



Odour Assessment	
Wyre Farm, Wiltshire	
Job number:	J1002
Document number:	J1002/1/F1
Date:	15 October 2025
Client:	Bodman Livestock Ltd
Prepared by:	Mr Bob Thomas

Air Quality Assessments Ltd
Tel: [REDACTED]
Email: [REDACTED]
Web: <http://aqassessments.co.uk>

Registered Office: c/o Ardwyn Channon, 12 Victoria Street, Burnham-on-Sea, Somerset, TA8 1AL
Companies House Registration: 8895617

[Air Quality Assessments Ltd](#) has completed this report based on the information provided by the client, and the agreed scope of work. [Air Quality Assessments Ltd](#) does not accept liability for any matters arising outside the agreed scope of work, or for changes that may be required due to omissions in the information provided.

Unless otherwise agreed, this document and all other Intellectual Property Rights remain the property of [Air Quality Assessments Ltd](#). [Air Quality Assessments Ltd](#) does not accept responsibility for any unauthorised changes made by others to the issued report.

© [Air Quality Assessments Ltd](#) 2025

Contents

1	Introduction	1
1.1.	Proposed Development	1
1.2.	Scope of Assessment	1
2	Odour Legislation, Policy & Guidance	2
2.1.	Legislation	2
2.2.	Planning Policy	2
2.3.	Guidance	3
3	Methodology	5
3.1.	Qualitative Odour Risk Assessment	5
4	Odour Assessment.....	9
4.1.	Qualitative Odour Risk Assessment	9
5	Discussion and Conclusions	15
6	References	16
7	Appendices	17

Tables

Table 1: Source Odour Potential	6
Table 2: Pathway Effectiveness	7
Table 3: Risk of Odour Impact at Receptors	7
Table 4: Receptor Sensitivity	8
Table 5: Odour Effect Descriptors for Impacts Predicted Qualitatively	8
Table 6: 10 Year Average Frequency Distribution, Lyneham 2012-2021	10
Table 7: Odour Pathway Effectiveness	12
Table 8: Risk of Odour Impacts	13

Figures

Figure 1: Location of Proposed Livestock Building	1
Figure 2: 10 Year Average Wind Rose, Lyneham 2012-2021.....	11
Figure 3: Odour Receptors	12

1 Introduction

1.1. Proposed Development

- 1.1.1 Air Quality Assessments Ltd (AQA) has been commissioned Bodman Livestock Ltd to undertake an odour assessment for a proposed livestock building at Wyre Farm, Potterne, Devizes, SN10 5PU. The location of the proposed building is shown in **Figure 1**.

1.2. Scope of Assessment

- 1.2.1 There is a risk that odour emissions from the livestock building will impact on the amenity of odour sensitive receptors. This assessment has been undertaken to determine whether there are likely to be odour effects at sensitive receptors due to the operation of the building.
- 1.2.2 The assessment has been prepared taking into account all relevant local and national guidance and regulations. The references used in this assessment are shown in **Section 6**.

