expectancy as well as impacts on conception, pregnancy outcome, respiratory health in children and brain health. It also notes that while action has been taken to reduce emission from some sources, some sectors including agriculture are lagging behind.

2.8 Damage Costs

Emissions of air pollutants result in damage to human health, productivity, wellbeing and the environment. Defra⁷ provide estimates of the monetary impact value of emissions of air pollutants including PM_{2.5}. The costs are provided as a range from low to high, the central damage cost for PM_{2.5} emissions in the agricultural sector is £28,654/tonne emitted.

2.9 deposition

The particulate matter assessment also considers dust deposition. There are no statutory standards for dust deposition in the UK, the IAQM⁸ suggest a level of 200mg/m²/day.

⁷ <https://www.gov.uk/government/publications/assess-the-impact-of-air-quality/air-quality-appraisal-damage-cost-guidance#annex-a> Accessed 11/7/25

⁸ IAQM, Guidance on Monitoring in the Vicinity of Demolition and Construction Sites, October 2018 (version 1.1)

3 Odour Assessment Guidance

3.1 Guidance - Odours

Various guidance documents have been produced in relation to the assessment of odours, the most relevant in terms of planning is guidance from Defra and the Institute of Air Quality Management (IAQM). The Environment Agency also provide guidance in relation to odours which is relevant for an Environmental Permit application, this also contains some useful background information and guidance on good practice for dispersion modelling.

3.1.1 DEFRA Guidance

The Department of Environment, Food and Rural Affairs (Defra) published the document Odour Guidance for Local Authorities in 2010⁹. This document was withdrawn in September 2017 and there is no indication that it will be replaced or updated. Some of the content of this guidance remains useful in providing background information on odours and for providing a framework for the assessment methodology which is discussed below.

The human nose is very sensitive to odour and can detect the presence of some chemicals at very low concentrations that would be difficult for instruments to measure. The environment is rarely “odour free”, even in places that are perceived to be clean such as rural areas or by the sea. Our response to odours depends on four interlinked (sensory) characteristics:

- Hedonic tone: this is a judgement of the relative pleasantness or unpleasantness of an odour made by assessors in an odour panel;
- Quality/Characteristics: this is a qualitative attribute which is expressed in terms of “descriptors”, e.g. “fruity”, “almond”, “fishy”. This can be of use when establishing an odour source from complainants’ descriptions;
- Concentration: is the “amount” of odour present in a sample of air. It can be expressed in terms of parts per million, parts per billion or in mg/m³ of air for a single odorous compound. More usually a mixture of compounds is present, and the concentration of the mixture can be expressed in odour units per cubic metre (ou_E/m³) (see definition below); and
- Intensity: is the magnitude (strength) of perception of an odour (from faint to strong). Intensity increases as concentration increases but the relationship is logarithmic. Increases or decreases in concentration of an odour do not always produce a corresponding proportional change in the odour strength as perceived by the human nose.

The most commonly used attribute is the concentration of odours; this is measured in European odour units (ou_E/m³) using a device known as an olfactometer which presents a sample of odour at different dilutions to a trained panel. The panel is asked whether they are able to detect odour at various concentrations. Once only 50% of the panel can detect the odour it is considered to be at its “Detection Threshold”. The odour concentration at the Detection Threshold is defined to be 1 ou_E/m³. For instance, if an odour sample has been diluted in an olfactometer by a factor of 10,000 to reach the detection threshold, then the concentration of the original sample is 10,000 ou_E/m³.

In the guidance, it is noted that 5 ou_E/m³ would be considered to be a ‘faint’ odour whilst 10 ou_E/m³ would be considered a ‘distinct’ odour. Generally, an average person would be able to recognise the source of an odour at about 3 ou_E/m³, although this can depend on the relative offensiveness of the odour. Background odour levels can be some 5-60 ou_E/m³ or more.

⁹ Defra, Odour Guidance for Local Authorities, March 2010 (withdrawn September 2017).

The guidance considers that the following factors are the main factors to consider when assessing the acceptability of odours:

- Frequency of the odour;
- Intensity of the odour;
- Duration of exposure to the odour;
- Offensiveness of the odour; and
- Tolerance and expectation of the exposed subjects.

These are then placed within a framework known as the FIDOL factors as summarised in Table 1 to assist Environmental Health Practitioners determine if a statutory nuisance exists.

Factor	Factors determining Statutory Nuisance
FREQUENCY (How often an individual is exposed to odour)	Frequency (How often an individual is exposed to odour)
INTENSITY (The perceived strength of the odour, proportional to \log_{10} concentration)	Level of odour
DURATION (The length of a particular odour event or episode. Duration of exposure to the odour)	Duration
OFFENSIVENESS (relative)/character (Offensiveness is a mixture of odour character and hedonic tone at a given odour concentration/intensity)	Type of odour
LOCATION (The type of land use and nature of human activities in the vicinity of an odour source. Tolerance and expectation of the receptor.)	The characteristics of the neighbourhood where the odour occurs The sensitivity of the complainant

Table 3 DEFRA Odour FIDOL Factors

Some other guidance refers to these as FIDOR factors (where the R relates to “receptors”).

3.1.2 IAQM Guidance

The Institute of Air Quality Management (IAQM) produced guidance in 2014 and was updated in 2018¹⁰ with the specific intention to provide advice for “assessing odour impacts for planning purposes”. It provides details of various assessment techniques noting that each has its own strengths and weaknesses.

The guidance states that dispersion modelling is a useful tool for assessments, particularly for assessing future odorous development. However, it also notes that dispersion modelling is not suitable for intermittent and fugitive sources and therefore the model results may not give a complete picture of the odour risk for a site. It suggests that, where possible, odour emissions rates are measured, and this will “*add certainty to the assessment*”. Where library data is used the guidance states “Where “*standard*” data are used, the source must be clearly noted and it should be demonstrated that the information is likely to be a reasonable representation of odour emission rates on the study site”.

The modelling will provide predicted concentrations ($\text{ou}_\text{E}/\text{m}^3$) as a 98th percentile of 1-hour means. The guidance recommends that in terms of comparing predicted concentrations with odour assessment criteria, practitioners should observe from the various scientific studies, case law and practical examples of the investigation of odour annoyance cases and then determine an appropriate criterion. This criterion could lie somewhere in the range of 1 to 10 $\text{ou}_\text{E}/\text{m}^3$ as a 98th percentile of hourly mean odour concentrations.

It is very important to note that the odour benchmarks are based on a modelled statistical value – the 98th percentile of hourly means. This is a very different parameter to the odour levels discussed in section 3.1.1 which refer to how the nose detects odours over short periods (often a few seconds) and the two parameters are not comparable.

