

Permitting decisions

Variation including part refusal

We have decided to grant the variation for **Chapel Ascote Farm Pig Unit** operated by **Chapel Ascote Limited**

The variation number is **EPR/KP3133UJ/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 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 decision checklist to show how all relevant factors have been taken into account
- shows how we have considered the [consultation responses](#)

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.

Key issues of the decision

Compliance with specific Ammonia BAT Associated Emission Levels as specified in new Intensive Farming Sector BAT conclusions document dated 21st February 2017

Ammonia emission controls

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

Ammonia emission controls – BAT conclusion 30 (pigs)

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

There is a footnote in some of the Ammonia BAT-AELs allowing a higher AEL for the existing plant. 'New plant' is defined as a plant first permitted at the site of the farm following the publication of the BAT conclusions. 'Existing plant' is defined in the BREF as any plant that is not a 'new plant'. The key phrase is 'first permitted'.

For variations all new housing on existing farms will need to meet the BAT-AEL, while the existing housing will be allowed the less stringent existing plant AEL. The 'existing plant' BAT-AEL will apply indefinitely to any existing housing on any site permitted before 21st February 2017 or at least until the next revision of the BREF.

This variation focuses on ensuring the new housing introduced complies with new plant Ammonia BAT AEL's.

More detailed assessment of AEL's

Pig housing

- *The only new housing introduced with this variation is one new pig house for production pigs.*
- *The housing type is Fully Slated Floor with vacuum system for frequent slurry removal.*

On this basis the standard ammonia emission factor is 3.11. The relevant BAT AEL for this type of pig and housing is 2.6. The operator duly making responses confirmed their crude protein levels have dropped 2 % across the cycle from 18.6 % (in early 2000's) to 16.6 % (today). The operator has supported this with diet formulae sheets.

We have a standard agreed approach (as defined in our Low Protein Diet guidance dated March 2015) of 10% ammonia reduction for every 1% of crude protein reduction up to and including 20 % ammonia reduction, as here.

*Hence the emission factor for this installation for production pigs can be lowered to $0.8 * 3.11 = 2.49$.*

Conclusion

For this installation the new NH₃ BAT AEL of 2.6 for the new production pig building is complied with.

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 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 Chapel Ascote Farm Pig Unit (dated 06/08/07) 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. This site condition report does also cover additional land included in variation EPR/KP3133UJ/V002. **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.**

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 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.

For this installation there are no such sensitive receptors within 400 metres of the installation and therefore an Odour Management Plan is not required. Nonetheless the operator has resubmitted an existing Odour Management Plan that they have completed for previous variation EPR/KP3133UJ/V002. It should be noted that there are no changes to the installation boundary linked to this variation.

Ammonia

Introduction

The assessment below is conservative, as this is based on emission factors excluding the lower emission factor for new plant production pig building, to ensure compliance with Ammonia BAT AEL's.

There are no European/Ramsar sites within 10 km screening distance of the installation boundary.

Ammonia assessment – SSSI

There are three SSSI's within 5km of the installation boundary.

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.

Sites screening out as <20%.

Screening using the ammonia screening tool version 4.5 has indicated that the PC for Harbury Railway Cutting SSSI is predicted to be less than 20% of the critical level for ammonia emissions/nitrogen deposition/acid deposition therefore it is possible to conclude no damage. The results of the ammonia screening tool version 4.5 dated 09/05/17 are given in the tables below.

Table 1 – Ammonia emissions

Site	Ammonia Cle (µg/m ³)	PC (µg/m ³)	PC % critical level
Harbury Railway Cutting	3*	0.296	9.9

* Natural England consulted and stated: 'After checking the notified features of Harbury Cuttings, it is possible to state that it is not notified for lower plants, as such the Critical Levels (Cle) for ammonia would be Cle 3, 3µg/m³'
Andy Stubbs 21/12/16

Table 2 – Nitrogen deposition

Site	Critical load kg N/ha/yr. [1]	PC kg N/ha/yr.	PC % critical load
Harbury Railway Cutting	10	1.538	15.4

Note [1] Critical load values taken from APIS website (www.apis.ac.uk) - 15/02/17

Acid Deposition

Critical load values assessment taken from APIS website (www.apis.ac.uk) -15/02/17 for Harbury Railway Cutting SSSI.

For woodland and Lowland Calcareous grassland – there are no estimates available for these habitat, with regards to critical acid levels. Hence no further assessment is required.

