

# Environment Agency permitting decisions

## Bespoke permit

We have decided to grant the variation for **Hogwood Farm Pig Unit** operated by **Brian Hobill**

The permit variation number is **EPR/EP3239UX/V003**

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

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

# Key issues of the decision

## Introduction

### The changes linked to this variation include:

- The pig numbers within the installation are increased to the following numbers:
  - 1,200 sows
  - 10,035 production pigs over 30 kg
  - 4683 pigs less than 30 kg.

Pig buildings have been extended and modernised to allow for such increased pig numbers as follows.

- Replace existing sheds 9 and 10 on same footprint with new sheds with fully slatted floor for housing sows.
  - Build new gilt house (building 34).
  - Replace building 21 for growers/finishers with a modern farm house.
  - Extend shed 14 nursery building over the footprint for existing houses 15 and 16. Latter buildings to be made redundant.
- The installation boundary has been increased primarily to include the full extent of the existing unchanged slurry lagoon.

**The permit has been varied and consolidated in accordance with the above changes.**

## Industrial Emissions Directive (IED)

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

This permit implements the requirements of the EU Directive on Industrial Emissions.

## Environmental Impacts

### Ammonia Emissions

There are *no* European statutory sites within the relevant screening distances of the installation boundary. There are *two* Sites of Special Scientific Interest within 5 km screening criteria ; Lobbington Hall Farm Meadows and Oxhouse Farm which are 3.0 km and 3.5 km respectively from the installation boundary.

There are *no* other nature conservation sites within 2 km of this installation.

### 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 (CL<sub>e</sub>) or critical load (CL<sub>o</sub>) 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.

### **Where sites screen out as <20%**

Screening using our screening assessment using our Ammonia Screening Tool AST v4.4

dated 24/10/14 indicated that the PCs for the following SSSIs are predicted to be less than 20% Critical Level 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.

### The SSSI

The results of the ammonia screening tool v4.4 are given in the table below for ammonia emissions for the SSSI.

**Table 1 Ammonia Emissions**

<u>Name of SSSI</u>	<u>Ammonia Cle (<math>\mu\text{g}/\text{m}^3</math>)</u>	<u>PC (<math>\mu\text{g}/\text{m}^3</math>)</u>	<u>PC as % of Critical level</u>
Oxhouse Farm	3 *	0.298	9.9
Lobbington Hall Farm Meadows	3*	0.371	12.4

\* Confirmed critical level of 3 after advice from Natural England (advice provided 24/09/14). There are no lower plants which on which any of notified species depend.

**Conclusion**

*Table 1 shows that the ammonia process contributions at both SSSI's are < 20 % of the critical level. Therefore impacts screen out for these SSSI's and no further assessment is required.*

**Table 2 – Nitrogen deposition**

The results of the nitrogen deposition screening tool v4.4 are given in the table below for the two SSSI's.

<b>Name of SSSI</b>	<b>Critical Load Deposition kg N/ha/year</b>	<b>PC Kg N/ha/yr</b>	<b>PC % Critical Load</b>
Oxhouse Farm	15 $\mu\text{g}/\text{m}^3$ *	1.545	10.3
Lobbington Hall Farm Meadows	20 $\mu\text{g}/\text{m}^3$ *	1.926	9.6

\*Critical load values taken from APIS website ([www.apis.ac.uk](http://www.apis.ac.uk)) – checked 24/09/14 based on citation of natural grassland a CLo of 15-25  $\mu\text{g}/\text{m}^3$  for Oxhouse Farm and 20-30  $\mu\text{g}/\text{m}^3$  for Lobbington Hall Farm Meadows would be appropriate. The lower levels have been utilised as a conservative approach.

**Conclusion**

*Table 2 shows that the predicted nitrogen depositions at both SSSI's are < 20% of the Critical loads. Therefore the impacts screen out for these SSSI's and no further assessment is required.*

**Table 3 – Acid deposition**

The results of the nitrogen deposition screening tool v4.4 are given in the table below for the two SSSI's.

<b>Name of SSSI</b>	<b>Critical Load Acid Deposition Kg eq/ha/year</b>	<b>Predicted Acid Deposition Kg eq/ha/yr</b>	<b>PC % Critical Load</b>
Oxhouse Farm SSSI	4.928 $\mu\text{g}/\text{m}^3$ *	0.110	2.2
Lobbington Hall Farm Meadows	4.928 $\mu\text{g}/\text{m}^3$ *	0.138	2.8

\*Critical load values taken from APIS website ([www.apis.ac.uk](http://www.apis.ac.uk)) – 24/09/14 based on citation of calcareous grassland a CLo of 4.928 would be appropriate.

**Conclusion**

*Table 3 shows that the predicted acid depositions at both SSSI's are < 20% of the Critical loads. Therefore the impacts screen out for these SSSI's and no further assessment is required.*

**Overall the ammonia impacts for this farm on nearby habitat screen out as having negligible impact, not requiring further assessment.**

## Groundwater and soil monitoring

As a result of the requirements of the Industrial Emissions Directive, all permits are now required to contain condition 3.1.3 relating to 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 the 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 your 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 application site condition report (original application duly made June 2007) is revised with this variation including the updating of our H5 template for the variation changes. The site condition report includes an installation boundary with locations of farm buildings, fuel tank and slurry storage including two tanks and a slurry lagoon.

The surrounding land is predominantly used for arable and grass farming. There are some small villages in the area.

The site itself is relatively flat or gently undulating.

Our technical review of this specific former land usage is as follows.

- There is no record of installation area land contamination.
- There is no record of any usage of the installation area except for agricultural usage.
- The site is not within a Groundwater Vulnerability Zone.

Therefore the conclusion is there is a low risk of historic groundwater and land contamination due to former activities within installation boundary.

