Permitting decisions

Variation

We have decided to grant the variation for Manor Farm Pig Unit operated by Harvey Farms (Winterbourne) Limited.

The variation number is EPR/LP3539UR/V007.

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:

- 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

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 21st 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. 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.

New BAT conclusions review

There are 34 BAT conclusion measures in total within the BAT conclusion document dated 21st February 2017.

The Applicant has confirmed their compliance with all BAT conditions for the new housing, in their BAT report document dated 01/03/2018 and submitted to us on 19/03/2018.

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	Fattening pigs (production pigs over 30 kg) The Applicant has confirmed it will demonstrate it achieves levels of Nitrogen excretion below the required BAT-AEL of 13.0 kg N/animal place/year by an estimation using manure analysis for total Nitrogen content. This confirmation is contained in the BAT report document, received 19/03/18, 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.
	Weaners The Applicant has confirmed it will demonstrate it achieves levels of Nitrogen excretion below the required BAT-AEL of 4.0 kg N/animal place/year by an estimation using manure analysis for total Nitrogen content. This confirmation is contained in the BAT report document, received 19/03/18, 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 measure	Applicant compliance measure
BAT 4 Nutritional management Phosphorous excretion	Fattening pigs (production pigs over 30 kg) The Applicant has confirmed it will demonstrate it achieves levels of Phosphorous excretion below the required BAT-AEL of 5.4 kg P_2O_5 animal place/year by an estimation using manure analysis for total Phosphorous content. This confirmation is contained in the BAT report document, received 19/03/18, 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.
	Weaners The Applicant has confirmed it will demonstrate it achieves levels of Phosphorous excretion below the required BAT-AEL of 2.2 kg P_2O_5 animal place/year by an estimation using manure analysis for total Phosphorous content. This confirmation is contained in the BAT report document, received 19/03/18, 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 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: - Monitoring will take place on a weekly basis. The operator or site manager will be responsible for the monitoring of the unit on a weekly basis outside the site perimeter using the monitoring form in the morning, before sensitivity to smell has reduced. - Should a complaint be received the operator will carry out daily odour monitoring and reporting, only returning to weekly monitoring when complaints have stopped and in agreement with the Environment Agency. Appendix 4 of the OMP identifies the monitoring form that will be used to carry out the odour monitoring. Odour monitoring will be carried out using the olfactory method.
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. The Applicant has confirmed they will report the dust emissions to the Environment Agency annually by multiplying the dust emissions factor for weaners and fattening pigs by the number of pigs on site. This confirmation is contained in the BAT report document, received 19/03/18,

BAT measure	Applicant compliance measure
	which has been referenced in Table S1.2 Operating techniques of the Permit.
BAT 30 Ammonia emissions from pig houses	The Applicant has confirmed it will demonstrate it achieves levels of ammonia below the required BAT-AEL for the following pig types: Pigs 7 – 30kg: 0.53 kg NH3/animal place/year. Pigs > 30kg: 2.6 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.

Ammonia emission controls – BAT conclusion 30

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 existing plant. 'New plant' is defined as 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.

More detailed assessment of AEL's

Pig housing

To comply with the BAT emission factor of 0.53 kg NH3/animal place/year for the new house W/G1. Using our standard emission factor of 0.7 for pigs within the weight range of 7 – 30kg and applying a 2% crude protein reduction, which is representative of the practice on site, the emission factor is reduced to 0.56.

There are 10 separate sheds within the new "WEAN_GROWA" building and the operator runs a batch system, where there will always be one shed empty. This further reduces the emission factor to 0.504 (9/10 of 0.56).

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 updated site condition report (SCR) for Manor Farm (dated 01/03/2018) 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 submitted with the Application lists key potential risks of odour pollution beyond the Installation boundary. These activities are as follows:

- Feed storage and preparation;
- Manure and slurry storage and management;
- Carcass disposal; and
- Pig housing.

