# **Environment Agency permitting decisions**

# Bespoke permit

We have decided to grant the permit for Lower Wigmore Farm operated by Mr Jonathan William Stokes, Mr Peter Cyril Stokes and Mrs Joyce Ann Stokes.

The permit number is EPR/BP3939RN

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

Lower Wigmore Farm is situated approximately 13 kilometres west of Shrewsbury, Shropshire. The installation is approximately centred on National Grid Reference SJ 35594 11242.

The installation comprises of three poultry houses for free range laying hens. The three poultry houses provide a combined capacity for 56,000 bird places. Hens are brought onto the farm at approximately 18 weeks old and are depopulated around 90 weeks of age, after the laying cycle has finished.

Poultry houses 1 and 2 are deep litter systems, ventilated by medium velocity roof fan outlets. Poultry house 3 is a multi-tier aviary system, with manure removed four times per week and is ventilated by high velocity roof fan outlets. House 3 also has fans located at each end of the house which have side outlets, although these are operated infrequently to maintain temperature, typically in the summer months.

At the end of the cycle the houses are depopulated, washed and disinfected ready for the next cycle. All manure is exported from the installation for spreading on land owned by the operator or third parties. Water from the wash out of poultry houses is channelled to underground collection tanks close to the houses to await export off site.

Mixing and milling of feed takes place within the installation boundary. Associated food is stored on the installation in sealed food bins. Mortalities are collected daily and stored in a secure container on site for removal under the National Fallen Stock Scheme.

EPR/BP3939RN/A001 Issued 25/01/16 Page 1 of 14

## 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 Lower Wigmore Farm (reference Appendix 2 Site Condition Report, received as part of application EPR/BP3939RN/A001 duly made 29/10/15) 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

EPR/BP3939RN/A001 Issued 25/01/16 Page 2 of 14

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 Nitrate Vulnerable Zone (NVZ). It is in a Groundwater Vulnerability Zone (GWVZ), minor aquifer.

#### Ammonia emissions

There are 2 Special Areas of Conservation (SAC), and 1 Ramsar sites located within 10 kilometres of the installation boundary\*. There are 3 Sites of Special Scientific Interest (SSSI) located within 5 km of the installation. There are also 3 Local Wildlife Sites (LWS), and 4 Ancient Woodlands (AW), within 2 km of the installation.

\*Please note, for ammonia screening purposes, the distances of the nature conservation sites from the installation have been calculated from the approximate centre of the installation. A buffer of 440m has been included to account for nature conservation sites within the relevant distance (10km) from the installation boundary (this is a large free range 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 Lower Wigmore Farm will only have a potential impact on the SAC/SPA/Ramsar sites with a precautionary critical level of 1µg/m³ if they are within 5250 metres of the emission source.

Initial screening indicates that beyond 5250m the PC is less than  $0.04\mu g/m^3$  (i.e. less than 4% of the precautionary  $1\mu g/m^3$  critical level) and therefore beyond this distance the PC is insignificant. The Stiperstones & The Hollies SAC, Montgomery Canal SAC (Wales) and Midland Meres & Mosses – Phase 1 Ramsar are beyond this distance (see table below) and therefore screen out of any further assessment.

EPR/BP3939RN/A001 Issued 25/01/16 Page 3 of 14

Where the precautionary level of  $1\mu g/m^3$  is used, and the process contribution is assessed to be less than 4% the sites automatically screen out as insignificant and no further assessment of critical load is necessary. In this case the  $1\mu g/m^3$  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)	
The Stiperstones & The Hollies SAC	9303	
Montgomery Canal SAC (Wales)	9705	
Midland Meres & Mosses – Phase 1 Ramsar	10202	

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 Lower Wigmore Farm will only have a potential impact on SSSI sites with a precautionary critical level of  $1\mu g/m^3$  if they are within 1895 metres of the emission source.