3.1.3 Environment Agency H4 Guidance

The Environment Agency H4 odour is the main source of the odour standards generally applied to assess the significance of dispersion modelling results. While the H4 document itself does not detail the justification for the proposed odour standards, these have been published elsewhere¹¹. The odour benchmarks proposed were derived from studies that examined the relationship between the percentage of the population reported to be “annoyed” by odours from pig farming with predicted odour concentrations from odour modelling. The percentage of the population reported to be annoyed was derived from community surveys.

The H4 document provides the following odour benchmarks:

- 1.5 $\text{ou}_\text{E}/\text{m}^3$ for most offensive odours;
- 3 $\text{ou}_\text{E}/\text{m}^3$ for moderately offensive odours; and
- 6 $\text{ou}_\text{E}/\text{m}^3$ for less offensive odours.

The guidance states that exposures above these benchmark levels indicates the likelihood of unacceptable odour pollution. H4 provides some guidance on the classification of the offensiveness of odours, odours from pig rearing clearly are defined as moderately offensive.

¹⁰ Bull M, IAQM, Guidance on the assessment of odour for planning, 2018 update

¹¹ Environment Agency, Assessment of Community Response to Odorous Emissions, R&D Technical Report p4-095/TR

However, in the background research on which these benchmarks were based, it is clear that the offensiveness of the odours was not included in the research. What was examined was whether there was an expectation of odours in the area and whether the exposed population had an economic interest in pig farming. The $1.5 \text{ ou}_E/\text{m}^3$ benchmark is based on a population where pig odours are not expected in the area (known as non-concentration areas in the research), and the $3 \text{ ou}_E/\text{m}^3$ benchmark on the basis that odours would be expected in the area as there are other farms in the area (known as concentration areas). In both cases, the benchmark is set at a level where 10% of the community was reported to be “annoyed” by the odours. This is detailed in the Environment Agency research report⁵ which provides the following figure (reproduced as Figure 2) relating reported annoyance with the predicted 98th percentile of hourly means (note that this figure is based on Dutch odour units, 2 Dutch odour units = $1 \text{ ou}_E/\text{m}^3$).

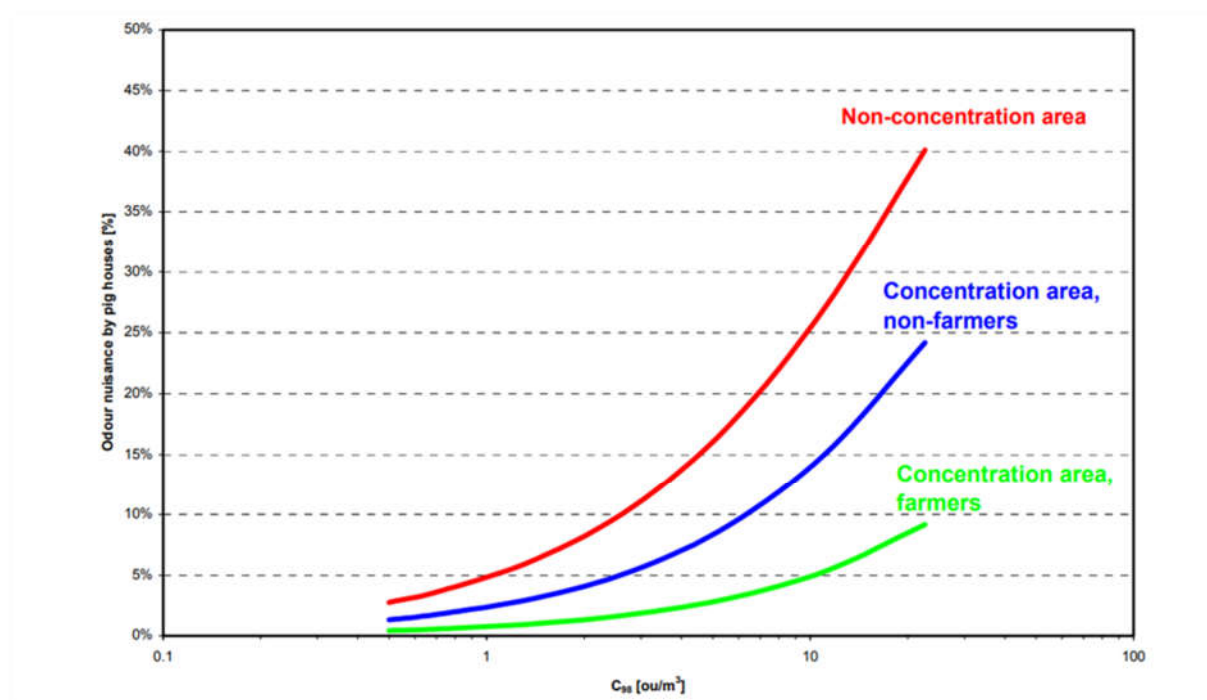


Figure 2 Reported relationship between observed annoyance and predicted odour concentrations

It can be seen from this figure, that even if the $3 \text{ ou}_E/\text{m}^3$ was just met (equivalent to 6 Dutch Odour units) then between 10 and 17% of the population would still be annoyed by the odours (depending on its location).

4 The Proposed Development and Surroundings

The application is for provision of 12 poultry houses each measuring 80 by 360 feet and associated infrastructure on land off Pear Tree Hill Road, Whaplode Drove. The sheds will be used for broiler rearing with approximately 552,000 places. However, this stocking level appears to be determined by the customer requirements and the Environmental Statement (ES) (para 1.1.7) states that there will be up to 690,000 bird places. As both the odour and particulate matter assessments are based on the lower bird numbers, it is clearly important to limit the maximum number of birds at the site otherwise the assessments are invalid as they are based on the wrong number of birds.

Chicks would be placed in the sheds at one day old, 35% of the birds would be removed at day 30 and the remainder at day 42. There will then be a period of 7-10 days at the end of the cycle for cleanout and preparation for the next crop.

The sheds will be mainly ventilated by roof mounted fans, the ES (section 5.1.7) states that these will be “higher than 5.5 metres above ground level”. There are also gable end fans for use in warmer weather. The elevations provided for the sheds indicate a ridge height of just over 6m from ground level but the height of the vents does not appear to be stated (although the odour and particulate matter assessment assume 7m above ground level).

Given the number of birds proposed, the site would require an Environmental Permit from the Environment Agency. The ES states in para 2.2 that the EA will only grant a permit if they believe that significant pollution will not be caused. However, it should be noted that in a recent consultation response, the EA has confirmed that they do not review odour impact assessments as part of planning or planning consultations (see Appendix A). Rather they recommend that odour is prevented, or where not possible, minimised through the application of Best Available Techniques and document in an Odour Management Plan. It is therefore wholly appropriate that the planning authority consider whether the odour assessment provided is robust and results in acceptable impacts as clearly this will not be carried out by the EA.

