

# **Permitting decisions**

## **Variation**

We have decided to grant the variation for Lower Ledicot Poultry Unit operated by Roberts Poultry Limited.

The variation number is EPR/LP3331YL/V002.

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.

## **Purpose of this document**

This decision document provides a record of the decision making process. It summarises the decision making process in the decision checklist to show how all relevant factors have been taken in to account.

This decision document provides a record of the decision making process. It:

- · highlights key issues in the determination
- summarises the decision making process in the <u>decision checklist</u> to show how all relevant factors have been taken into account
- shows how we have considered the <u>consultation responses</u>

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

Read the permitting decisions in conjunction with the environmental permit and the variation notice. The introductory note summarises what the variation covers.

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# Key issues of the decision

## New Intensive Rearing of Poultry or Pigs BAT Conclusions document

The new Best Available Techniques (BAT) Reference Document (BREF) for the Intensive Rearing of poultry or pigs (IRPP) was published on the 21st February 2017. There is now a separate BAT Conclusions document which will set out the standards that permitted farms will have to meet.

The BAT Conclusions document is as per the following link

http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017D0302&from=EN

Now the BAT Conclusions are published **all new housing within variation applications** issued after the 21<sup>st</sup> February 2017 must be compliant in full from the first day of operation.

There are some new requirements for permit holders. The conclusions include BAT Associated Emission Levels for ammonia emissions which will apply to the majority of permits, as well as BAT associated levels for nitrogen and phosphorous excretion.

For some types of rearing practices stricter standards will apply to farms and housing permitted after the new BAT Conclusions are published.

This variation determination includes a review only of BAT compliance for new housing introduced with this variation (poultry houses 5 and 6). A BAT review of existing housing compliance with BAT conclusions document is to be the subject of a sector permit review and is beyond the scope of this variation application permit determination (poultry houses 1-4).

#### **New BAT conclusions review**

There are 33 BAT conclusion measures in total within the BAT conclusion document dated 21st February 2017.

We have sent out a request for information requiring the Applicant to confirm that the new installation complies in full with all the BAT conclusion measures.

The Applicant has confirmed their compliance with all BAT conditions for the new housing, in their emails of 15/06/18 and 16/07/18.

The following is a more specific review of the measures the Applicant has applied to ensure compliance with the above key BAT measures.

BAT measure	Applicant compliance measure
BAT 3 - Nutritional management Nitrogen excretion	The Applicant has confirmed it will demonstrate it achieves levels of Nitrogen excretion below the required BAT-AEL of 0.6 kg N/animal place/year by an estimation using manure analysis for total Nitrogen content.
	This confirmation was in response to the Request for Further Information, received 15/06/18, which has been referenced in Table S1.2 Operating Techniques of the Permit.
	Table S3.3 of the Permit concerning process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions.
BAT 4 Nutritional management Phosphorous excretion	The Applicant has confirmed it will demonstrate it achieves levels of Phosphorous excretion below the required BAT-AEL of 0.25 kg $P_2O_5$ animal place/year by an estimation using manure analysis for total Phosphorous content.
	This confirmation was in response to the Request for Further Information, received DD/MM/YY, which has been referenced in Table S1.2 Operating techniques of the Permit.
	Table S3.3 of the Permit concerning process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions.

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BAT measure	Applicant compliance measure
BAT 24 Monitoring of emissions and process parameters  - Total nitrogen and phosphorous excretion	Table S3.3 Process monitoring requires the operator to undertake relevant monitoring that complies with these BAT conclusions
BAT 25 Monitoring of emissions and process parameters  - Ammonia emissions	Table S3.3 of the Permit concerning process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions.
BAT 26 Monitoring of emissions and process parameters  - Odour emissions	The approved OMP includes the following details for on Farm Monitoring and Continual Improvement:  • The staff will perform a sniff tests around the site to check the surrounding area for high levels of odour. Subsequent to an expansion in bird numbers daily this will be undertaken on a daily basis. If no odours are detected then this will be reduced to a weekly basis after 3 months.
BAT 27 Monitoring of emissions and process parameters -Dust emissions	Table S3.3 Process monitoring requires the operator to undertake relevant monitoring that complies with these BAT conclusions.  Example text:  The Applicant has confirmed they will report the dust emissions to the Environment Agency annually by multiplying the dust emissions factor for broilers by the number of birds on site.  This confirmation was in response to the Not Duly Made Request for Further Information/Schedule 5 Notice request for further information, received 16/07/18, which has been referenced in Table S1.2 Operating techniques of the Permit.
BAT 32 Ammonia emissions from poultry houses - Broilers	The BAT-AEL to be complied with is 0.01 – 0.08 kg NH3/animal place/year.  The Applicant will meet this as the emission factor for broilers is 0.034 kg NH3/animal place/year.  The Installation does not include an air abatement treatment facility, hence the standard emission factor complies with the BAT AEL.