Initial screening indicates that beyond 1895m the PC is less than 0.2µg/m³ (i.e. less than 20% of the precautionary 1µg/m³ critical level) and therefore beyond this distance the PC is insignificant. River Severn at Montford SSSI, Trewern Brook SSSI and Trewern Brook SSSI (Wales) are beyond this distance (see table below) and therefore screen out of any further assessment.

Where the precautionary level of  $1\mu g/m^3$  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  $1\mu g/m^3$  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.

EPR/BP3939RN/A001 Issued 25/01/16 Page 4 of 14

Table 2 – SSSI Assessment

Name of SSSI	Distance from site (m)
River Severn at Montford SSSI	5147
Trewern Brook SSSI	4725
Trewern Brook SSSI (Wales)	4778

No further assessment is required.

### Ammonia assessment - LWS/AW/LNR

There are 3 Local Wildlife Sites (LWS) and 4 Ancient Woodland (AW) within 2 km of Lower Wigmore 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 the following 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 Lower Wigmore Farm will only have a potential impact on sites with a critical level of 1  $\mu$ g/m³ if they are within 684 metres of the emission source. Screening indicates that beyond this distance, the PC at conservation sites is less than 1  $\mu$ g/m³. 1  $\mu$ g/m³ is 100% of the 1  $\mu$ g/m³ CLe and therefore beyond this distance the PC is insignificant. In this case the following LWS and AWs are beyond this distance.

Table 3 – distance from source

Site	Distance (m)
Loton Park and Quarries LWS	1785
Wattlesborough Lawns AW	699
Broxton Wood AW	1972
Plantation on Ancient Woodland Site AW (Wales)	2285
Plantation on Ancient and Semi Natural Woodland AW (Wales)	2346

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.

Wollaston Ponds LWS and Wattlesborough Lawn LWS are 543m and 579m from the installation, respectively. For these sites the farm has been screened out, using the ammonia screening tool (version 4.4). The predicted PCs on

EPR/BP3939RN/A001 Issued 25/01/16 Page 5 of 14

the LWSs for ammonia, acid and nitrogen deposition from the application site are under the 100% significance threshold and can be screened out as having no likely significant effect.

Table 4 - Ammonia emissions

Site	Critical level ammonia µg/m³	Predicted PC μg/m <sup>3</sup>	PC % of critical level
Wollaston Ponds LWS	3*	1.439	48
Wattlesborough Lawn LWS	3*	1.301	43.4

<sup>\*</sup> CLe 3 applied as no protected lichen or bryophytes species were found when checking Easimap layer

Table 5 - Nitrogen deposition

Site	Critical load kg N/ha/yr	Predicted PC kg N/ha/yr	PC % of critical load
Wollaston Ponds LWS	10*	7.476	74.8
Wattlesborough Lawn LWS	10*	6.755	67.6

<sup>\*</sup> Critical load values taken from APIS website (<u>www.apis.ac.uk</u>) – 01/12/15 for Neutral Grassland

Table 6 - Acid deposition

Site	Critical load keq/ha/yr	Predicted PC keq/ha/yr	PC % of critical load
Wollaston Ponds LWS	4.72*	0.534	11.3
Wattlesborough Lawn LWS	2.58*	0.483	18.7

<sup>\*</sup> Critical load values taken from APIS website (<u>www.apis.ac.uk</u>) – 01/12/15 for Broadleaved, Mixed and Yew Woodland

No further assessment is required.

#### Odour

There are sensitive receptors within 400 metres of the installation and therefore an odour management plan has been prepared, 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. Lower Wigmore Farm, occupied by the operator, located immediately to the west of the installation boundary.
- 2. A large number of properties (in excess of 30) located immediately to the north of the installation.

EPR/BP3939RN/A001 Issued 25/01/16 Page 6 of 14

The residence occupied by people associated with the farm (property described above in 1) is not considered as a sensitive receptor for odour as it is unlikely that odour will be perceived by them as a nuisance.