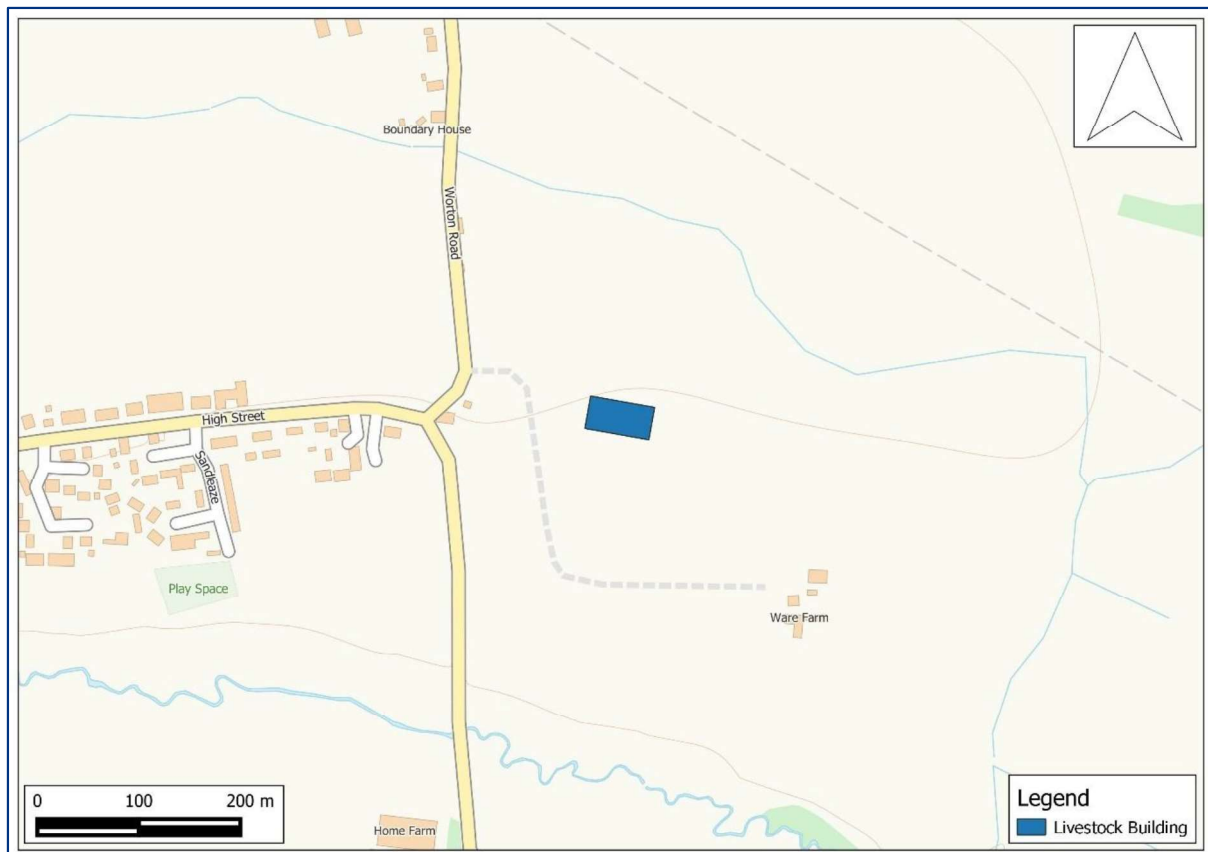


Figure 1: Location of Proposed Livestock Building

Contains Ordnance Survey data © Crown copyright and database right 2025

2 Odour Legislation, Policy & Guidance

2.1. Legislation

Environmental Protection Act

- 2.1.1 Nuisances caused by odours are regulated by the statutory nuisance provisions in Part III of the Environmental Protection Act (EPA) (HMSO, 1990). Section 79(1)(d) of the EPA states that a statutory nuisance is:

“dust, steam, smell or other effluvia arising on an industrial, trade and business premises and being prejudicial to health or a nuisance” (Section 79(1)(d))

- 2.1.2 Local authorities have a duty under the Environmental Protection Act to inspect their districts from time to time for statutory nuisances and to investigate any complaint about an alleged odour nuisance made by a member of the public.

- 2.1.3 If the local authority finds that a statutory nuisance exists, then it must serve an abatement notice. If the process operates under an environmental permit, any court proceedings should be brought by the Environment Agency for failure to comply with the operating permit. This is to avoid an operation being subject to regulatory action by both the Environment Agency and the local authority for the same incident.

2.2. Planning Policy

National Policies

- 2.2.1 The National Planning Policy Framework (NPPF) sets out the Government’s planning policies for England and how these should be applied (Ministry of Housing, Communities & Local Government, 2024). It provides a framework within which locally-prepared plans for development can be produced. At Paragraph 8c, the NPPF states that the purpose of the planning system is to contribute to the achievement of sustainable development and includes an overarching environmental objective:

“To protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.”

- 2.2.2 At Paragraph 198, the NPPF states that:

“Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development.”

- 2.2.3 At Paragraph 201, the NPPF goes on to say that:

“The focus of planning policies and decisions should be on whether proposed development is an acceptable use of land, rather than the control of processes or emissions (where these are subject to separate pollution control regimes). Planning decisions should assume that these regimes will operate effectively. Equally, where a

planning decision has been made on a particular development, the planning issues should not be revisited through the permitting regimes operated by pollution control authorities."

- 2.2.4 The NPPF is supported by Air Quality national Planning Practice Guidance (nPPG) (Ministry of Housing, Communities & Local Government, 2019). The PPG makes clear that that:

"Odour and dust can also be a planning concern, for example, because of the effect on local amenity".