The proposed development is located in a rural area around 5km southeast of Spalding. The closest residential receptors are around 400m from the proposed development

Most of the area appears to be used for agricultural purposes.

5 Review of Particulate Matter Assessment

The air quality assessment was prepared by AS Modelling and Data Ltd and is an Appendix to the ES. The assessment has examined PM₁₀ impacts during operation of the proposed development. Given the increasing emphasis on finer particulate matter, the omission of an PM_{2.5} assessment is of concern and without this, the requirements of the Defra interim planning guidance cannot be met.

5.1 Baseline conditions

Information on baseline air quality has been taken from reputable sources that are typically used in air quality assessments. As would be expected, the baseline air quality in this rural area shows that pollutants meet the relevant air quality standards.

5.2 Operational Impacts

The operational impact assessment has been based around dispersion modelling which is the expected approach for this type of assessment. The ADMS model has been used for the assessment which is a widely used model and accepted by all UK regulatory authorities. The model requires input data detailing the mass emission rates of pollutants, the source characteristics (e.g. stack height and diameter), meteorological data, and information on building and terrain heights. These are considered below.

The model has been set up with point sources to represent the roof mounted fans and volume sources to represent the gable end fans, these are both appropriate approaches.

5.2.1 Pollutant Emission Rates

Pollutant emission rates are a key input; the predicted concentrations will be directly proportional to the emission rate selected and consequently any error in the emission rates used will result in an incorrect assessment of the air quality impacts. The emission rate used is 0.1kg/bird/year which has been sourced from an Environment Agency guidance¹² and consequently is a reasonable source for this information. Particle size distribution and mass fraction are stated to have been derived from Defra research – the reference is not directly provided but is assumed to be the Defra document on poultry dust properties listed in the references.

The report does not provide an estimate of the annual PM_{2.5} emissions but these can be readily estimated using the number of birds (552,000), the particulate matter emission rate of 0.1 kg/bird/year and the PM_{2.5} fraction of 0.42 resulting in 23.18 tonnes/year.

5.2.2 Building Effects

Building structures can affect the initial dispersion of pollutants and the model used can take this into account. Building dimensions are included as model input to allow for modelling of building downwash for the poultry houses. The data used in the model is provided in line with good practice.

5.2.3 Meteorological and Terrain Data

The meteorological data used for the modelling is so-called NWP data which is good quality data for this type of assessment. This is the closest site and has good data capture and would be suitable for this assessment. Four years of data are used and this is consistent with the IAQM guidance that suggests between 3-5 years of data are used.

¹² <https://www.gov.uk/government/publications/pollution-inventory-reporting-guidance-notes/intensive-farming-pollution-inventory-reporting> - accessed 13/6/25

Terrain data has not been used but given the nature of the area, this is not necessary.

5.2.4 Other Model Options

The predicted concentrations are dependent on the selected surface roughness, the effect of surface roughness on the predicted concentrations depends on the type of source being modelled. For elevated point sources, increasing the surface roughness would generally be expected to result in higher predicted concentrations closer to the source as the plume will expand more quickly bringing pollutants to ground level nearer to the source although this effect will be related to the distance from the source. For the volume sources used, increasing the surface roughness will result in a decrease in predicted concentrations.

In this assessment, a surface terrain file has been created based on information in the Defra Living Landscapes land use database. This is an unusual approach frequently applied by AS Modelling and Data Ltd but it could result in a reasonable definition of the surface roughness of the area if appropriately applied.

Further explanation of the approach is needed as the database does not directly contain surface roughness information, rather it contains a habitat classification based on those in UK Biodiversity Action Plan (UKBAP) habitat classification framework¹³. An explanation is needed to detail how each of the habitat classifications is used to determine the surface roughness. The report details that the resulting average surface roughness over the modelling domain is 0.161, this is a relatively low value for an agricultural area and potentially results in lower predicted concentrations. As such, this would be an appropriate factor to examine in sensitivity testing (see following section).

The model has been set up to produce the 98th percentile of hourly means and the model run for each of the five years of data which is consistent with guidance.

5.2.5 Sensitivity Testing

The EA guidance on dispersion modelling¹⁴ details requirements for sensitivity testing, this states that

“You must show how the model is affected by:

- ***meteorological data, such as different observed data, NWP data, data sources, inter-annual variation and surface characteristics;***
- ***emission parameters, such as stack parameters, substance release rates and different plant operating scenarios;***
- ***the receptor grid resolution;***
- ***treatment of terrain and buildings;***
- ***special model treatments;***
- ***alternative modelling software, if appropriate”.***

¹³ <https://publications.naturalengland.org.uk/publication/5260859937652736> accessed 16/6/25

¹⁴ <https://www.gov.uk/guidance/environmental-permitting-air-dispersion-modelling-reports#carry-out-sensitivity-analysis> Accessed 2 June 2025

The assessment does not provide a specific response to this requirement. There is consideration of inter-year variation with the met data.

This type of sensitivity study is important as it allows an assessment of the uncertainties in the assessment. If it is found that the impacts are acceptable for most options examined in a sensitivity test, then there can be more confidence in the conclusion that the development is acceptable. If, however, acceptable impacts are only found under a narrow range of input options, then there can be less confidence in the conclusions.

5.2.6 Results – Air Quality

The results of the modelling of PM₁₀ are produced in Tables 7 and 8 of the assessment and the results for dust deposition in Table 9.

The predicted increases in PM₁₀ levels are very high, indeed the increase of 5.5 µg/m³ predicted at Receptor 1 is one of the highest predicted increases ever seen by the author in an assessment report where typical increases are in the range 0.1–0.2 µg/m³ at worse. The scale of the predicted increases can be compared with those from major transport applications such as the Gatwick Northern runway DCO application (maximum increase in annual mean concentrations of 0.3 µg/m³). The scale of impact predicted at nearby residential properties is similar to those seen from extremely large transport infrastructure applications. The predicted increase near to the site and at the workers' residences are likely to result in health impacts that are very significant and highlight the deficiencies in the now out of date IAQM approach. The predicted increase of 5.5 µg/m³ as an annual mean would result in an increase in mortality rates of around 3% when allied to the overall population (based on the information in Figure 1 and taking the PM_{2.5} fraction of 67%). The predicted increase of 3.16 µg/m³ at the proposed workers' accommodation would result in an increase in mortality of approximately 1.7% to the general population.

Examining the impacts of existing residential receptors, the potential increase in mortality would be around 0.2%.