The farm has operated for several years with houses 1 and 2, below threshold with 24,000 layers. There have been no complaints from the neighbouring properties, including at times when the deep litter houses are cleaned out every 14 months. The expansion of the installation to include house 3 in between the original two houses, which adds 32,000 layers, is not anticipated to change this position. This house will have litter removed 4 times a week therefore avoiding the need to remove litter at the end of the crop, and on days when litter is not removed from site the trailer will be covered immediately after the litter belts have been run. In addition the general wind direction is from the south west therefore not in the direction of most of these properties. There are two properties within 400m of the boundary which are downwind of the installation, but these are more than 500m from the nearest poultry house.

The Odour Management Plan (OMP), submitted as part of the application supporting documentation (reference Appendix 8), 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, in particular, procedural controls such feed selection, feed delivery and storage, ventilation design, poultry litter management, carcass storage and disposal, poultry house clean out operations, dirty water management, manure management, contingency measures, 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.

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

There is the potential for odour pollution from the installation. The operator's compliance with their Odour Management Plan, submitted with this application, will minimise the risk of odour pollution beyond the installation boundary and the risk of odour pollution at sensitive receptors beyond the installation boundary is not considered significant.

#### **Noise**

There are sensitive receptors within 400 metres of the installation boundary as stated above in the odour section. The applicant has provided a noise

EPR/BP3939RN/A001 Issued 25/01/16 Page 7 of 14

management plan (NMP) as part of the application supporting documentation, reference Appendix 9.

Operations with the most potential to cause noise nuisance have been assessed as those involving delivery vehicles travelling to and from the farm, vehicles on site, feed transfer to poultry houses, testing of the standby generator, operation of ventilation fans, noise from birds on site, staff and contractors, and repairs. The noise management plan covers control measures for each of these potential noise hazards.

As for odour, the residence occupied by people associated with the farm is not considered as a sensitive receptor as it is unlikely that noise will be perceived as a nuisance.

There is the potential for noise from the installation beyond the installation boundary. However the risk of noise beyond the installation boundary is considered unlikely to cause a nuisance.

#### **Dust and bioaerosols**

There are measures included within the permit (the 'Fugitive Emissions' conditions) to provide a level of protection. The use of Best Available Techniques and good practice will ensure minimisation of emissions. Furthermore, condition 3.2.1 'Emissions of substances not controlled by an emission limit' is included in the permit. This is 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.

The closest residential receptor is located adjacent to the installation boundary to the west, and approximately 40m away from the building containing the feed mill, which is a sealed steel building. The receptor is more than 100m to the west and north of the nearest poultry houses.

The general wind direction in the area is from the south west. This means that the nearest receptor is generally not downwind of the installation. This, together with good management of the installation, keeping areas clean from build up of dust, other measures in place to reduce dust and risk of spillages, such as litter and feed management/delivery procedures all reduce the potential for emissions impacting the nearest receptor.

The applicant has also submitted a Dust Management Plan (reference Appendix 10), written in accordance with Environment Agency's EPR 6.09 How to Comply with your Environmental Permit for Intensive Farming

EPR/BP3939RN/A001 Issued 25/01/16 Page 8 of 14

Appendix 11 guidance. We consider this acceptable as a bioaerosol risk assessment and that the measures outlined in the plan will minimise the potential for dust and bioaerosol emissions from the installation.