Local Policies

- 2.2.5 The Wiltshire Core Strategy includes Core Policy 57 Ensuring High Quality Design and Place Shaping, the relevant parts of which state (Wiltshire Council, 2015):

"A high standard of design is required in all new developments, including extensions, alterations, and changes of use of existing buildings. Development is expected to create a strong sense of place through drawing on the local context and being complementary to the locality. Applications for new development must be accompanied by appropriate information to demonstrate how the proposal will make a positive contribution to the character of Wiltshire through: ...

"vii. having regard to the compatibility of adjoining buildings and uses, the impact on the amenities of existing occupants, and ensuring that appropriate levels of amenity are achievable within the development itself, including the consideration of privacy, overshadowing, vibration, and pollution (e.g. light intrusion, noise, smoke, fumes, effluent, waste or litter) ..."

- 2.2.6 Wiltshire Council is currently undergoing a review of a new Local Plan (Wiltshire Council, 2023). The Regulation 19 draft of the Wiltshire Local Plan includes Policy 98 Ensuring High Quality Design and Place Shaping, the relevant parts of which state:

"A high standard of design is required in all new developments, including extensions, alterations, and changes of use of existing buildings. This will be achieved through: ...

having regard to the compatibility of existing land and building uses in the vicinity of the proposed development, the impact of the development on the amenities of existing occupants, and ensuring that appropriate levels of amenity are achievable within the development itself, including the consideration of vehicle parking, access and movement, internal and external space standards, private outdoor space, waste storage and collection, privacy, overshadowing, mass and height (overbearing), vibration, and pollution (e.g. light intrusion, noise (including vibration), smoke, odour, fumes, effluent, waste or litter); ..."

2.3. Guidance

Environment Agency Guidance

- 2.3.1 The Environment Agency has produced horizontal guidance on odour assessment and management (H4) (Environment Agency, 2011). The H4 guidance document is primarily aimed at process operators looking to control and manage the release of odours but also contains a series of recommended assessment methods.

Institute of Air Quality Management Guidance

- 2.3.2 Guidance on the Assessment of Odour for Planning has been published by the Institute of Air Quality Management (IAQM) ¹ (IAQM, 2018). The guidance describes what the IAQM considers to be current best practice with regard to odour assessment and sets out a range of methodologies that can be used for assessing odour impacts for planning purposes. The IAQM guidance also includes odour assessment criteria that can be used to determine the level of significance of an odour impact.

¹ The IAQM is the professional body for air quality practitioners in the UK.

3 Methodology

3.1. Qualitative Odour Risk Assessment

- 3.1.1 A qualitative odour risk assessment has been undertaken that utilises an approach based on the source-pathway-receptor chain. All three links in the chain would need to be present for an adverse effect to occur. Adverse effects from odour lead to annoyance, which can result in a nuisance if exposure is ongoing.
- 3.1.2 The scale of exposure to odour (the impact) and the sensitivity of the receptor determines the overall effect, with the impact (FIDO) and receptor sensitivity (L) known as the FIDOL factors:
- Frequency – how often an individual is exposed to odour;
 - Intensity – the individuals perception of the strength of the odour;
 - Duration – the duration that individuals are exposed to an odour over time;
 - Offensiveness – the character, or pleasantness/unpleasantness of the odour; and
 - Location – the sensitivity of the location/receptors to odours.
- 3.1.3 The IAQM guidance describes a framework for qualitative odour assessment which incorporates the FIDOL factors and uses a number of steps to determine the overall effect from the source odour potential, the pathway effectiveness and the receptor sensitivity.
- 3.1.4 The first step is to estimate the source odour potential, which takes account of the magnitude of the odour release, how inherently odorous the source is, the unpleasantness of the odour and the effectiveness of any mitigation. The examples in **Table 1** can be used to estimate the odour source potential.
- 3.1.5 The second step is to estimate the pathway effectiveness, or the odour flux to the receptor, based on distance from source to receptor, the frequency of winds from the source to the receptor, the effects of dispersion and dilution and the topography/terrain. The pathway effectiveness can be estimated using the examples in **Table 2**.
- 3.1.6 The third step is to consider the source odour potential and the pathway effectiveness together to determine the risk of odour exposure (the impact) at the receptors, using the matrix in **Table 3**.
- 3.1.7 The fourth step is to determine the sensitivity of the receptors to odour. Professional judgement, along with the general principles in **Table 4**, should be used to determine the sensitivity of the receptors.
- 3.1.8 Finally, the effect of the odour impact at the receptors, taking account of the receptor sensitivities, is determined using the matrix in **Table 5**.
- 3.1.9 The overall odour effect on the surrounding area, taking account of differing effect magnitudes at different receptors and the numbers of receptors affected, requires the application of professional judgement (the professional experience of the author of this report is set out in **Appendix A1**). Where the overall effect is negligible or slight adverse the impacts would likely be considered not significant. The IAQM guidance states that:

“Concluding that an effect is significant should not mean, of itself, that a development proposal is unacceptable and the planning application should be refused; rather, it should mean that careful consideration needs to be given to the consequences, scope for securing further mitigation, and the balance with any wider environmental, social and economic benefits that the proposal would bring.”

Table 1: Source Odour Potential

Source Odour Potential	Magnitude of Odour Release	Offensiveness of Odour	Mitigation	Examples
Large	Materials use >100,000 tonnes/m ³ /yr, area source >1,000 m ²	Very odorous (e.g. mercaptans) with very low detection thresholds, most offensive, unpleasant (-2) to very unpleasant (-4) hedonic score	Open air operation, no containment, reliance solely on good management techniques and best practice	Large permitted processes of odorous nature or large sewage treatment works (STW)
Medium	Materials use >1,000 but <100,000 tonnes/m ³ /yr, area source >100m ² but <1,000m ²	Moderately odorous, moderately offensive, neutral (0) to unpleasant (-2) hedonic score	Some mitigation measures in place, but significant residual odour	Smaller permitted processes or small STW
Small	Materials use <1,000 tonnes/m ³ /yr, area source <1,000 m ²	Mildly odorous with high odour detection threshold, less offensive, neutral (0) to very pleasant (+4) hedonic score	Effective, tangible mitigation measures in place leading to little or no residual odour	Falls below Part B threshold

Table 2: Pathway Effectiveness

Pathway Effectiveness	Distance	Direction	Dispersion/Dilution
High	Receptor adjacent to source, distance well below set-back distances	High frequency (%) of winds from source to receptor, or receptors downwind of source with respect to the prevailing wind	Open process with low level releases, e.g. lagoons, uncovered effluent treatment plant, landfilling of putrescible wastes
Moderate	Receptor local to the source	Medium frequency (%) of winds from source to receptor, or receptors neither upwind nor downwind of source with respect to the prevailing wind	Releases are elevated, but compromised by building effects
Ineffective	Receptor remote from source, distance exceeds official set-back distances	Low frequency (%) of winds from source to receptor, or receptors upwind of source with respect to the prevailing wind	Releases are from high level (e.g. stacks, or roof vents >3m above ridge height) and are not compromised by surrounding buildings

Table 3: Risk of Odour Impact at Receptors

Pathway Effectiveness	Source Odour Potential		
	Small	Medium	Large
High	Low	Medium	High
Moderate	Negligible	Low	Medium
Ineffective	Negligible	Negligible	Low

Table 4: Receptor Sensitivity

Sensitivity	Principles	Exposure	Examples
High	Users can reasonably expect enjoyment of a high level of amenity	People would reasonably be expected to be present here continuously, or at least regularly for extended periods, as part of the normal pattern of use of the land	Residential dwellings, hospitals, schools/education and tourist/cultural
Medium	Users would expect to enjoy a reasonable level of amenity, but wouldn't reasonably expect to enjoy the same level of amenity as in their home	People wouldn't reasonably be expected to be present here continuously or regularly for extended periods as part of the normal pattern of use of the land	Places of work, commercial/retail premises and playing/recreation fields
Low	Enjoyment of amenity would not reasonably be expected	Transient exposure, where people would reasonably be expected to be present only for limited periods of time as part of the normal pattern of use of the land	Industrial, farms, footpaths and roads

Table 5: Odour Effect Descriptors for Impacts Predicted Qualitatively

Risk of Odour Exposure	Receptor Sensitivity ^a		
	Low	Medium	High
High	Slight	Moderate	Substantial
Medium	Negligible	Slight	Moderate
Low	Negligible	Negligible	Slight
Negligible	Negligible	Negligible	Negligible

^a Examples of odour sensitive receptors are shown in Table 4.