5.3 Damage Costs

As noted in Section 2.8 the damage costs from emissions of air pollutants can be estimated using data from Defra. Several local authorities require damage cost calculations to be made, for instance those in Sussex¹⁵ require the costs over five years to be calculated and mitigation provided to this value. If this approach was applied here, then the five-year damage costs would be £3,321,572. This again illustrates the significant PM_{2.5} emissions from the proposal and the need for mitigation given the damage caused by these emissions.

5.4 Overall Conclusions – PM_{2.5}

These levels of impact and damage costs cannot be dismissed as insignificant and highlight the need to follow the advice in the Defra interim planning guidance for PM_{2.5} that states: “applicants are advised to provide evidence in their planning applications that they have identified key sources of air pollution within their schemes and taken appropriate action to minimise emissions of PM_{2.5} and its precursors as far as is reasonably practicable”. In this application, no mitigation is proposed and no attempts have been made to minimise the impacts. Given the potential health impacts, this is a significant omission and results in quantifiable health impacts at nearby receptors.

¹⁵ Sussex-Air Air Quality Partnership - Air quality and emissions mitigation guidance for Sussex (2021)

6 Operational Impacts – Process Emissions – Odour

Odour impacts during operation have been assessed using dispersion modelling using the same dispersion model and approach as discussed in Section 5.4. Therefore, all the general comments made for the modelling approach made in Section 5.4 apply to the odour assessment with the exception of the calculation of emission rates.

It should be reiterated that the EA does not generally review odour modelling reports and therefore it is completely appropriate that the planning authority scrutinise the report during the planning application process.

6.1 Model Selection and Set Up

The odour assessment report has used the ADMS 6 model and would have been the current version at the time of the assessment. This is a well-established model which is widely used for odour assessments in the UK and is considered to be a suitable tool for this study. The model requires information on the odour emission sources, meteorological data, terrain data (where complex terrain is an issue) and selection of general model options. As the model has been set up in generally the same manner as the odour assessment, the same comments made in Section 5 on general model options would also apply to the odour assessment and these comments have not been repeated in this section.

6.1.1 Odour Emission Rates

The odour emissions have been calculated by assuming that odour concentrations in the houses are 300 ou_E/m³ at day 1, increase to 700 ou_E/m³ at day 16, 1800 ou_E/m³ at day 30 and “approximately” 2,300 ou_E/m³ at day 34. These figures were obtained by a paper published by Robertson¹⁶ for a poultry house with 34,000 birds. However, the Robertson only reports odour concentrations “around day 16” as 600-800 ou_E/m³ and 1300-2300 ou_E/m³ around day 30. The assessment has used the average of the range quoted, not the worse case and the figures used for the start of the cycle (300 ou_E/m³) and day 34 (2,300 ou_E/m³) are not quoted in the paper.

It should be noted that, higher odour concentrations have been measured in an operational chicken house housing 44,700 birds (i.e. nearly the same size as this proposal) in an Environment Agency (EA) research study¹⁷. They measured odour concentrations from just under 3,000 – 4,179 ou_E/m³ (in one test) and from just over 3,000-3,641 ou_E/m³ (in a second test) at day 29 of the rearing cycle. The aim of this study was to “to inform modelling studies that will be undertaken by the Air Quality Modelling and Assessment Unit (AQMAU)”. The figures in the Environment Agency study are in some cases more than 100% higher than those reported in the Robertson study. However, other odour monitoring studies reported in poultry house odour assessments indicate that concentrations are in a similar range to those detailed in the Robertson paper¹⁸.

This illustrates the potential range in values that can be found in poultry houses, all studies have reputable authors and no study could be considered to be “better” than another. However, if the EA study figures were used in the same manner to calculate the odour emission rates, the resulting predicted odour concentrations would be more than double those predicted in the report and would

¹⁶ Robertson, A.P. et al, (2002), Commercial-scale Studies of the Effect of Broiler-protein Intake on Aerial Pollutant Emissions, Biosystems Engineering, 82 (2), 217–225.

¹⁷ Environment Agency, (2012), Odour Assessment of an Intensive Livestock Facility, ISBN: 978-1-84911-268-0

¹⁸ Air Spectrum Environmental Limited (October 2022). Odour & ammonia emissions monitoring assessment. Hollins lane Poultry facility. International energy crops Limited. Report reference: JL 24242 v1.0

result in a predicted exceedance of the adopted standard of $3.0 \text{ ou}_E/\text{m}^3$ at several of the receptors (although the $3 \text{ ou}_E/\text{m}^3$ is exceeded at two receptors).

This uncertainty can be addressed by providing a full review of information available. For instance, MBAL maintain a database of odour emission rates that includes many values for emissions from various processes. Our current practice, when carrying out modelling assessments, is to use a 70th percentile value for the emissions rate taken from the available information.

The odour emission rates are calculated in the applicant's report for each hour of the year by multiplying the ventilation rate by the internal odour concentration. The ventilation rate is based on the day of the crop cycle and the external temperature. Lower ventilation rates will occur at the beginning of the rearing cycle and/or in cooler weather. At high ventilation rates an adjustment is made to the assumed concentrations, it is stated that *"if the calculated ventilation rate exceeds that required to replace the volume of air in the house every 5 minutes, internal concentrations are reduced (by a factor of the square root of 7.5 times the shed volume/divided by the ventilation rate as an hourly figure)"*. This adjustment reduces the odour emission rate (and hence the odour impact) at higher ventilation rates. There is no supporting justification for the manner in which this adjustment is made in the applicant's report. MBAL has frequently noted this in similar reviews of AS Modelling and Data Ltd.'s reports and the data to support this adjustment has not been made publicly available.

6.2 Guidance and Standards

Two sources for odour standards are quoted, the Environment Agency H4 guidance and a study carried out by UK Water Industry Research (UKWIR) on the relationship between complaints and predicted odour concentrations. While the UKWIR study is described as "in depth" in the dispersion modelling reports, the information provided in the UKWIR report amounts to less than one page of a 260 page report and gives no detail regarding the methodology used or the sites studied. In any event, complaints are not the same as annoyance and a far smaller proportion of the population exposed to annoying levels of odours will complain compared with those who are annoyed.

The H4 document is the main source of odour standards (known as benchmarks) used in assessments and the value of $3 \text{ ou}_E/\text{m}^3$ quoted (as a 98th percentile) is the most relevant for poultry house odours. The H4 standards are based on annoyance as measured by social surveys and the $3 \text{ ou}_E/\text{m}^3$ standard is the level where 10% of a population where odours are a common feature of the local environment will report being "annoyed" by the odours (although see earlier explanation that the proportion could be higher depending on the observers' expectations of the area).

H4 also sets other requirements for modelling studies:

"Irrespective of the model applied, sufficient information should be supplied to enable the model to be audited."

