

Environment Agency permitting decisions

Bespoke permit

We have decided to grant the permit for Burlton Lane Farm operated by Mr Thomas Simon Powell and Mrs Claire Powell.

The permit number is EPR/MP3032AP

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

Description of the main features of the Installation

Burlton Lane Farm is situated approximately one kilometre north west of the village of Myddle in Shropshire. The installation is approximately centred on National Grid Reference SJ 46325 24955.

The installation is operated by Mr Thomas Simon Powell and Mrs Claire Powell and comprises of two poultry houses, which operate a multi-tier aviary system for free range laying hens. The two poultry houses provide a combined capacity for 64,000 bird places, accommodated by extending and adapting the existing housing from the previously below threshold poultry site. Free range laying hens are brought onto the farm at approximately 16 weeks old and are depopulated around 70 to 80 weeks of age, before being replaced.

Both poultry houses are ventilated by roof fan outlets with an emission point higher than 5.5 metres above ground level and an efflux speed at or above 11 metres per second, and there will be roof mounted inlets. Both houses also have gable end fans, although these are operated infrequently to maintain temperature, typically in the summer months. Popholes in the house walls allow livestock access to the surrounding range area, covering approximately 80 acres (32 hectares).

Both houses will include litter. The multi-tier system will allow manure produced by birds on the slatted sections to be collected on a manure belt, which is removed from the poultry houses at least once each week. Manure which is deposited onto the litter will be removed at the end of each flock cycle. At the end of the cycle the houses are depopulated, litter removed, washed and disinfected ready for the next cycle. All manure is exported from the installation for spreading on land owned by the operator and also land owned by third parties. Water from the wash out of poultry houses is channelled to underground collection tanks close to the ends of the houses to await export off-site and is spread on land owned by the operator. Roof water from both houses drains via gutters to French drains running alongside the houses, and is then piped to a ditch to the north of the installation, which ultimately drain to Sleap Brook. There are also underground gravel pits at the extended ends of the poultry houses which receive roof water via gutters from the extended roofs, and then drain via the existing piped drainage system to the ditch to the north of the installation. Water draining from the concreted yard areas at the ends of the houses (excluding periods of washout when

water from the yard drains to the underground tanks) is channelled via the French drains to the piped system and onto the ditch to the north. The land around the site is predominantly agricultural, and falls gently towards the north east, rising gently to the south west. Associated food is stored on the installation in sealed food bins. Mortalities are collected daily and stored in a secure container prior to disposal in an on-site incinerator.

Purpose of this document

This decision document:

- explains how the application has been determined
- provides a record of the decision-making process
- shows how all relevant factors have been taken into account
- justifies the specific conditions in the permit other than those in our generic permit template.

Unless the decision document specifies otherwise we have accepted the applicant's proposals.

Structure of this document

- Key issues
- Annex 1 the decision checklist
- Annex 2 the consultation and web publicising responses

Key issues of the decision

Industrial Emissions Directive (IED)

The Environmental Permitting (England and Wales) (Amendment) Regulations 2013 were made on the 20 February 2013 and came into force on 27 February 2013. These Regulations transpose the requirements of the IED.

This permit implements the requirements of the European Union Directive on Industrial Emissions.

Groundwater and soil monitoring

As a result of the requirements of the Industrial Emissions Directive, all permits are now required to contain a condition relating to protection of soil, groundwater and groundwater monitoring. However, the Environment Agency's H5 Guidance states **that it is only necessary for the operator to take samples** of soil or groundwater and measure levels of contamination where there is evidence that there is, or could be existing contamination and:

- The environmental risk assessment has identified that the same contaminants are a particular hazard; or
- The environmental risk assessment has identified that the same contaminants are a hazard and the risk assessment has identified a possible pathway to land or groundwater.

