

Environment Agency permitting decisions

Bespoke permit

We have decided to issue the variation for **Salford Lodge Poultry Farm** operated by **P.Hughes Limited**

The variation number is **EPR/YP3737MP/V005**

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:

- 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

- Description of main features of the installation.
- Key issues
- Annex 1 the decision checklist
- Annex 2 the consultation and web publicising

Description of the changes introduction with this variation

This is a substantial variation as the broiler number increase is greater than the Environmental Permitting Regulation threshold for this activity as follows:

Section 6.9 A(1)(a)(i) Rearing of poultry intensively in an installation with more than 40,000 places

The changes linked to this variation are as follows:

- An increase in broiler numbers from 357,000, to 399,500. In order to achieve this one new poultry house is to be added (poultry house 11), with associated drainage, feed bins and a new biomass boiler (thermal input capacity 369 kW). The poultry house design is based on high velocity roof fans but without the addition of heat exchanger, as is place for the existing ten poultry houses.
- There are no changes to the installation boundary and no changes to the other ten poultry houses.

Installation location

The installation is not within 400 metres of any residential properties and hence there is no requirement for odour and noise management plans in line with our intensive farming sector guidance EPR 6.09.

Key issues of the decision

Environmental Impacts Ammonia Emissions

There are no European/Ramsar statutory sites within the 10 km screening distance from this installation. There are four Sites of Special Scientific Interest within the 5 km screening criteria. There are eleven other conservation sites within the 2 km of this installation.

The assessment below concludes that the installation impacts on all of the relevant habitat sites within screening distances screens out as having insignificant environmental impacts on the basis of our Ammonia Screening Tool AST v.4.5 assessment.

The data is based on our Ammonia Screening Tool AST v.4.5 (assessment dated 06/07/16) with emissions based on the following:

- Poultry houses 1 to 8 – 308,800 broilers with natural side ventilation and installation of heat exchangers
- 2 Poultry houses 9 to 10 - 48,200 broilers with high ventilation fans and installation of heat exchangers
- 3 Poultry house 11 - 42,500 broilers with high ventilation fans and no heat exchangers
- An ammonia reduction factor of 35 % has been applied to all poultry houses with heat exchanges, after a review of data linked to heat exchangers and biomass boilers compared with standard broiler ammonia emission factor.

Ammonia Assessment – SSSIs

The following trigger thresholds have been applied for assessment of SSSI's. 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.

Our screening assessment dated 06/07/16 indicated that the PCs for the following SSSIs are predicted to be less than 20% CLe/CLo for ammonia, acid and N deposition therefore it is possible to conclude no damage. The results of the ammonia screening tool v4.4 are given in the tables below.

A precautionary CLe of $1\mu\text{g}/\text{m}^3$ for ammonia has been used during the screen.

Screening indicates that beyond **1,658 m** distance, the PC at SSSIs is less than 20 % of the $1\mu\text{g}/\text{m}^3$ critical level for ammonia. In this case the SSSIs below in Table 1 are beyond this distance.

Table 1 – Distance from source

Site	Distance (m)
Highclere SSSI	4,254
Tunnel Hill Meadow	4,022
Windmill Hill	3,951
Broom Railway Cutting	4,603

The PCs for ammonia at these sites has been screened out as insignificant. It is therefore possible to conclude that any impact will be insignificant at these sites and therefore no further assessment is required.

Where a CLe of $1\mu\text{g}/\text{m}^3$ is used, and the PC is assessed to be less than the 20% insignificance threshold, in these circumstances it is not necessary to further consider Nitrogen Deposition or Acidification Critical Load values. In these cases the $1\mu\text{g}/\text{m}^3$ level used has not been confirmed, but it is precautionary.

Ammonia assessment - LWS/AW/LNR.

There are eleven other conservation sites within 2 km of this installation. 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.

The PCs on the Local Wildlife Sites(LWS) 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.

A precautionary CLe of $1\mu\text{g}/\text{m}^3$ for ammonia has been used during the screen.

Screening using AST 4.5 dated 06/07/16 indicates that beyond **590 m** distance, the PC at conservation sites is less than 100 % of the $1\mu\text{g}/\text{m}^3$ critical level for ammonia. In this case, the other conservation sites below in Table 2 are beyond this distance.

Table 2 – Distance from Source

Site	Distance (m)
Church Lench Ponds LWS	1,768
Franklins Lane Verge, King Edward Plantation and Longwood LWS	1,797
River Arrow LWS	1,306
Rough Hill (North) Wood LWS	1,351
Whitsun Brook LWS	1,622
Atch Lench Wood LWS	851
Atchlench Wood AW	855
Handgate Wood AW	1,474

Conclusion

On the basis of distances above there is no further requirement for assessment as installation impacts on these habitat sites are concluded to have no likely significant effect.

Where a CLe of 1µg/m³ is used, and the process contribution is assessed to be less than the 100% insignificance threshold in these circumstances it is not necessary to further consider Nitrogen Deposition or Acidification Critical Load values.

River Avon LWS

This habitat site is with 250m of the installation, however it screens out as it is designated only for aquatic features, in line with our guidance.

Salford Coppice AW / Salford Coppice with associated hedge and pond LWS assessment.

Screening using the ammonia screening tool version 4.5 dated 06/07/16 has determined that the PC on the Ramsar for ammonia emissions/nitrogen deposition/acid deposition from the application site are under the 100% significance threshold and can be screened out as having no likely significant effect. See results below. APIS relevant habitat: Broadleaved, Mixed and Yew Woodland.