## More detailed assessment of specific BAT measures

## **Ammonia emission controls**

A BAT Associated Emission Level (AEL) provides us with a performance benchmark to determine whether an activity is BAT.

## <u>Ammonia emission controls – BAT conclusion 32</u>

The new BAT conclusions include a set of BAT-AEL's for ammonia emissions to air from animal housing for broilers.

For variations all new housing on existing farms will need to meet the BAT-AEL.

### **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 Ledicot Poultry Unit (dated 26/03/18) 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.

#### Odour

Intensive farming is by its nature a potentially odorous activity. This is recognised in our 'How to Comply with your Environmental Permit for Intensive Farming' EPR 6.09 guidance (http://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/297084/geho0110brsb-e-e.pdf).

Condition 3.3 of the environmental permit reads as follows:

"Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour."

Under section 3.3 of the guidance an Odour Management Plan (OMP) is required to be approved as part of the permitting process, if as is the case here, sensitive receptors (sensitive receptors in this instance excludes properties associated with the farm) are within 400m of the Installation boundary. It is appropriate to require an OMP when such sensitive receptors have been identified within 400m of the installation to prevent, or where that is not practicable, to minimise the risk of pollution from odour emissions.

The risk assessment for the Installation provided with the Application lists key potential risks of odour pollution beyond the Installation boundary. These activities are as follows:

manufacture and selection of feed, feed storage and delivery, ventilation system, litter management, carcass disposal, house clean-out, during stock inspections, during catching of birds.

A contingency plan has been included in the OMP, in event that preventative odour control measures fail. In addition, to splitting the crop cycles as a backstop measure in the event that the contingency measures fail. The details of which will be discussed with the Environment Agency should this scenario arise.

#### **Noise**

Intensive farming by its nature involves activities that have the potential to cause noise pollution. This is recognised in our 'How to Comply with your Environmental Permit for Intensive Farming' EPR 6.09 guidance.

Under section 3.4 of this guidance a Noise Management Plan (NMP) must be approved as part of the permitting determination, if there are sensitive receptors within 400m of the Installation boundary.

Condition 3.4 of the Permit reads as follows:

Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan, to prevent or where that is not practicable to minimise the noise and vibration.

There are sensitive receptors within 400 metres of the Installation boundary as stated in section 4.4.2 above. The Operator has provided a noise management plan (NMP) as part of the Application supporting documentation, and further details are provided in section 4.5.2 below.

The risk assessment for the Installation provided with the Application lists key potential risks of noise pollution beyond the Installation boundary. The key sources of noise pollution are as follows:

ventilation fans, boiler flue outlets, biomass boiler, fuel and fed deliveries, feeding systems, alarm systems, bird catching, clean out operations, maintenance and repairs, set up and placement and standby generator testing.

We have assessed the NMP and the H1 risk assessment for noise and conclude that the Applicant has followed the guidance set out in EPR 6.09 Appendix 5 'Noise management at intensive livestock installations'. We are satisfied that all sources and receptors have been identified, and that the proposed mitigation measures will minimise the risk of noise pollution / nuisance.

#### **Biomass boilers**

The applicant is varying their permit to add 1 biomass boiler with a net rated thermal input of 0.510MW. As a result there will be a total of 2 biomass boilers on the installation each with a net rated thermal input of 0.510Mth. The total aggregated thermal input for the two boilers is 1.1MWth.

The Environment Agency has assessed the pollution risks and has concluded that air emissions from small biomass boilers are not likely to pose a significant risk to the environment or human health providing certain conditions are met. Therefore a quantitative assessment of air emissions will not be required for poultry sites where:

- the fuel will be derived from virgin timber, miscanthus or straw, and;
- the biomass boiler appliance and installation meets the technical criteria to be eligible for the Renewable Heat Incentive, and;

#### For poultry:

- the aggregate boiler net rated thermal input is less than or equal to 4 MWth, and no individual boiler has a net thermal input greater than 1 MWth, and;
- the stack height must be a minimum of 5 metres above the ground (where there are buildings within 25 metres the stack height must be greater than 1 metre above the roof level of buildings within 25 metres (including building housing boiler(s) if relevant) and:
- there are no sensitive receptors within 50 metres of the emission point(s).