A sensitivity analysis, to enable the overall uncertainties to be understood, should also be provided including:

- ***likely uncertainties in the source term, including a consideration of fugitive emissions;***
- ***the degree to which the emissions are likely to be steady or fluctuating and the impact of this on the model chosen;***
- ***likely uncertainties associated with the meteorological data;***
- ***plausible worst case scenarios;***

These uncertainties should be acknowledged in consideration of the isopleths".

The need for a sensitivity analysis and acknowledgement of the uncertainties in the source term have been noted earlier but this has not been provided.

The report has not used the IAQM guidance for the assessment of odours for planning. This provides a framework for determining whether there is a significant effect. This is important as the assessment has only considered whether the predicted odour concentrations exceed the Environment Agency benchmarks. However, the IAQM guidance notes that a significant effect can occur for concentrations lower than the benchmark for some types of odours – this is a significant omission from the ES. It is also a surprising omission given that the particulate matter assessment by the same authors does provide an assessment of significance based on IAQM guidance.

6.3 Compliance with Guidance

The assessment provided does not meet the full requirements of either the Environment Agency H4 guidance nor the IAQM guidance on the assessment of odours for planning. Sensitivity testing is not provided nor are full details of the input data provided; this is not compliant with the EA requirements for dispersion modelling. The main areas of non-compliance with H4 and the IAQM guidance are:

- The derivation of odour emissions is limited and based on a single study of odour concentrations in poultry houses. The use of another dataset detailed in an Environment Agency research report would result in concentrations that are more than double those predicted. Further justification of the emission rates is therefore required;
- No justification or supporting evidence is provided for adjustments made to odour emission rates at high ventilation rates. Without such evidence this has to be considered an arbitrary adjustment that has reduced the overall impact of the proposals;
- No sensitivity testing has been carried out to establish the likely uncertainties in the assessment as required by the H4 guidance; and
- No assessment of significance following an established framework such as in the IAQM guidance.

6.4 Results

The results of the assessment are provided in Table 2 of the report and as a contour plot in Figure 7. The results show that the predicted concentration exceed the level of $3 \text{ ou}_E/\text{m}^3$ suggested in the EA H4 guidance where “unacceptable odour “ would be present at Pear Tree Hill Farm and are in the range of $2.4 - 2.9 \text{ ou}_E/\text{m}^3$ at four other receptors. Pear Tree Farm would be unlikely to be considered to be a highly sensitive receptor given its connection with the proposal development. However, the other receptors nearby would be considered to be highly sensitive. This illustrates the value of undertaking sensitivity testing to understand the range in plausible values that could be predicted and consequently how much confidence there would be that unacceptable odours would not occur. Note that should the number of birds increase to 690,000 (the capacity stated in the ES), then the assessment would predict an exceedance of the $3 \text{ ou}_E/\text{m}^3$ benchmark at nearby receptors.

Note that the concentrations of $2.4-2.9 \text{ ou}_E/\text{m}^3$ would result in around 15% of the population exposed being “annoyed” by odours with a resulting risk of complaint.

Given the predicted values being close to the standard, the lack of a sensitivity study further mitigation should be considered. As the same conclusion was reached in the review of the particulate matter assessment, one solution would be a scrubber that would both reduce particulate matter and odour emissions from the proposals.

7 Summary and Conclusions

MBAL has reviewed the assessments of odour and particulate matter submitted with the ES for the proposed development at Pear Tree Hill. The assessment of particulate matter predicts increases in concentrations of PM₁₀ that are surprisingly high and up to fifteen times greater than those predicted in assessments of very large transport infrastructure at airports. The highest predicted PM₁₀ concentrations (when corrected for PM_{2.5}) would result in an increase in exposure that would be associated with a 3% increase in mortality at the worst affected receptor and around 1.7% at the proposed workers accommodation. This level of impact is not considered to be insignificant. The damage costs of these emissions over 5 years are estimated as over £3 million.

The proposed development contains no measures designed to reduce the emissions of PM_{2.5} and results in increased exposure to this pollutant for the local population. It is therefore not considered to have complied with the requirements of the Defra interim planning guidance relating to PM_{2.5}.

The odour assessment predicts concentrations that are close to the benchmark in the Environment Agency H4 guidance where unacceptable odour levels would arise. The report has also not met some of the requirements of the H4 guidance for modelling particularly as it has not provided a sensitivity study nor acknowledged the potential uncertainties. Given that the predicted concentrations at residential properties are within 0.1 ou_E/m³ of the standard of 3.0 ou_E/m³ and given the uncertainties in the modelling that have not been appropriately tested in a sensitivity study provided by the applicant. Such a study would provide more information on the level of confidence that the appropriate benchmarks would not be breached. However, given the very marginal compliance with standards reported, there is a need for further mitigation to reduce the risk of unacceptable odour exposure.

As currently planned, the proposed development results in increases in concentrations of fine particulate matter that would have significant impacts on human health at nearby receptors and odour levels that would potentially exceed Environment Agency thresholds.

Appendix A – Extract from Environment Agency Consultation Response

DRAFT NOTES



Clerk/RFO: Jan Hearsey
Deputy Clerk: Becky Brothwell

Coubro Chambers, 11 West End
Holbeach, PE12 7LW
01406 426739
clerk@holbeachpc.com
holbeach.parish.lincolnshire.gov.uk
@HolbeachParishCouncil



Minutes of the meeting of Holbeach Parish Council Planning, Properties, Emergency Planning & Speeding Committee on Wednesday 23rd July 2025 at 14:00 at Coubro Chambers, 11 West End

Those present :

Chair : Cllr P Howden

Councillors : Cllr S Ball, Cllr J Bennett-Collins

* Attended remotely

Open Meeting opened at:

14:06

Public Attended: Cllr I Hutchison & Cllr S Hutchinson & 2 Public Members

PP25/6-023 Apologies

Apologies have been received from Cllr T Wiltshire were received and accepted under the delegated powers of the Clerk.

PP25/6-024 Declarations of Interest

TO RECEIVE DECLARATIONS OF INTEREST UNDER THE LOCALISM ACT 2011
None received.

PP25/6-025 Minutes

TO APPROVE AS A CORRECT RECORD THE NOTES OF THE MEETING OF THE COUNCIL HELD ON 19th JUNE 2025

It was proposed, seconded and

Resolved: That the official minutes of the meetings of the Council held on 19th June 2025 be approved as a correct record and signed by the Chair.