4 Odour Assessment

4.1. Qualitative Odour Risk Assessment

Source Odour Potential

- 4.1.1 The livestock building has been designed to house beef cattle and for efficiency of modern farming practices, with open straw cattle yards both sides of a central access. Building design allows for maximum ventilation, with elevations finished in Yorkshire boarding above cream concrete panels where necessary and left open wherever possible. Profiled fibre cement roof sheeting would shelter the cattle from inclement weather. The intention is that all cattle would be bedded on straw within the livestock building, with soiled bedding stored and then removed and spread on the land or taken elsewhere, depending on the time of year.
- 4.1.2 To maintain high standards of animal welfare and health, the livestock building will be cleaned and disinfected regularly. Concrete areas around the building will be kept clean and free from any build-up of manure.
- 4.1.3 Odours from intensive livestock rearing are considered to be moderately offensive in the Environment Agency's H4 guidance; however, intensive livestock farming installations refer to poultry and pig farming and are defined as 40,000 places for poultry, 2,000 places for production pigs or 750 places for sows. Operations at the proposed livestock building will not be an intensive livestock operation, with the livestock made up of beef cattle.
- 4.1.4 Any residual odour would likely fall into the moderately odorous category in the IAQM guidance and, with reference to **Table 1**, the source odour potential is considered to be medium.

Pathway Effectiveness

- 4.1.5 Any residual odour from the livestock building may have the potential to cause annoyance at local receptors. The extent to which odours travel from source is dependent on the meteorological conditions at the time the odour is being emitted. The dispersion of odour emissions will be influenced by wind speed, wind direction, and atmospheric stability. The worst odour dispersion conditions often occur at night under stable atmospheric conditions, when the mixing and dilution of odorous emissions is inhibited; however, these conditions can also occur during the day, when there is a temperature inversion.

Wind

- 4.1.6 Receptors downwind of the odour emissions source, with regard to the prevailing wind, will be exposed to odour more frequently than those located upwind. The 10-year average wind rose from Lyneham meteorological station, approximately 21km to the north of the application site, shows that prevailing winds in the region blow from the southwest (see **Figure 2**). The frequency distribution of the wind direction is shown in **Table 6**.

Table 6: 10 Year Average Frequency Distribution, Lyneham 2012-2021

Direction	Direction (°)	Frequency (%)
N	340-20	8.3
NE	30-60	11.8
E	70-110	7.0
SE	120-150	4.7
S	160-200	17.5
SW	210-240	22.4
W	250-290	18.5
NW	300-330	6.8
Calms	na	1.7
Missing	na	1.1
Total	0-350	100