H5 Guidance further states that it is **not essential for the Operator** to take samples of soil or groundwater and measure levels of contamination where:

- The environmental risk assessment identifies no hazards to land or groundwater; or
- Where the environmental risk assessment identifies only limited hazards to land and groundwater and there is no reason to believe that there could be historic contamination by those substances that present the hazard; or
- Where the environmental risk assessment identifies hazards to land and groundwater but there is evidence that there is no historic contamination by those substances that pose the hazard.

The site condition report (SCR) for Burlton Lane Farm (reference Appendix 2 Site Condition Report, received as part of application EPR/MP3032AP/A001 duly made 14/10/15) demonstrates that there are no hazards or likely pathway to land or groundwater and no historic contamination on site that may present a hazard from the same contaminants. **Therefore, on the basis of the risk assessment presented in the SCR, we accept that they have not provided base line reference data for the soil and groundwater at the**

site at this stage, and although condition 3.1.3 is included in the permit no groundwater monitoring will be required.

The installation is not in a Source Protection Zone (SPZ) or Groundwater Vulnerability Zone (GWVZ). It is on an existing surface water Nitrate Vulnerable Zone (NVZ).

Ammonia emissions

There are 2 Special Areas of Conservation (SAC) and 2 Ramsars located within 10 kilometres of the installation. There are 3 Sites of Special Scientific Interest (SSSI) located within 5 km of the installation. There are also 2 Local Wildlife Sites (LWS) and 4 ancient woodlands within 2 km of the installation.

Ammonia assessment – SAC/SPA/Ramsar sites

The following trigger thresholds have been designated for the assessment of European sites:

- If the process contribution (PC) is below 4% of the relevant critical level (CLe) or critical load (CLo) then the farm can be permitted with no further assessment.
- Where this threshold is exceeded an assessment alone and in combination is required.
- An in combination assessment will be completed to establish the combined PC for all existing farms identified within 10 km of the application.

Initial screening using Ammonia Screening Tool v4.4 has indicated that emissions from Burlton Lane Farm will only have a potential impact on the SACs and Ramsar sites with a precautionary critical level of $1\mu\text{g}/\text{m}^3$ if they are within 2530 metres (m) of the emission source.

Initial screening indicates that beyond 2530m the PC is less than $0.04\mu\text{g}/\text{m}^3$ (i.e. less than 4% of the precautionary $1\mu\text{g}/\text{m}^3$ critical level) and therefore beyond this distance the PC is insignificant. Three sites, Fenn's, Whixall, Bettisfield, Wem & Cadney Mosses SAC, West Midlands Mosses SAC and Midland Meres and Mosses – Phase 2 Ramsar, are beyond this distance (see table below) and therefore screen out of any further assessment.

Where the precautionary level of $1\mu\text{g}/\text{m}^3$ is used, and the process contribution is assessed to be less than 4% the site automatically screens out as insignificant and no further assessment of critical load is necessary. In this case the $1\mu\text{g}/\text{m}^3$ level used has not been confirmed by Natural England, but it is precautionary. It is therefore possible to conclude no likely significant effect.

Table 1 – SAC/SPA/Ramsar Assessment

Name of SAC/SPA/Ramsar	Distance from site (m)
Fenn's, Whixall, Bettisfield, Wem & Cadney Mosses SAC	9021
West Midlands Mosses SAC	9388
Midland Meres and Mosses – Phase 2 Ramsar	4996

Midland Meres and Mosses – Phase 2 Ramsar is located 2505m from the installation and therefore does not screen out <4% for a precautionary CLe of 1µg/m³. It was established that a Cle of 3µg/m³ was appropriate for this site. Screening using the ammonia screening tool (version 4.4) (AST4.4) has determined that the PC on the Midland Meres and Mosses – Phase 1 Ramsar for ammonia, acid and nitrogen deposition from the application site are under the 4% significance threshold and can be screened out as having no likely significant effect. See results below.