EPR/BP3939RN/A001 Issued 25/01/16 Page 9 of 14

# 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.	<b>✓</b>		
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.	<b>√</b>		
Consultation				
Scope of consultation	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.  For this application we consulted the following bodies:  • Health and Safety Executive (HSE)  • Shropshire Council Environmental Health  • Public Health England (PHE)  • Director of Public Health (DoPH)  We have consulted with PHE and DoPH because there are sensitive receptors within 100m of the installation boundary.			
Responses to consultation and web publicising	The web publicising and consultation responses (Annex 2) were taken into account in the decision.  The decision was taken in accordance with our guidance.	<b>✓</b>		
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 meaning of operator.	<b>✓</b>		

EPR/BP3939RN/A001 Issued 25/01/16 Page 10 of 14

Aspect considered	Justification / Detail	Criteria met
		Yes
<b>European Direc</b>	ctives	
Applicable directives	All applicable European directives have been considered in the determination of the application.	<b>✓</b>
The site		
Extent of the site of the facility	The operator has provided a plan which we consider is satisfactory, showing the extent of the site of the facility.  A plan is included in the permit and the operator is required to carry on the permitted activities within the site	<b>✓</b>
	boundary.	
Site condition report	The operator has provided a description of the condition of the site.	<b>✓</b>
	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).	
Biodiversity, Heritage, Landscape and Nature	The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat.	<b>√</b>
Conservation	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.	
	Please refer to Key Issues section Ammonia Assessment for further information.	
	We have not formally consulted on the application. The decision was taken in accordance with our guidance.	
	An Appendix 11 has been sent to Natural England and Natural Resources Wales for information only (dated 05/01/16) and saved on the Environment Agency's Electronic Document and Records Management system (EDRM).	

EPR/BP3939RN/A001 Issued 25/01/16 Page 11 of 14

Aspect	Justification / Detail	Criteria
considered		met
Environmental	Risk Assessment and operating techniques	Yes
Environmental risk	We have reviewed the operator's assessment of the environmental risk from the facility.  The operator's risk assessment is satisfactory.  The assessment shows that, applying the conservative criteria in our guidance on Environmental Risk Assessment all emissions may be categorised as environmentally insignificant.	<b>✓</b>
Operating techniques	We have reviewed the techniques used by the operator and compared these with the relevant guidance notes.  The operating techniques are as follows:  • Poultry housing is ventilated by medium velocity fans (efflux velocity > 2m/s) in houses 1 and 2, and high velocity roof fans (efflux velocity 11m/s) in poultry house 3.  • In addition house 3 has side fans located at the ends of the house 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 or third party owned land  • Roof water drains to ponds acting as soakaways, one of which also outlets 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 under the National Fallen Stock Scheme  • Phosphorous and protein levels are reduced over the production and growing cycle by providing different feeds  • No artificial heating is provided  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,	

EPR/BP3939RN/A001 Issued 25/01/16 Page 12 of 14

Aspect	Justification / Detail	Criteria
considered		met Yes
	and ELVs deliver compliance with BAT-AELs.	162
	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 con	ditions	
Incorporating the application	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.	<b>✓</b>
	These descriptions are specified in the Operating Techniques table in the permit.	
Emission limits	We have decided that emission limits should be not set in the permit.	<b>✓</b>
<b>Operator Comp</b>	etence	
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.	<b>\</b>
Relevant	The National Enforcement Database has been checked	<b>√</b>
convictions	to ensure that all relevant convictions have been declared.  No relevant convictions were found. The operator 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.	✓

EPR/BP3939RN/A001 Issued 25/01/16 Page 13 of 14

#### Annex 2: External Consultation and web publicising responses

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 (PHE) (received 06/01/16)

### Brief summary of issues raised

PHE recommended that any Environmental Permit issued for this site should contain conditions to ensure that the following potential emissions do not impact upon public health: noise, dust and odour.

Based solely on the information contained in the application provided, PHE has no significant concerns regarding risk to health of the local population from this proposed activity, providing that the applicant takes all appropriate measures to prevent or control pollution, in accordance with the relevant sector technical guidance or industry best practice.

### Summary of actions taken or show how this has been covered

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 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.

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.

The above conditions should ensure potential emissions do not impact on public health.

No action required.

The Health and Safety Executive (HSE), Shropshire Council Environmental Health and the Director of Public 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 07/01/16 for comments, but none were received.

EPR/BP3939RN/A001 Issued 25/01/16 Page 14 of 14