<https://holbeach.parish.lincolnshire.gov.uk/downloads/file/1612/2025-6-02-ppes-draft-notes-19th-june-2025>

PP25/6-026 Clerk's report

1. To receive a report from the Clerk.
No report.

PP25/6-027 Planning applications

1. To **resolve to agree** the planning responses:

It was proposed, seconded and
Resolved:

58A SPALDING ROAD HOLBEACH

H09-0534-25 Proposed Shed and Car Port
Fully Support - OWPC51561

Land off Nutts Lane Holbeach St Johns

H09-0557-25 Erection of new innovative self-build dwelling and detached annexe building to provide architectural studio

Objection: The proposed development lies within designated local countryside and is deemed contrary to the adopted Local Plan policies, which aim to safeguard rural character and prevent inappropriate expansion beyond defined settlement boundaries. OWPC51562

Land between 4 & 5 Star Lane Holbeach Bank

H09-0555-25 Erection of Self - Build dwelling & garage
Fully Support OWPC51563

34 BOSTON ROAD SOUTH HOLBEACH

H09-0563-25 Change of use of part of existing car wash to restaurant (Use Class E) and take away (Sui Generis) with installation of extraction flue system, new shop front and rear single storey extension

Objection: The proposed change of use from car wash to restaurant (Use Class E) and takeaway (Sui Generis), along with associated structural alterations, represents a town centre function being introduced outside the designated town centre boundary. This raises concerns over spatial planning principles, undermines the integrity of the Local Plan, and may adversely impact the vitality of the established retail core. OWPC51565

Carter's Farm Oxcroft Bank

H23-0615-25 Erection of a single dwelling with attached triple garages involving the demolition of existing agricultural buildings & follows a Part Q Approval under reference H23-0766-24
Fully Support OWPC51566

28 BALMORAL WAY HOLBEACH

H09-0627-25 Proposed extension to dwelling to form bedroom and en suite above former garage.
Fully Support OWPC51567

98 Dog Drove North Holbeach Drove

H09-0596-25 Demolition of existing agricultural building benefiting from Class Q approval (Ref: H09-0420-24) and erection of two storey dwelling and attached associated garage block.
Fully Support OWPC51568

The Poplars Chapel Drove

H09-0473-25 Demolition of existing derelict dwelling & erection of detached 3 bed self build dwelling.
Fully Support OWPC51569

Land off Battlefields Lane South Holbeach

H09-0442-25 Hybrid Application for 158 Dwellings Comprising:- Full Application for the Erection of 62 Dwellings, Associated Landscaping and Infrastructure and

Outline Application for the Erection of Approximately 96 Dwellings (Some Matters Reserved)

Objection: Holbeach Parish Council objects to the proposed hybrid application comprising a full application for 62 dwellings and an outline application for approximately 96 additional dwellings, due to concerns over the capacity of existing local infrastructure. This includes pressure on primary healthcare services (e.g., doctors and dentists), educational facilities, and the loss of valued green areas that contribute to residents' well-being.

The Council considers that the scale of the proposal will place undue strain on already stretched local services. To mitigate the impact, Holbeach Parish Council formally requests that a Section 106 contribution be secured to support local infrastructure enhancements. The Council will contact the Planning Department to initiate discussions on funding allocation that reflects the scale and implications of the proposed development. OWPC51570

Building Adj. Pentland House Chapel Drove

H09-0632-25 Proposed demolition of existing agricultural building and erection of 2 two storey dwellings with attached double garages.

Fully Support OWPC51571

10 Sluice Road Holbeach Clough

H09-0686-25 Use of site for wood storage & distribution business - Retrospective
Holbeach Parish Council reviewed the retrospective application for use of the site for wood storage and distribution and has no comment to submit. OWPC51572

PP25/6-028

Speeding

1. To **resolve to agree** the SID locations for August.

It was proposed, seconded and

Resolved: The Committee resolved to approve the SID locations for August as listed, and to proceed with deployment.

- Fen Road, outside Tudor Lodge
- Wignals Gate

2. To receive an update for 2 solar-powered Speed Indicator Devices.

Members received an update regarding the acquisition of two solar-powered Speed Indicator Devices (SIDs).

It was noted that the Deputy Clerk will proceed with the purchase of the units.

The Committee resolved to receive the update and requested that the item be placed on the next agenda for further discussion and confirmation of installation plans

3. To receive an update for the results of a recent Archer Survey on Barrington Gate.

Members expected to receive an update on the results of the recent Archer Survey conducted on Barrington.

It was noted that no update was available at this time.

The Committee resolved to defer the item and requested that it be placed on the next agenda once results are available.

4. To review and **resolve to agree** the way forward regarding speed reduction at Further Old Gate.

It was proposed, seconded and

Resolved: Members reviewed concerns regarding vehicle speeds along Further Old Gate and discussed potential measures to improve road safety.

Following consideration, it was agreed to:

- Write to Lincolnshire County Council (LCC) Highways to request a review of the current speed limit and explore options for reduction.
- Request an Archer Survey to collect traffic speed and volume data to support the case.

The Committee resolved to write to LCC Highways regarding the speed limit on Further Old Gate and to request an Archer Survey to inform next steps.

5. To review and **resolve to agree** updating the transport strategy report.

It was proposed, seconded and

Resolved: Members reviewed the current Transport Strategy Report and discussed the need to update its priorities and recommendations, with a focus on:

- Safe walking routes
- Safe cycle routes

It was agreed that a meeting with Cllr Thomas Sneath should be requested to discuss collaborative approaches and local priorities.

The Committee resolved to update the Transport Strategy Report, incorporating proposals for safe walking and cycling routes, and to request a meeting with Cllr Thomas Sneath to support the development of the revised strategy.

PP25/6-029

Properties

1. To **resolve to agree** to allow a tenant to have a therapy dog.

It was proposed, seconded and

Resolved: Members considered a request from a tenant to keep a therapy dog on the premises.

It was noted that the lease be reviewed to establish if pets are excluded, and that consultation with other tenants would be necessary to ensure communal agreement and welfare considerations.

The Committee resolved to agree in principle to the tenant's request to keep a therapy dog, subject to:

- Review of the lease specification regarding pet restrictions
- Consultation with other tenants to ensure no objections and to maintain harmony within the property

2. To **resolve to agree** to allow a tenant to use a sofa gifted to Holbeach Parish Council.

It was proposed, seconded and

Resolved: Members considered a request for a tenant to use a sofa gifted to Holbeach Parish Council.

Following discussion, it was agreed that the sofa be formally gifted to the tenant.

The Committee resolved to gift the sofa to the tenant, acknowledging its suitability and the Council's willingness to support tenant comfort.

3. To **resolve to agree** the way forward with windows at 4a High Street.

It was proposed, seconded and

Resolved: Members discussed the condition of the windows and fire exit at 4a High Street, and considered options for repair and improvement.

It was agreed that:

- Secondary glazing quotes will be obtained for both the windows and fire exit
- Existing windows will be repaired, sealed, and painted
- Cllr I Hutchinson will provide details of suppliers and repair specifications
- It was noted that planning permission is not required for the proposed repair works

The Committee resolved to proceed with obtaining quotes for secondary glazing, and to repair the existing windows and fire exit as specified. Cllr I Hutchinson will circulate supplier details to support next steps.