Table 2 – Ammonia emissions

Site	Critical level ammonia µg/m ³	Predicted PC µg/m ³	PC % of Critical level
Midland Meres and Mosses – Phase 1 Ramsar	3*	0.041	1.4

* Natural England advised that a CLe of 3 for ammonia should be applied and this has been reviewed and agreed by Environment Agency May 2015

Table 3 – Nitrogen deposition

Site	Critical load kg N/ha/yr	Predicted PC kg N/ha/yr	PC % of critical load
Midland Meres and Mosses – Phase 1 Ramsar	10*	0.211	2.1

* Critical load values taken from Air Pollution Information System (APIS) website (www.apis.ac.uk) – 23/10/15

Table 4 – Acid deposition

Site	Critical load keq/ha/yr	Predicted PC keq/ha/yr	PC % of critical load
Midland Meres and Mosses – Phase 1 Ramsar	0.663*	0.015	2.3

* Critical load values taken from APIS website (www.apis.ac.uk) – 23/10/15

No further assessment is necessary.

Ammonia assessment – SSSIs

The following trigger thresholds have been applied for assessment of SSSIs. If the process contribution (PC) is below 20% of the relevant critical level (CLe) or critical load (CLo) then the farm can be permitted with no further assessment. Where this threshold is exceeded an in combination assessment and/or detailed modelling may be required.

Initial screening using Ammonia Screening Tool v4.4 has indicated that emissions from Burlton Lane Farm will only have a potential impact on SSSI sites with a precautionary critical level of $1\mu\text{g}/\text{m}^3$ if they are within 868m of the emission source.

Initial screening indicates that beyond 868m the PC is less than $0.2\mu\text{g}/\text{m}^3$ (i.e. less than 20% of the precautionary $1\mu\text{g}/\text{m}^3$ critical level) and therefore beyond this distance the PC is insignificant. All 3 SSSIs are beyond this distance (see table below) and therefore screens out of any further assessment.

Where the precautionary level of $1\mu\text{g}/\text{m}^3$ is used, and the process contribution is assessed to be less than 20% the site automatically screens out as insignificant and no further assessment of critical load is necessary. In this case the $1\mu\text{g}/\text{m}^3$ level used has not been confirmed by Natural England, but it is precautionary. It is therefore possible to conclude no likely damage to these sites.

Table 5 – SSSI Assessment

Name of SSSI	Distance from site (m)
Fenemere	2505
Brownheath Moss	4996
Ruewood Pastures	4372

No further assessment is required.

Ammonia assessment – LWSs / Ancient Woodlands

There are 2 Local Wildlife Sites (LWS) and 4 Ancient Woodlands within 2 km of Burlton Lane Farm. The following trigger thresholds have been applied for the assessment of these sites.

1. If PC is <100% of relevant critical level or load, then the farm can be permitted (H1 or ammonia screening tool)
2. If further modelling shows PC <100%, then the farm can be permitted.

For all these sites this farm has been screened out at stage 1, as set out above, using results of the ammonia screening tool (version 4.4).

Screening using ammonia screening tool (version 4.4) has indicated that emissions from Burlton Lane Farm will only have a potential impact on sites with a critical level of $1 \mu\text{g}/\text{m}^3$ if they are within 297m of the emission source. Screening indicates that beyond this distance, the PC at conservation sites is less than $1 \mu\text{g}/\text{m}^3$ (i.e. less than 100% of the precautionary $1 \mu\text{g}/\text{m}^3$ CLe) and therefore beyond this distance the PC is insignificant. In this case the following sites are beyond this distance.

Table 4 – distance from source

Site	Distance (m)
Oldewood Burlton LWS	1569
Marion Pool LWS	2022
Old Wood ancient woodland	1569
Webscott Wood ancient woodland	1855
Unnamed ancient woodland	2098
Unnamed ancient woodland	2105

The PC at these sites has been screened as insignificant. It is possible to conclude no significant pollution will occur at these sites and no further assessment is required.

Site drainage

The current drainage system is already in existence and adapted by the addition of underground gravel pits at the extended ends of the poultry houses which receive roof water via gutters from the extended roofs, and then drain via the existing piped drainage system to a ditch to the north of the installation. A pre-operational condition has been included in the permit (reference 1, table S1.3), requiring the operator to demonstrate that the dirty water (wash water) drainage system and wash water tanks have been leak-tested and no contaminated water can enter the clean drainage system, as the current drainage system has been in place for a while.