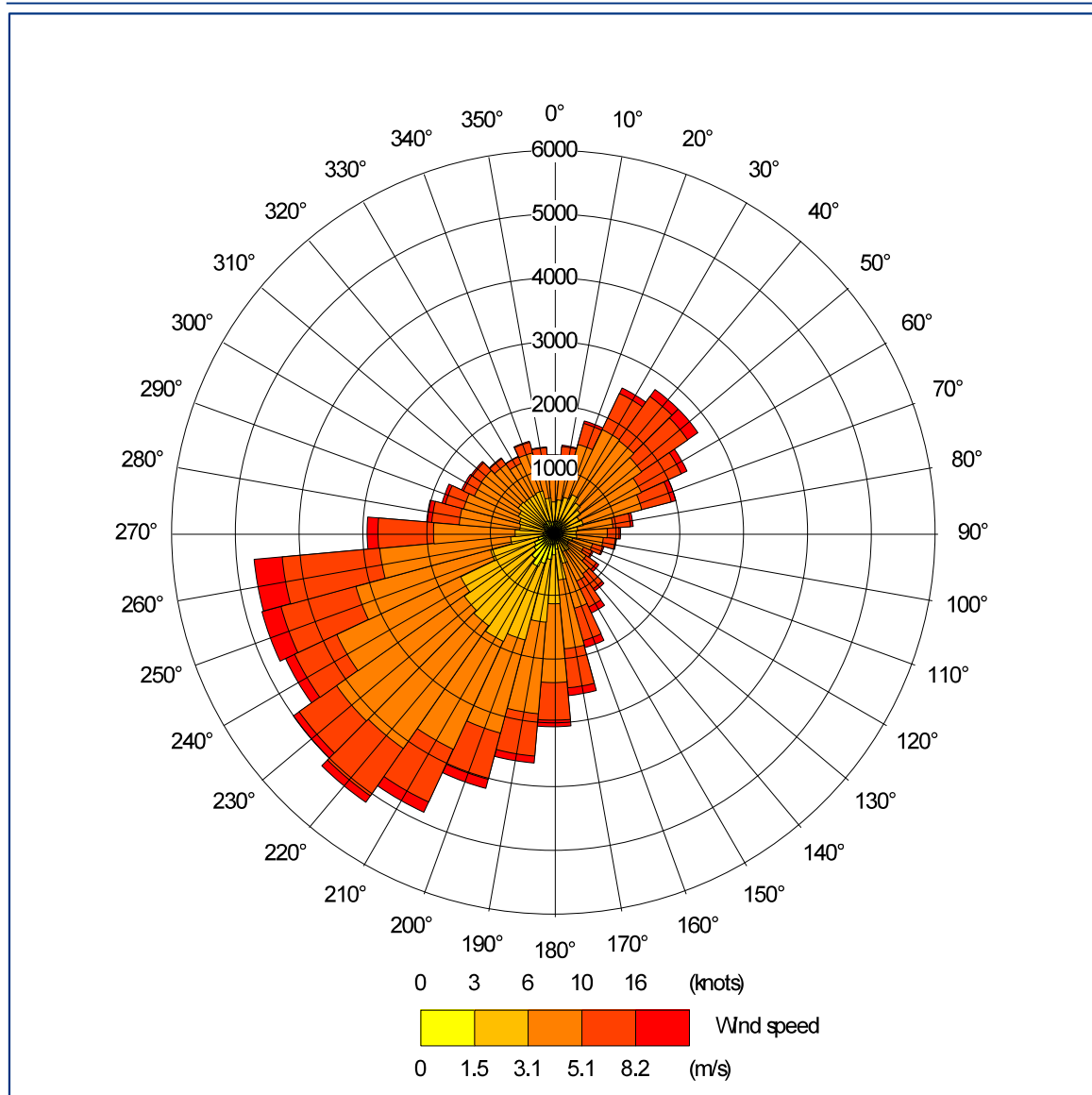


Figure 2: 10 Year Average Wind Rose, Lyneham 2012-2021

Receptors

- 4.1.7 The potential effect of odour at local receptors is dependent on the distance from the livestock building to the receptor and the sensitivity of the receptor to odour. The closest indicative receptors that may be affected by odour emissions from the proposed livestock building are shown in **Figure 3**. The receptors are mostly residential, apart from R4 which is employment use. Residential receptors would be considered highly sensitive with regard to odour, whereas the employment use would be of medium sensitivity (see **Table 4**). Receptors R3, R8 and R1 are dwellings within farms and are unlikely to be sensitive to agricultural odours.
- 4.1.8 Given the prevalence of farms in the area, local residents are likely to be accustomed to some odour from agricultural activity and will have moved into their homes fully aware that odour is a risk in a rural area close to working farms.
- 4.1.9 Receptors within 50m of the odour source are considered to be adjacent to the odour source. Receptors within a distance of 50-250m of the odour source are considered

to be local to the odour source, whereas receptors more than 250m from the odour source are considered to be remote.

4.1.10 Receptors downwind of the odour source less than 10% of the time are considered to be downwind with a low frequency, between 10-20% of the time downwind with a medium frequency and more than 20% of the time downwind with a high frequency.

4.1.11 **Table 7** shows a summary of the information used to determine the pathway effectiveness towards the receptors, based on the examples in **Table 2**.