**Therefore, although condition 3.1.3 is included in the permit, no groundwater monitoring will be required at this installation as a result.**

## Odour

There are three sensitive receptors within 400 metres of the installation and therefore an odour management plan has been prepared. These consist of residential properties as follows:

1. A unnamed residence 60 metres to the south west of the installation boundary (National Grid Reference 432122,247391)
2. Stoneycroft House residence 100 metres to the south of the installation boundary (National Grid Reference 432272,247247)
3. Greensway House residence 70 metres to the north of the installation boundary (National Grid Reference 432239,247722)

*There is no history of odour complaints from local residents linked to the existing pig facility from Environment Agency records.* The pig farm house improvements to ventilation include high velocity roof fans for the new buildings will minimise risk of potential odour beyond the installation boundary

An Odour Management Plan has been submitted with this application. The OMP consists of:

- Duly making response with more detailed OMP including list of sensitive receptors, application of Pig Code of Practice Checklist giving more details on appropriate measures for odour pollution

minimisation beyond installation boundary plus application risk assessment entitled assessment of environmental impacts report.

The OMP covers feed selection, feed storage and containment, ventilation design, techniques to manage loading pigs onto wagons to minimise odour, wash down and slurry storage management.

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

### Noise

There are sensitive receptors within 400 metres of the installation boundary as stated above in the odour review. The applicant has hence provided a noise management plan in their supplementary application information and an associated risk of environmental reports covering noise risks associated with the installation.

Operations with the most potential to cause noise nuisance have been assessed as those involving pig loading, farm building ventilation fans, delivery of supplies and materials plus automated feed lines. The noise management plan covers control measures for each of these potential noise hazards.

The management plan includes a commitment to assess noise levels during such activities and optimise vehicles and procedures to minimise noise.

There is no history of noise complaints linked to the existing pig farm. 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

Aspect considered	Justification / Detail	Criteria met
		Yes
<b>Consultation</b>		
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. The application was sent for consultation with <ul style="list-style-type: none"> <li>Stratford-on-Avon District Council Environmental Health Department.</li> <li>HSE.</li> </ul>	✓
Responses to consultation and web publicising	The web publicising and consultation responses were taken into account in the decision. <b>No consultation or public comments were received.</b> The decision was taken in accordance with our guidance.	✓
<b>Operator</b>		
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>European Directives</b>		
Applicable directives	All applicable European directives have been considered in the determination of the application. This permit meets IED requirements. This permit implements the requirements of the EU Directive on Industrial Emissions. See key issues section above for further information.	✓
<b>The site</b>		
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. This plan was finalised with the duly making response. A plan is included in the permit and the operator is required to carry on the permitted activities within the site boundary.	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
Site condition report	<p>The operator has provided a description of the condition of the site. We consider this description is satisfactory. Please refer to key issues, section 'Groundwater and soil monitoring'. As a result of further assessment, baseline data is not required.</p> <p>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 screening distance criteria of the following nature conservation sites.</p> <p>There are no European statutory sites within relevant screening distances. There are two Sites of Special Scientific Interest within 5 km screening criteria ; details are provided in key issues section of this document.</p> <p>There are no other conservation sites within the screening distance. An ammonia emissions review is included in key issues section of this document.</p> <p>In conclusion installation environmental impacts on the surrounding habitat sites are considered not significant.</p>	✓
<b>Environmental Risk Assessment and operating techniques</b>		
Environmental risk	<p>We have reviewed the operator's assessment of the environmental risk from the facility. 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 operator has confirmed that all farm facilities and operating techniques will be in compliance with our sector guidance EPR 6.09.</p> <p><b><u>The Operator has proposed the following techniques:</u></b></p> <ul style="list-style-type: none"> <li>• Feed selection is carefully selected with reference to pig's growth curve. Phosphorous and protein levels are altered over the growing.</li> <li>• All pig buildings will be well insulated for optimum animal health and the houses will use medium or high velocity extraction fans to optimise odour dispersion. The finishing rooms will be thoroughly washed and disinfected between batches.</li> <li>• General management; Gilts and pregnant sows will be kept on a fully slatted system with frequent slurry removal and farrowing sows and suckling pigs are kept on either part slatted or fully slatted floors with shallow slurry pits.</li> <li>• Slurry management: slurry is stored within installation for 6 months in compliance with being within a Nitrate Vulnerable Zone. This was confirmed via calculated estimates provides at duly making stage against total slurry volume storage capacity within installation of 14,485 m3.</li> <li>• Fugitive Emission controls include building maintenance, routine building wash downs, use of automatic auger feed transfer to minimise spillages. Feed is stored within enclosed feed bins.</li> <li>• Storage facilities: there are no new liquid bulk storage tanks added with this variation. Existing fuel tank bunded.</li> <li>• Roof /yard water are transferred via drainage to a either soak away or diversion to surface water culvert and slurry transferred into two off existing slurry tanks and one existing slurry lagoon respectively.</li> </ul> <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.</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	<p>The one exception is the existing slurry lagoon which was subject to an improvement program IC2 in original permit EP3239UX (EPR/EP3239UX). The operator has committed to covering lagoon by 2020 with clay particles. The operator has provided a response to this improvement program but there is a lack of detail. As such IC2 is retained to allow full completion</p> <p>The operator has made some improvement to fuel tank bunding as per IC1 but it is unclear if the full work has been completed. As such this improvement program is retained with a revised completion date.</p> <p>The permit conditions ensure compliance with relevant BREFs and BAT Conclusions, and ELVs deliver compliance with BAT-AELs.</p>	
<b>The permit conditions</b>		
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.	✓

## 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 external consultation responses were received.*

This proposal was also publicised on the Environment Agency's website for 4 weeks but no representations were received during this period.