Odour

There are sensitive receptors within 400 metres of the installation boundary and therefore an Odour Management Plan (OMP) has been prepared (received 14/10/15 in support of the application, and including an additional Odour Contingency Plan received 30/11/15), as required in chapter 3, section 3.3 of guidance SGN How to comply – Intensive Farming - The EPR Sector Guidance Note 6.09 for intensive pig and poultry farmers, Version 2, published January 2010 (SGN EPR 6.09).

The residential properties are as follows:

1. Burlton Lane Farm is located to the north east of the installation, approximately 25m from the installation boundary (approximately 160m from the nearest poultry house), at approximate grid reference 346500,324985. This property is occupied by people associated with the farm.
2. No.s 1 and 2 The Old Barn are located approximately 35m to the north east of the installation boundary (approximately 180m from the nearest poultry house), at approximate grid reference 346515,324985, and it is understood these properties form part of the farmstead and are occupied by people associated with the farm.
3. Greenfields is located to the north west of the installation, approximately 20m from the installation boundary (approximately 290m from the nearest poultry house), at approximate grid reference 346158,325338.
4. Yew Tree House is located to the north west of the installation, approximately 365m from the installation boundary (approximately 630m from the nearest poultry house), at approximate grid reference 345969,325630.

The OMP submitted is considered acceptable having been assessed against the requirements of IPPC SRG 6.02 (Farming): Odour Management at Intensive Livestock Installations plus our Top Tips Guidance and Poultry Industry Good Practice Checklist and with regard to the site specific circumstances at the installation. The operator is required to manage activities at the installation in accordance with condition 3.3.1 and this odour management plan. The odour management plan includes odour control measures. These measures include procedural controls covering feed selection, feed delivery, storage and containment, ventilation design, poultry litter management, poor range management, carcass storage and disposal, poultry house clean out operations, dirty water management, manure management, abnormal operations, and a complaints procedure. The odour management plan is required to be reviewed at least every 4 years and/or after a complaint is received, whichever is the sooner.

In addition an odour risk assessment has been completed as part of the environmental risk assessment (Appendix 11 table A1) submitted with application supporting documentation.

We are satisfied that operations carried out on the farm will minimise the risk of odour pollution from the installation.

Burlton Lane Farm, and no.s 1 and 2 The Old Barn are not considered as sensitive receptors in that they are occupied by people associated with the farm, therefore it is unlikely that odour will be perceived as a nuisance. In addition there is no history of odour complaints from local residents linked to the existing poultry facility operating below the EPR scheduled activity threshold .

In addition, Greenfields and Yew Tree Farm are located over 290m and 630m respectively to the northwest of the nearest poultry house, which will be the main outlet of emissions which may cause odour, and the predominant wind direction is south westerly (i.e. not in the direction towards these residential properties).

Finally, the applicant submitted an odour dispersion modelling report (reference 'An Odour Dispersion Modelling Study of the Impact of the Existing and Proposed Free Range Egg Laying Houses at Burlton Lane farm. Myddle, Shrewsbury, Shropshire', completed by AS Modelling & Data Ltd, dated 09/10/15) that was submitted as part of their planning application. We have reviewed this and agree with the conclusions that the impacts are not likely to be significant at receptors for this application. Furthermore, the results indicate a reduction in odour impact for the permitted operation compared with the previous below threshold operation due to the improvement in the housing system, using frequent belt removal for some of the manure.

Overall there is the potential for odour pollution from the installation. The operator compliance with their Odour Management Plan, submitted with this application, will minimise the risk of odour pollution beyond the installation boundary.

However the risk of odour pollution beyond the installation boundary is considered not significant.

Noise

There are sensitive receptors within 400 metres of the installation boundary as stated above in the odour review. The operator has hence provided a noise management plan with the application.