This is in line with the Environment Agency's document "Air Quality and Modelling Unit C1127a Biomass firing boilers for intensive poultry rearing", an assessment has been undertaken to consider the proposed addition of the biomass boiler(s).

Our risk assessment has shown that the biomass boilers should meet the requirements of the criteria above, and are, therefore, considered not likely to pose a significant risk to the environment or human health and no further assessment is required.

In accordance with the Environment Agency's Air Quality Technical Advisory Guidance 14: "for combustion plants under 5MW, no habitats assessment is required due to the size of combustion plant". Therefore this proposal is considered acceptable and no further assessment is required.

#### **Ammonia**

The applicant has demonstrated that the housing will meet the relevant NH3 BAT-AEL.

There are 4 Sites of Special Scientific Interest (SSSI) located within 5 km of the installation. There are also 14 Local Wildlife Sites (LWS) and Ancient Woodlands (AW) within 2 km of the installation.

The screening results below are based upon poultry houses 1-6 being ventilated by roof fans with an emission point higher than 5.5 metres above ground level and an efflux speed greater than 7 metres per second (m/s).

The fan heights on poultry houses 2-4 are just below 5.5 metres above ground. We undertook further checks through the ammonia screening using a significant worst case scenario. This presumed that sheds 2-4 are fitted with 'Medium Velocity fans' (fans speed greater than 2m/s but less than 7m/s, fan height 3.5m). This did not change the conclusions, all habitats sites screened out and no further assessment was necessary.

#### Ammonia assessment - SSSI

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 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 5 km of the SSSI.

Initial screening using the ammonia screening tool version 4.5 has indicated that emissions from Lower Ledicot Poultry Unit will only have a potential impact on SSSI sites with a precautionary critical level of  $1\mu g/m^3$  if they are within 1280 metres of the emission source.

Beyond 1280m the PC is less than  $0.2\mu g/m^3$  (i.e. less than 20% of the precautionary  $1\mu g/m^3$  critical level) and therefore beyond this distance the PC is insignificant. In this case all SSSIs 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.

Table 1 – SSSI Assessment

Name of SSSI	Distance from site (m)
River Lugg	1380
Rockhall Quarry	3267
Fishpool Valley	4665
River Lugg Meanders	4322

#### Ammonia assessment - LWS/AW

The following trigger thresholds have been applied for the assessment of these sites:

• If the process contribution (PC) is below 100% of the relevant critical level (CLe) or critical load (CLo) then the farm can be permitted with no further assessment.

Initial screening using ammonia screening tool version 4.5 has indicated that emissions from Lower Ledicot Poultry Unit will only have a potential impact on the LWS/AW sites with a precautionary critical level of  $1\mu g/m^3$  if they are within 448 metres of the emission source.

Beyond 448m the PC is less than  $1\mu g/m^3$  and therefore beyond this distance the PC is insignificant. In this case all LWS/AWs are beyond this distance (see table below) and therefore screen out of any further assessment.

Table 2 - LWS/AW Assessment

Name of SAC/SPA/Ramsar	Distance from site (m)
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Shobdon Pools LWS	1614
Pinsley Brook LWS	958
Marsh Covert LWS	1613
Woodlands and Commons centred on Croft Ambrey LWS	2059
Tars Wood LWS	2054
River Lugg LWS	1376
Chaff Wood AW	1218
Church Wood AW	1403
Rock Coppice AW	1059
Hooks Coppice Wood AW	1960
Pear Tree Grove & Long AW	2102
Tars Coppice AW	1876
Tars Wood AW	2055
School Wood AW	2059