River Itchen SSSI

Natural England consulted with respect to this SSSI. The advice given dated 16/12/16 stated that this is a geological SSSI which has been notified for its fluvial processes, as such there are no biological features of interest in this SSSI and Ammonia levels have no relevance for the site. The habitat site is therefore not impacted by emissions from this installation and screens out.

Harbury Quarries SSSI

The APIS website confirms that the site has no features of interest. The SSSI citation confirms that the site is protected due to its geological features rather than any habitat or species. The site is therefore not sensitive to emissions from this installation and an assessment is not required.

Ammonia assessment - LWS/AW/LNR

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.

There are two other conservations sites within 2km of the installation boundary.

Sites that screen out from distance criteria

Initial screening using ammonia screening tool version 4.5 dated 09/05/17 has indicated that emissions from this installation will only have a potential impact on the Jock's Meadow Local Wildlife Site with a precautionary critical level of $1\mu\text{g}/\text{m}^3$ if they are within **1,870** metres of the emission source.

Beyond this distance the PC is insignificant. In this case the LWS beyond this distance (see table below) and therefore screen out of any further assessment.

Table 3 – LWS/AW/LNR Assessment

Name of LWS/AW/LNR	Distance from site (m)
Jock's Meadow Local Wildlife Site	1956

The installation impacts on this Local Wildlife Site therefore screen out as insignificant and no further assessment is needed.

Sites screening out as <100%.

Screening using the detailed modelling dated 06/03/17 provided by the operator within the EPR/KP3133UJ/V003 variation application supporting information has determined that the PC on the AW for ammonia emissions/nitrogen deposition from the application site are under the 100% significance threshold and can be screened out as having no likely significant effect. The process contributions listed below are the maximum values of all the sensitive receptors modelled.

The acid deposition screening using the ammonia screening tool version 4.5 dated 09/05/17 has determined that the PC on the AW for 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.

Table 4 - Ammonia emissions

Site	Critical level ammonia $\mu\text{g}/\text{m}^3$	Predicted PC $\mu\text{g}/\text{m}^3$	PC % of critical level
Nun's Bushes AW	3*	0.506	16.9

* 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. [1]	Predicted PC kg N/ha/yr.	PC % of critical load
Nun's Bushes AW	10	3.94	39.4

Note [1] Critical load value taken from APIS website (www.apis.ac.uk), based on broadleaved, mixed and yew woodland selected.

Table 6 – Acid deposition

Site	Critical load keq/ha/yr. [1]	Predicted PC keq/ha/yr.	PC % of critical load
Nun's Bushes AW	2.85	1.829	64.2

Note [1] Critical load value taken from APIS website (www.apis.ac.uk) - based on broadleaved, mixed and yew woodland selected.

No further assessment is required.

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	<p>The consultation requirements were identified in accordance with the Environmental Permitting Regulations and our public participation statement.</p> <p>The application was publicised on the GOV.UK website.</p> <p>We consulted the following organisations:</p> <ul style="list-style-type: none"> • HSE • Public Health England/Director of Public Health. • Local Council Environmental Health Department <p>The comments and our responses are summarised in the consultation section.</p>
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 including the location of the new production pig building within an unchanged installation boundary
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>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.</p> <p>We consider that the application will not affect any sites of nature conservation, landscape and heritage, and/or protected species or habitats identified.</p> <p>There are no European /Ramsar Sites within 10 km screening distance of the installation.</p> <p>We have not consulted Natural England on the application. The decision was taken in accordance with our guidance.</p>
Environmental risk assessment	
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>

Aspect considered	Decision
Operating techniques	
General operating techniques	<p>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.</p> <p>The operating techniques that the applicant must use are specified in table S1.2 in the environmental permit.</p>
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	No emission limits have been added, amended or deleted as a result of this variation.
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	
Section 108 Deregulation Act 2015 – Growth duty	<p>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.</p> <p>Paragraph 1.3 of the guidance says:</p> <p>“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.”</p> <p>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.</p> <p>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.</p>

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 consultation and public advertising ran from 01/06/17 to 29/06/17.

Responses from organisations listed in the consultation section

Response received from
Public Health England dated 20/06/17.
Brief summary of issues raised
No specific concerns. General comment to ensure dust, odour and noise are addressed in permit determination.
Summary of actions taken or show how this has been covered
Management plans for dust, odour and noise controls exist