Operations with the most potential to cause noise nuisance have been assessed as those involving the running of poultry house ventilation fans, feed delivery, mechanical equipment, poultry loading and unloading, fork lift truck

movements and other vehicles use in catching birds at depopulation, manure removal and clean out of poultry houses.

The noise management plan covers control measures for each of these potential noise hazards.

There is no history of noise complaints linked to the existing pig farm operating below the EPR scheduled activity threshold.

Overall there is the potential for noise from the installation beyond the installation boundary. However the risk of noise beyond the installation boundary is considered insignificant.

Annex 1: decision checklist

This document should be read in conjunction with the application, supporting information and permit.

Aspect considered	Justification / Detail	Criteria met
		Yes
Receipt of submission		
Confidential information	A claim for commercial or industrial confidentiality has not been made.	✓
Identifying confidential information	We have not identified information provided as part of the application that we consider to be confidential. The decision was taken in accordance with our guidance on commercial confidentiality.	✓
Consultation		
Scope of consultation	<p>The consultation requirements were identified and implemented. The decision was taken in accordance with RGN 6 High Profile Sites, our Public Participation Statement and our Working Together Agreements.</p> <p>For this application we consulted the following bodies:</p> <ul style="list-style-type: none"> • Health and Safety Executive (HSE) • Shropshire Council Environmental Health • Public Health England (PHE) • Director of Public Health (DoPH) <p>We have consulted with PHE and DoPH because there are sensitive receptors within 100m of the installation boundary.</p>	✓
Responses to consultation and web publicising	<p>The web publicising and consultation responses (Annex 2) were taken into account in the decision.</p> <p>The decision was taken in accordance with our guidance.</p>	✓
Operator		
Control of the facility	We are satisfied that the applicant (now the operator) is the person who will have control over the operation of the facility after the grant of the permit. The decision was taken in accordance with EPR RGN 1 Understanding the	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	meaning of operator.	
European Directives		
Applicable directives	All applicable European directives have been considered in the determination of the application.	✓
The site		
Extent of the site of the facility	<p>The operator has provided a plan which we consider is satisfactory, showing the extent of the site of the facility.</p> <p>A plan is included in the permit and the operator is required to carry on the permitted activities within the site boundary.</p>	✓
Site condition report	<p>The operator has provided a description of the condition of the site.</p> <p>We consider this description is satisfactory. The decision was taken in accordance with our guidance on site condition reports and baseline reporting under IED–guidance and templates (H5).</p>	✓
Biodiversity, Heritage, Landscape and Nature Conservation	<p>The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat .</p> <p>A full assessment of the application and its potential to affect the sites has been carried out as part of the permitting process. We consider that the application will not affect the features of the site.</p> <p>Please refer to Key Issues section 4 Ammonia Assessment for further information.</p> <p>We have not formally consulted on the application. The decision was taken in accordance with our guidance.</p> <p>An Appendix 11 has been sent to Natural England for information only (dated 30/11/15) and saved on the Environment Agency’s Electronic Document and Records Management system (EDRM).</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
Environmental Risk Assessment and operating techniques		
Environmental risk	<p>We have reviewed the operator's assessment of the environmental risk from the facility.</p> <p>The operator's risk assessment is satisfactory.</p> <p>The assessment shows that, applying the conservative criteria in our guidance on Environmental Risk Assessment all emissions may be categorised as environmentally insignificant.</p>	✓
Operating techniques	<p>We have reviewed the techniques used by the operator and compared these with the relevant guidance notes.</p> <p>The operating techniques are as follows:</p> <ul style="list-style-type: none"> • Poultry housing is ventilated by high velocity roof fans (efflux velocity 11m/s) and gable end fan outlets used infrequently for temperature control in hot weather • Litter is exported off site and is spread either on operator owned land or land owned by third parties • Dirty wash water is exported off site and spread on operator owned land • Roof water drains via French drains along houses then is piped to a surface water ditch • Sealed and collision-protected feed storage bins • Carcasses are collected daily and stored in a secure container on site prior to disposal via an on-site incinerator • Phosphorous and protein levels are reduced over the production and growing cycle by providing different feeds • No artificial heating is provided <p>The proposed techniques for priorities for control are in line with the benchmark levels contained in the SGN EPR6.09 and we consider them to represent appropriate techniques for the facility. The permit conditions ensure compliance with relevant BREFs and BAT Conclusions, and ELVs deliver compliance with BAT-AELs.</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	We, the Environment Agency, have reviewed and approved the Odour Management Plan and consider it complies with the requirements of our H4 Odour management guidance note. We agree with the scope and suitability of key measures but this should not be taken as confirmation that the details of equipment specification design, operation and maintenance are suitable and sufficient. That remains the responsibility of the operator.	
The permit conditions		
Pre-operational conditions	<p>Based on the information in the application, we consider that we need to impose pre-operational conditions.</p> <p>We have included a pre-operational condition that requires the operator to shall submit a report to the Environment Agency demonstrating that the dirty water (wash water) drainage system and wash water tanks have been leak-tested and no contaminated water can enter the clean drainage system.</p>	✓
Incorporating the application	<p>We have specified that the applicant must operate the permit in accordance with descriptions in the application, including all additional information received as part of the determination process.</p> <p>These descriptions are specified in the Operating Techniques table in the permit.</p>	✓
Emission limits	We have decided that emission limits should be not set in the permit.	✓
Operator Competence		
Environment management system	There is no known reason to consider that the operator will not have the management systems to enable it to comply with the permit conditions. The decision was taken in accordance with RGN 5 on Operator Competence.	✓
Relevant convictions	<p>The National Enforcement Database has been checked to ensure that all relevant convictions have been declared.</p> <p>No relevant convictions were found. The operator</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	satisfies the criteria in RGN 5 on Operator Competence.	
Financial provision	There is no known reason to consider that the operator will not be financially able to comply with the permit conditions. The decision was taken in accordance with RGN 5 on Operator Competence.	✓