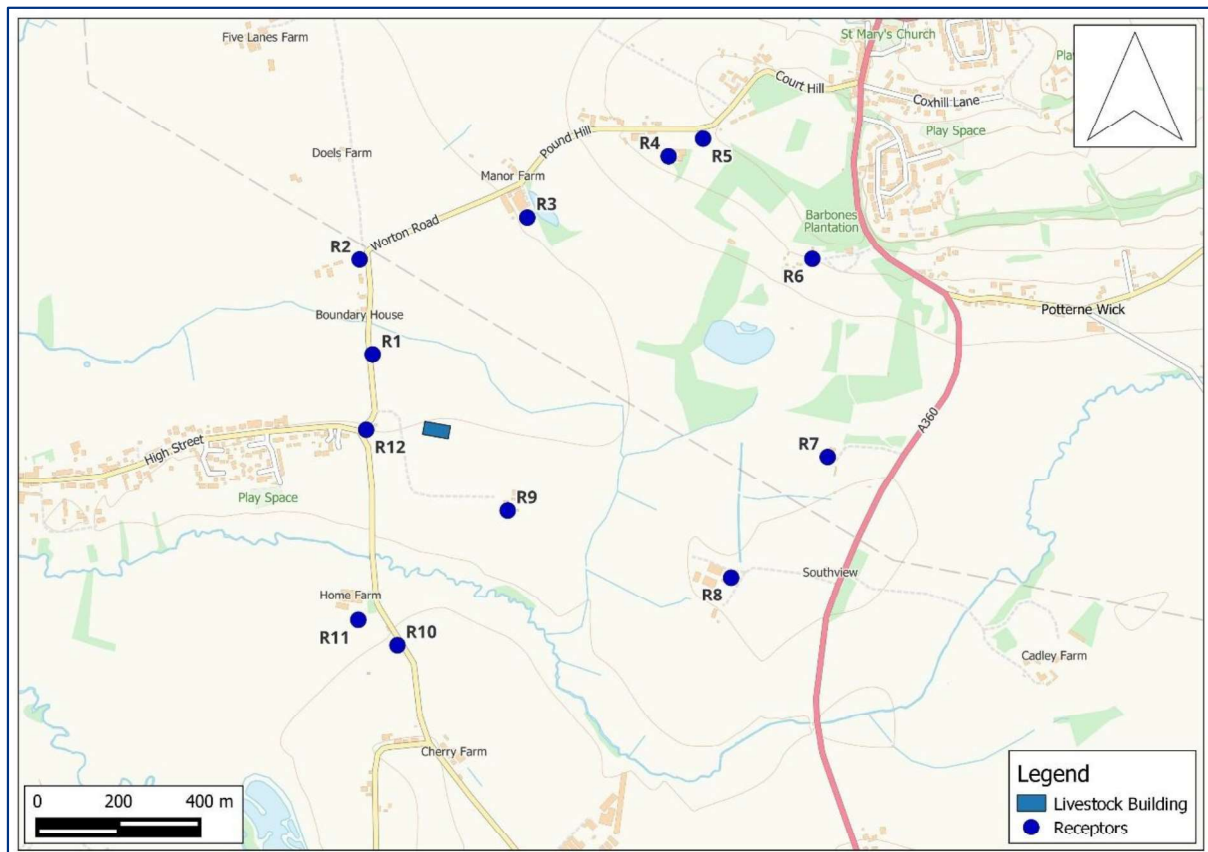


Figure 3: Odour Receptors

Contains Ordnance Survey data © Crown copyright and database right 2025

Table 7: Odour Pathway Effectiveness

Receptor in Figure 3	Description	Distance from Source	Winds Towards Receptor (°)	Frequency of Wind Towards Receptor	Pathway Effectiveness
R1	Dwelling	Local (200m)	130-150	Low (1.5%)	Ineffective
R2	Dwelling	Remote (425m)	140-170	Low (3.1%)	Ineffective
R3	Dwelling (Farm)	Remote (540m)	190-210	Low (3.9%)	Ineffective
R4	Employment	Remote (840m)	210-230	Low (4.3%)	Ineffective
R5	Dwelling	Remote (940m)	210-230	Low (4.3%)	Ineffective

Receptor in Figure 3	Description	Distance from Source	Winds Towards Receptor (°)	Frequency of Wind Towards Receptor	Pathway Effectiveness
R6	Dwelling	Remote (970m)	240-260	Low (6%)	Ineffective
R7	Dwelling	Remote (920m)	260-290	Low (5.3%)	Ineffective
R8	Dwelling (Farm)	Remote (778m)	290-310	Low (1.1%)	Ineffective
R9	Dwelling	Local (220m)	310-340	Low (1%)	Ineffective
R10	Dwelling	Remote (515m)	350-20	Low (1.4%)	Ineffective
R11	Dwelling (Farm)	Remote (480m)	10-40	Low (3.2%)	Ineffective
R12	Dwelling	Local (130m)	60-110	Low (3.2%)	Ineffective

Risk of Odour Impacts & Magnitude of Effects

4.1.12 The risk of odour exposure has been determined by combining the source odour potential with the pathway effectiveness using the matrix in **Table 3**. The risk of odour impacts and the receptor sensitivity have then been combined using the matrix in **Table 5** to determine the likely magnitude of the odour effect at the receptors, as shown in **Table 8**.