PP25/6-030 Meetings

1. The next meeting date for PPES Committee is Wednesday 20th August 2025 at 14:00.

PP25/6-031 Budgets

1. To review current budgets and spends.

Members reviewed the current budgets and expenditure, noting that the budget had been structured to reflect the move to Park Bungalow. It was agreed that further clarity is needed regarding budget allocations for Coubro Chambers, to ensure accurate financial planning and resource distribution.

The Committee resolved to review and clarify budget provisions relating to Coubro Chambers, and to ensure that all spending aligns with the operational transition to Park Bungalow.

Open Meeting closed at:

15:06

Closed meeting opened at:

15:11

Closed Session

It was resolved to agree to exclude the press and public under the Public Bodies (Admission to Meeting) Act 1960 due to the confidential nature of the Business to be transacted

PP25/6-032 Council Properties

1. To review and **resolve to agree** lease extensions on tenants.

It was proposed, seconded and

Resolved: Deputy Clerk to obtain at quotes for legal services relating to lease drafting.

and to send copies of existing lease agreements to prospective legal representatives for reference. Quotes to be reviewed at the next meeting or via delegated authority if time-sensitive.

Closed Meeting closed at:

15:30

Chair signature

Date

To the South Holland Planning Committee:

As a resident of this district council, I write this letter in strong objection to Holbeach Poultry Ltd. application H23-0313-25 to build 12 poultry houses and keep 552,120 birds (690,000 permitted) at Pear Tree Hill Road, Whaplode Drove, Spalding PE12 0SL.

I believe that there are flaws and misleading statements which are intended to justify the need or benefit to this application which are untrue. All calculations with regard to climate change, environmental health and human health indicate that mega farms such as this proposal have a negative effect in each individual area and collectively.

I urgently call on the planning committee to commission an independent and expert review of the environmental statement, including of the odour and air quality assessments to identify failings. The application will not meet the aims of the National Planning Policy Framework. I object on amenity, public health, environmental, and animal welfare grounds, as identified below:

Amenity

It is well established that intensive livestock causes odours, air pollution, dust, and flies which are unacceptable to residents. I reference one example which gained national media attention for such problems in Westhall, Suffolk. During the worst months, residents were forced to sleep under fly nets. These issues only began occurring when this new facility was opened in 2022. It too would have been built to 'Best Available Techniques' and is far far smaller than this mega farm application, which could consequently have a far greater impact! Ref. Daily Mail, news article 13310761 dated 16th April 2024.

Although the application documents indicate a customer contract for lower intensity stocking, this Intensive Poultry Unit (IPU) would be permitted to keep up to 4,830,000 birds per year and all impacts need to be shown in worst case scenario.

The extremely narrow road which accesses the site will not have been designed for neither the weight or volume of HGV traffic which this proposal will create. Even without visiting the site, Google street views from 3 years ago show structural road issues. During a drive around all of the local routes which HGV vehicles could use a wider volume of problems with local roads can be seen. Many are in really poor condition, suffer high levels of general subsidence and severe cracking, not being originally designed and built for high levels of HGV movement. The applicant's assessment on the impact on highways is woefully insufficient: they have not done a California Bearing Ratio tests, which should be required, and the 2884 HGV (potentially low estimates) movements a year will inevitably increase the likelihood of significant repairs needed and cost to taxpayers. In a time when council's appear desperate to find cost savings it would be most remiss of the panel to approve any application which will likely incur such significant highway repairs costs.

There has been no impact assessment undertaken on the increased air pollution from 2884 annual HGV movements.

Environment, Wildlife, Climate Change, Rivers & Waste

In order to fairly assess the environmental impact of any development, the assessment should require more than a tick box approach. Where a set of guidelines are available, they are just that, guidelines. I believe that it is the responsibility of the planning panel and committee to ensure, on behalf of the local residents that where necessary, they hold applications to scrutiny certainly up to the guidelines and where appropriate, above them. Removal via third party rhetoric is used in this application, shifting the burden of responsibility elsewhere. This is a shameful way of a business who's only aim is to generate profit, simply moving a problem offsite, to become someone else's problem, somewhere else. Inevitably, this level of environmental waste becomes everyone's problem.

Unlawful waste management plan that does not assess the negative impact of slurry when spread on 3rd party land and the nuisance or environmental damage it may cause via odours, nitrates, ammonia, and phosphorus.

Unlawful lack of environmental impact assessment quantifying upstream and downstream greenhouse gas emissions, which is required following the supreme court's ruling in *Finch v Surrey County Council* [2024] UKSC 20.

Lack of environmental impact assessment of deforestation caused by feed produced for these chickens.

The site is in a priority area for Countryside Stewardship measures addressing Lapwing habitat issues, yet Lapwing birds are not assessed in the environmental statement, and they are vulnerable to the increased risk of bird flu from this installation as well as increased air pollution.

The National Biodiversity Atlas shows 122 different species of birds in a 5km radius, and Daubenton's bat within just a 2km radius. The environmental statement says nothing about how the air pollution will impact bats and birds. Great Crested Newts have also been cited within a 10km radius, and there is no assessment on the impact of increased water usage on protected species of wildlife.

Our rivers are already in crisis from the combined onslaught of a failing sewerage system, factory farming, and highway run off. Factory farming is destroying nature and holding up housebuilding because new houses can't be built because the water is already so polluted from fertiliser over-use.

This site is in the Nene Lower operational catchment, where three out of the four water bodies do not have good ecological status. The site is very close to a Nitrate Vulnerable Zone, which is a statutory recognition of the area's existing risk from agricultural nitrate pollution. Factory farming in South Holland can produce up to 272.24 tonnes of animal waste every day. This creates 3565.21 tonnes of nutrient pollution every year.

The Court of Appeal has ruled that all 10 River Basin Management plans in England are unlawful, upholding the Government's 2027 deadline to clean up all rivers under the Water Framework Directive (*SoS Environment v Pickering Fishery* [2025] EWCA Civ 378) It would be inadvisable to approve another IPU before the catchment's river basin management plans are updated.

The site is in a flood zone, there is about a 39.5% chance of flooding over the next 50 years, and the farm plans to be operational for that long. The ES does not adequately address the consequences of what would happen in the event of flooding to A) the birds themselves, and B) the colossal amount of polluted waste in 12 no. poultry houses running off into the nearby water courses.

No information given on how much water will be used. The EA chief executive says that lack of water is an 'existential' threat. The nation is already suffering from lack of freshwater with droughts increasingly common. This will negatively impact arable agriculture and businesses.