# **Decision checklist**

Aspect considered	Decision	
Receipt of application		
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.	
Consultation/Engagement		
Consultation	The consultation requirements were identified in accordance with the Environmental Permitting Regulations and our public participation statement.	
	The application was publicised on the GOV.UK website.	
	We consulted the following organisations:	
	- Environmental Protection/Planning - Herefordshire Council	
	- Health and Safety Executive	
	No responses were received.	
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 The plan is included in the permit.	
Site condition report	The operator has provided a description of the condition of the site, which we consider is satisfactory. The decision was taken in accordance with our guidance on site condition reports and baseline reporting under the Industrial Emissions Directive.	
Biodiversity, heritage, landscape and nature conservation	The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat.	
	We have assessed the application and its potential to affect all known sites of nature conservation, landscape and heritage and/or protected species or habitats identified in the nature conservation screening report as part of the permitting process.	
	We consider that the application will not affect any sites of nature conservation, landscape and heritage, and/or protected species or habitats identified.	
	We have not consulted Natural England on the application. The decision was taken in accordance with our guidance.	
Environmental risk assessment		
Environmental risk	We have reviewed the operator's assessment of the environmental risk from the facility.	
	The operator's risk assessment is satisfactory.	
Operating techniques		

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Aspect considered	Decision
General operating techniques	We have reviewed the techniques used by the operator and compared these with the relevant guidance notes and we consider them to represent appropriate techniques for the facility.
	The operating techniques that the applicant must use are specified in table S1.2 in the environmental permit. The operating techniques will remain the same for the additional birds that are to be housed in the new poultry sheds. A biomass boiler is already installed on the installation. The new boiler will be operated in the same way as the current boiler.
Odour management	We have reviewed the odour management plan in accordance with our guidance on odour management.
	We consider that the odour management plan is satisfactory.
	See Key Issues
Noise management	We have reviewed the noise management plan in accordance with our guidance on noise assessment and control.
	We consider that the noise management plan is satisfactory.
	See Key Issues
Permit conditions	
Updating permit conditions during consolidation	We have updated permit conditions to those in the current generic permit template as part of permit consolidation. The conditions will provide the same level of protection as those in the previous permit(s).
Emission limits	ELVs and/or equivalent parameters or technical measures based on BAT have been set for the following substances:
	kg N excreted/animal place/year
	kg P₂O₅ excreted/animal place/year
	Kg NH <sub>3</sub> /animal place/year
	See Key Issues.
Monitoring	We have decided that monitoring should be carried out for the parameters listed in the permit, using the methods detailed and to the frequencies specified.
	These monitoring requirements have been imposed in order to meet the requirements of BAT Conclusions 24, 25 and 27 of the IRPP BAT Conclusions.
	We made these decisions in accordance with the IRPP BAT Conclusions.
	See Key Issues.
Reporting	We have specified reporting in the permit. This is in line with BAT Conclusions 24, 25 and 27 of the IRPP BAT Conclusions.
	We made these decisions in accordance with the IRPP BAT Conclusions.
	See Key Issues.

Aspect considered	Decision		
Operator competence			
Management system	There is no known reason to consider that the operator will not have the management system to enable it to comply with the permit conditions.		
Growth Duty	Growth Duty		
Section 108 Deregulation Act 2015 – Growth duty	We have considered our duty to have regard to the desirability of promoting economic growth set out in section 108(1) of the Deregulation Act 2015 and the guidance issued under section 110 of that Act in deciding whether to grant this permit.		
	Paragraph 1.3 of the guidance says:		
	"The primary role of regulators, in delivering regulation, is to achieve the regulatory outcomes for which they are responsible. For a number of regulators, these regulatory outcomes include an explicit reference to development or growth. The growth duty establishes economic growth as a factor that all specified regulators should have regard to, alongside the delivery of the protections set out in the relevant legislation."		
	We have addressed the legislative requirements and environmental standards to be set for this operation in the body of the decision document above. The guidance is clear at paragraph 1.5 that the growth duty does not legitimise non-compliance and its purpose is not to achieve or pursue economic growth at the expense of necessary protections.		
	We consider the requirements and standards we have set in this permit are reasonable and necessary to avoid a risk of an unacceptable level of pollution. This also promotes growth amongst legitimate operators because the standards applied to the operator are consistent across businesses in this sector and have been set to achieve the required legislative standards.		

## Consultation

The following summarises the responses to consultation with other organisations, our notice on GOV.UK for the public and the way in which we have considered these in the determination process.

The following organisations were consulted, however, no responses were received:

- Environmental Protection/Planning Herefordshire Council
- Health and Safety Executive

The proposal was also publicised on the Environment Agency's website between 08/05/18 and 08/06/18

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