Table 3 - Ammonia Emissions

Site	Critical Level Ammonia µg/m ³	PC µg/m ³	PC % Critical Level
Salford Coppice AW and Salford Coppice with associated hedge and pond LWS	3 *	1.43	47.7 %

*Critical level values taken from APIS website (www.apis.ac.uk) – July 2016

Table 4 – Nitrogen deposition

Site	Critical Load nutrient enrichment kg N/ha/yr	PC Kg N/ha/yr	PC % Critical Load
Salford Coppice AW and Salford Coppice with associated hedge and pond LWS	10 *	7.44	74.4%

*Critical load values taken from APIS website (www.apis.ac.uk) – July 2016

Table 5 – Acid deposition

Site	Critical Load nutrient enrichment kg N/ha/yr	PC Kg N/ha/yr	PC % Critical Load
Salford Coppice AW and Salford Coppice with associated hedge and pond LWS	2.84 *	0.53	18.8%

*Critical load values taken from APIS website (www.apis.ac.uk) – July 2016

Conclusion

The process contributions for the above other conservation sites are less than 100 % of relevant critical level for ammonia and critical load for nitrogen deposition.

Hence the PCs this site has been screened as insignificant.

Biomass Boiler

The application includes proposals a total aggregated thermal input capacity for installation of **1.209MW** with new boiler thermal input capacity of **0.369 MW**. The aggregated installation biomass boiler capacity is. 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:

- A. the aggregate net rated thermal input is less than 0.5MW_{th}, or:
- B. the aggregate boiler net rated thermal input is less than or equal to 4 MW_{th}, and no individual boiler has a thermal input greater than 1 MW_{th}, and;
- the stack height must be a minimum of 5 meters above the ground (where there are buildings within 25 meters the stack height must be greater than 1 meter above the roof level of buildings within 25 meters) and:
 - there are no sensitive receptors within 50 meters of the emission points

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 boilers.

The Environment Agency's risk assessment has shown that the biomass boiler does fully meet the requirements of criteria **B**.

In conclusion we confirm that the addition of the single biomass boiler will have an insignificant environmental impact.

Annex 1: decision checklist

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

Aspect considered	Justification / Detail	Criteria met
		Yes
Receipt of submission		
Confidential information	A claim for commercial or industrial confidentiality has <i>not</i> 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	The consultation requirements were identified and implemented. The decision was taken in accordance with our Public Participation Statement and our Working Together Agreements. The application was sent for consultation with <ul style="list-style-type: none">• Stratford-on-Avon District Council Environmental Health Department• Health and Safety Executive (HSE). There are no sensitive receptors within 100 metres from the installation boundary. As such a dust assessment and associated consultation with Public Health England/Director of Public Health is not required.	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
Responses to consultation and web publicising	The web publicising and consultation responses (Annex 2) were taken into account in the decision. No points of concern were received from the consultation responses. The decision was taken in accordance with our guidance.	✓
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 our guidance on what a legal Operator is.	✓
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	The Applicant 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 Applicant is required to carry on the permitted activities within the site boundary.	✓
Site condition report	The Applicant has provided a description of the condition of the site. We consider this description is satisfactory. There is no change to the installation boundary. The decision was taken in accordance with our guidance on site condition reports and baseline reporting under IED – guidance and templates.	✓
Biodiversity, Heritage, Landscape and Nature Conservation	The application is within the relevant screening distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat. A full assessment of the application and its potential to affect the site has been carried out as part of the permitting process. The key issues section provides a list of these sites. In addition an ammonia emissions review is included in key issues section of this document. In conclusion installation environmental impacts on the surrounding habitat sites are considered not significant.	✓
Environmental Risk Assessment and operating techniques		
Environmental risk	We have carried out a risk assessment on behalf of the Applicant	✓
Environmental risk	We have reviewed the Applicant's assessment of the environmental risk from the facility. The Applicant'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.	✓
Operating techniques	We have reviewed the techniques used by the operator and compared these with the relevant guidance notes. The operator has confirmed that all farm facilities and operating techniques will be in compliance with our sector guidance EPR 6.09. General operating procedures include: <ul style="list-style-type: none"> • The infrastructure changes include the addition of an 11th poultry house new feed bins plus updated to site drainage for poultry house 11 and a new biomass boiler with thermal input capacity 369 KW. • The supporting information provides operating techniques for the biomass boilers and accident management control measures to minimise the risk of fire. • The site drainage plan has been updated for the 11th poultry house and the opportunity taken to clarify the sources of clean and lightly contaminated water discharging from the installation. • There are no sensitive receptors within 400 metres of the installation boundary and hence no odour or noise management plans are required in line with our SGN EPR 6.09 guidance. There are no installation boundary changes within this installation, changing that conclusion. <p>The proposed techniques for priorities for control are in line with the benchmark levels contained in the SGN EPR 6.09 and we consider them to represent appropriate techniques for the facility. The permit conditions ensure compliance with</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	relevant BREFs and BAT Conclusions.	
The permit conditions		
Use of conditions other than those from the template	Based on the information in the application, we consider that we do not need to impose conditions other than those in our permit template, which was developed in consultation with industry having regard to the relevant legislation.	✓
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. 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.	✓
Applicant Competence		
Environment management system (EMS)	There is no known reason to consider that the Applicant will not have the management systems to enable it to comply with the permit conditions. The Applicant has chosen to utilise their own management system without external certification.	✓

Annex 2: 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.

No consultation responses were received.

This proposal was also publicised on the Environment Agency's website for 4 weeks (deadline for responses 18/08/16) but no representations were received during this period.