Annex 2: External Consultation and web publicising

Summary of responses to consultation and web publication and the way in which we have taken these into account in the determination process.

Response received from
Public Health England (received 03/11/15)
Brief summary of issues raised
<p>PHE recommendations:</p> <ol style="list-style-type: none">1. These sites occasionally present odour problems and we recommend that the Environment Agency confirm that no recent nuisance complaints have been received about this installation. The nature of any recent complaints should be supplied and the Environment Agency should ensure that these complaints have been appropriately investigated. It is recommended that this issue needs to be clarified prior to any permit variation.2. We recommend that any Environmental Permit issued for this site should contain conditions to ensure that the following potential emissions do not impact upon public health: odour, fugitive emissions of ammonia, dust to air from feed and litter and noise.
Summary of actions taken or show how this has been covered
<ol style="list-style-type: none">1. The Environment Agency is not aware of any nuisance complaints for this installation.2. The operator is required by the permit to prevent or minimise emissions, in condition 3.2 for fugitive emissions ('Emissions of substances not controlled by an emission limit'), which includes ammonia and dust, and also conditions 3.3 for odour and 3.4 for noise and vibration, and also has an odour management plan and noise management plan in place. <p>The use of Best Available Techniques and good practice will ensure minimisation of emissions. Furthermore, condition 3.2.1 used in conjunction with condition 3.2.2 which states that in the event of fugitive emissions causing pollution following commissioning of the installation, the Operator is required to undertake a review of site activities, provide an emissions management plan and to undertake any mitigation recommended as part of that report, once agreed in writing with the Environment Agency.</p> <p>The above conditions should ensure potential emissions do not impact on public health.</p> <p>No action required.</p>

The Health and Safety Executive (HSE), the Director of Public Health and Shropshire Council Environmental Health were also consulted, however, no consultation responses were received.

The application was also advertised on the www.gov.uk website, with a deadline of 18/11/15 for comments, but none were received.