4.1.13 The risk assessment identifies that there is a negligible to slight risk of odour effects at all receptors. IAQM guidance considers that slight effects, or less, would not usually be considered significant; therefore, the proposed livestock building would have an insignificant effect on odour.

Table 8: Risk of Odour Impacts

Receptor	Risk of Odour Impact			Receptor Sensitivity	Likely Odour Effect
	Source Odour Potential	Pathway Effectiveness	Risk of Odour Exposure		
R1	Medium	Ineffective	Negligible	High	Negligible
R2	Medium	Ineffective	Negligible	High	Negligible
R3	Medium	Ineffective	Negligible	High	Negligible
R4	Medium	Ineffective	Negligible	Medium	Negligible
R5	Medium	Ineffective	Negligible	High	Negligible
R6	Medium	Ineffective	Negligible	High	Negligible
R7	Medium	Ineffective	Negligible	High	Negligible
R8	Medium	Ineffective	Negligible	High	Negligible

Receptor	Risk of Odour Impact			Receptor Sensitivity	Likely Odour Effect
	Source Odour Potential	Pathway Effectiveness	Risk of Odour Exposure		
R9	Medium	Ineffective	Negligible	High	Negligible
R10	Medium	Ineffective	Negligible	High	Negligible
R11	Medium	Ineffective	Negligible	High	Negligible
R12	Medium	Ineffective	Negligible	High	Negligible

5 Discussion and Conclusions

- 5.1.1 The results of the qualitative risk assessment indicate that there is likely to be an insignificant effect on odour at local receptors due to the operation of the proposed livestock building.
- 5.1.2 Local residents are likely to be accustomed to some odour from agriculture and will have moved into their homes fully aware that odour is a risk in a rural area close to a working farms. Odours from the proposed livestock building would not significantly change the odour landscape due to existing farming operations.
- 5.1.3 There should be no constraints to the development of a livestock building with regard to odour as the proposed development is consistent with the relevant parts of:
- The NPPF and Air Quality nPPG;
 - Core Policy 57 of the Wiltshire Core Strategy; and
 - Policy 98 of the Regulation 19 draft of the Wiltshire Local Plan.

6 References

Environment Agency. (2011). *H4 Odour Mangement*.

HMSO. (1990). *Environmental Protection Act 1990*.

IAQM. (2018). *Guidance on the Assessment of Odour for Planning V1.1*.

Ministry of Housing, Communities & Local Government. (2019). *Guidance Air Quality*.
Retrieved from <https://www.gov.uk/guidance/air-quality--3>

Ministry of Housing, Communities & Local Government. (2024). *National Planning Policy Framework*.

Wiltshire Council. (2015). *Wiltshire Core Strategy*.

Wiltshire Council. (2023). *Local Plan Pre-Submission Draft 2020-2038 (Regulation 19)*.

7 Appendices

A1 Professional Experience.....	18
---------------------------------	----

A1 Professional Experience

Bob Thomas, BSc (Hons) PgDip MSc MEnvSc MIAQM CSci

Bob Thomas is a Director at AQA, with over 22 years working in the sciences and over 18 years' experience in the field of air quality management and assessment. He has carried out air quality and odour assessments for a wide range of developments, including residential, commercial, industrial, minerals and waste developments. He has been responsible for air quality projects that include ambient air quality monitoring of nitrogen dioxide, dust and PM₁₀, the assessment of nuisance odours and dust, and the preparation of Review and Assessment reports for local authorities. He has extensive dispersion modelling experience for road traffic, energy centre and industrial (including odour) sources, and has completed many stand-alone reports and chapters for inclusion within an Environmental Statement. Bob has worked with a variety of clients to provide expert air quality services and advice, including local authorities, planners, developers, architects and process operators, and has provided expert witness services at public inquiry. He is a Chartered Scientist, a Member of the Institute of Air Quality Management and a Member of the Institution of Environmental Sciences.