Lincolnshire already has 146 mega farms, and the highest number of confined animals in the UK. There are 1300 intensive farms in England, and the UK exports over £100m of poultry; this IPU is unnecessary for food security.

This area well known and widely accepted as being fertile, excellent arable growing qualities. The site is wasting high quality arable land for another unneeded factory farm. 45% of UK cereals are used for chicken animal feed; factory farming is a highly inefficient way of producing protein and food for humans; this is bad for food security.

Permit would allow stocking density of 690,000, applicant has only reduced due to higher welfare requirements from client, but the client could easily change to a lower standard. All impact assessment should be recalculated with the 690,000-bird stocking density as the worst-case scenario, including vehicle movements, water use, GHG emissions, and muck.

Public Health, Bird Flu, Antibiotic Resistance

The factory and increased traffic will cause air pollution and dust; a serious public health risk, and cause health risks to workers. There are 4,400 people in the Whaplode and Holbeach St John's Ward, and this puts them at an increased risk of ill health due to increased air pollution (ammonia, particulate matter).

This mega farm will lead to more antibiotic overuse leading to antibiotic resistance which kills one million lives per year. The UK Health Security Agency says deaths are on the rise with over 2000 people in the UK dying a year from antibiotic resistant infections.

In addition to several existing nearby poultry farms, there is another intensive factory chicken farm just 1.8km away which is less than the 3km biosecurity protection zone required, whenever there is highly pathogenic avian flu (the most common type of bird flu).

Lincolnshire is a hot spot for bird flu. Scientists say the risk of the next pandemic from bird flu is rising.

Consumption of chicken above 300g/week is also associated with an increased risk of all-cause mortality from gastrointestinal cancers, as well as increased cholesterol, carcinogens, and exposure to harmful pathogens. This installation increases the risks of chronic disease. The UK spends billions per year in diagnosis, treatment and research of Cancer. It is widely becoming accepted by scientists that much of this spending could be saved by the public improving diets.

The Planetary Health Diet, developed by EAT-Lancet Commission, which aims to feed and nourish 10 billion people by 2050 whilst keeping within planetary boundaries, emphasises a

diet focused on fruits, vegetables, greens, and whole grains, with a reduced consumption of meat, fish, eggs, refined cereals, and tubers (Willet et al. 2019). Based on global food system modelling, the adoption of this dietary pattern could reduce GHG emissions by 50% in 2050 (Willet et al. 2019). Approving another factory farm is therefore contrary to sustainability policies.

Animals

Animal Welfare is a material planning consideration and the application should be rejected as it will not meet the welfare needs of chickens. The Animal Welfare Act (2006) recognised in law that animals can feel pain and suffering and the Animal Sentience Act (2022) recognizes that animals are sentient beings, with emotional and cognitive capabilities. Section 9 of the Animal Welfare Act places a duty of care on people to ensure they take reasonable steps in all the circumstances to meet the welfare needs of their animals to the extent required by good practice, including chicken's need to be able to exhibit normal behaviour patterns (s9(2)(c)) and the chicken's need to be protected from pain, suffering, injury and disease. (s9(2)(e)). UK Broiler Welfare guidance also includes the five freedoms.

Factory farms do not allow birds the freedom to express normal behaviour by providing sufficient space; nor freedom from fear and distress by ensuring conditions and treatment to avoid mental suffering. Chickens in factory farms are subject to overcrowding and stress, and broiler breeders are also subject to painful mutilations, which leads to immense suffering. Undercover investigations show that animal abuse, sickness, and extreme suffering is commonplace on factory farms. The application does not meet the welfare guidance of the five freedoms as required by s9(2)(c) and (e) of the Animal Welfare Act.

We already suffer the effects of smaller existing intensive farms in the UK. These are US scale mega farms, which have become a major problem in the states with regards to health problems and legal cases. Increasing the intensity of an already destructive method will never be the answer.

I hope that the panel and committee will be taking the points raised on board, in full consideration of the impacts of this huge proposal, which will be felt by nearby residents and wider locals for many years to come. Your community deserves you to act in their best interests and reject this application.

Yours sincerely,

Financial Budget Comparison

for PPES

Comparison between 01/04/25 and 31/07/25 inclusive. Includes due and unpaid transactions.

Excludes transactions with an invoice date prior to 01/04/25

		2025/26	Reserve	Actual Net	Balance
INCOME					
PPES					
1500	Property Rents	£13,230.00	£0.00	£7,710.00	-£5,520.00
1501	Speeding device donations	£0.00	£0.00	£0.00	£0.00
1502	Property rents CP Charity	£2,250.00	£0.00	£116.68	-£2,133.32
1505	Contribution to utilities	£105.00	£0.00	£0.00	-£105.00
Total PPES		£15,585.00	£0.00	£7,826.68	-£7,758.32
EXPENDITURE					
PPES					
4057	Business rates	£0.00	£0.00	£905.83	-£905.83
4058	Business rates Bowls Club	£0.00	£0.00	£0.00	£0.00
4440	Crown Estate rent - Holbeach Bank	£733.00	£0.00	£43.13	£689.87
4452	Property project	£0.00	£0.00	£0.00	£0.00
4454	Projects	£10,000.00	£0.00	£0.00	£10,000.00
4456	Defibrillator costs	£0.00	£0.00	£0.00	£0.00
4605	Council Tax - Park Bungalow	£0.00	£0.00	£1,921.23	-£1,921.23
4606	Council tax 4a High St	£300.00	£0.00	£0.00	£300.00
4610	Speeding costs	£4,000.00	£0.00	£400.00	£3,600.00
4675	Gas - Coubro	£0.00	£0.00	£2,608.98	-£2,608.98
4685	Cleaning - Coubro	£0.00	£388.17	£690.17	-£302.00
44351	Professional fees	£1,000.00	£0.00	£0.00	£1,000.00
44352	Management Fees	£0.00	£0.00	£0.00	£0.00

Financial Budget Comparison

for PPES

Comparison between 01/04/25 and 31/07/25 inclusive. Includes due and unpaid transactions.

Excludes transactions with an invoice date prior to 01/04/25

	2025/26	Reserve	Actual Net	Balance
44551 Repairs & Maintenance	£16,000.00	£0.00	£311.66	£15,688.34
44561 Changing places toilet	£0.00	£0.00	£0.00	£0.00
46701 Electricity	£400.00	£0.00	£540.38	-£140.38
46801 Water	£0.00	£0.00	£245.70	-£245.70
Total PPES	£32,433.00	£388.17	£7,667.08	£25,154.09
Total PPES Income	£15,585.00	£0.00	£7,826.68	-£7,758.32
Total PPES Expenditure	£32,433.00	£388.17	£7,667.08	£25,154.09
Total Net Balance	-£16,848.00		£159.60	