The OMP has detailed measures and practices in place to ensure that odour emissions do not give rise to pollution beyond the installation boundary. These measures include the following:

- All liquid feed is stored in enclosed feed tanks.
- Mortalities are stored in locked bins and are collected weekly by a certified haulier;
- Slurry store has a rigid cover and stirring is minimised; and
- Water troughs and feeders are constructed to minimise waste, which could give rise to odour and nipple drinkers are used to minimise water spillage for drier litter.

The operator has committed to weekly monitoring by olfactory method outside the site perimeter in the morning, before sensitivity to smell has reduced.

The OMP has also detailed appropriate contingency measures in place to bring any odour problems under control when normal measures prove inadequate. The measures cover activities such as carcass disposal, slurry removal, dirty water management and feed delivery and storage.

We have assessed the operator's OMP against our Sector Guidance Note 6.09 for Intensive Farming, we agree that the measures listed in the OMP are appropriate for the nature and scale of activities on site, hence, we have accepted the operator's odour management plan (OMP).

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. The Operator has provided a noise management plan (NMP) as part of the Application supporting documentation. The NMP for the Installation submitted with the Application lists key potential risks of noise pollution beyond the Installation boundary. These activities are as follows:

- Feed and other deliveries;
- Ventilation fans;
- Vehicles and other machinery operating within installation boundary;
- Manure and slurry loading; and
- Muck out operation.

The Applicant has also detailed appropriate measures in place to reduce the risk of noise from the above sources. These measures include:

- Ventilation fans are well maintained to reduce noise;
- Small deliveries are arranged for delivery during working hours. Tipping type delivery vehicles and augers are used for bulk dry ingredient delivery;
- Loaders are used during mucking out and engine revs are kept at a minimum. Effective silencers are also used during the process; and
- All manure loading equipment and machinery regularly serviced and operated to correct standards.

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.

Ammonia

This initial ammonia screening assessment has considered any Special Areas of Conservation (SAC), Special Protection Areas (SPA) and Ramsar sites within 5 km; any Sites of Special Scientific Interest (SSSI) within 5 km and also any National Nature Reserves (NNR), Local Nature Reserves (LNR), ancient woodlands and local wildlife sites (LWS) within 2 km of the farm.

The screening identified 2 Special Areas of Conservation (SAC) and 1 Special Protection Area (SPA), located within 5 km of the installation. There are 7 Sites of Special Scientific Interest (SSSI) located within 5 km of the installation. There are also 4 Local Wildlife Sites (LWS), within 2 km of the installation. Where any of the underlisted criteria is met, we would require the operator to carry out detailed ammonia modelling:

- emissions of ammonia or ammonia deposition (nutrient nitrogen or acid) are in excess of Z% of the relevant Critical Level (ammonia) or Critical Load (nutrient nitrogen or acid) at any particular designated site;
- there is the potential for an in-combination effect with existing farms at a SAC, SPA, Ramsar and/or SSSI if emissions are > Y% but < Z% of the critical level or critical load;

- the original permit for the installation required an Improvement Condition to reduce ammonia emissions; or
- a proposal is within 250m of a nature conservation site.

Table 1 - Screening thresholds

Designation	Y%	Z%
SAC, SPA, Ramsar	4	20
SSSI	20	50
NNR, LNR, LWS, ancient woodland	100	100

Based on the results of the screening, the Operator was required to carry out detailed modelling.

The Ammonia Modelling Report version 1, submitted by the operator was audited in detail by our Air Quality Modelling and Assessment Unit. They agreed with the report conclusions for the proposed scenario. However, we asked the operator to make changes to some emission factors to reflect some best practices onsite. We also asked the operator to change the animal numbers used for the existing scenario to reflect the number of pigs currently permitted. The operator has submitted a version 2 of the modelling assessment, with all the recommended changes. We have reviewed and accepted this version of the report. Although changes have been made, these variations do not materially impact on our conclusions so, we have not asked for another detailed audit.

Ammonia assessment – SAC/SPA/Ramsar

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 SAC/SPA/Ramsar.

Screening using the detailed modelling “Manor_Farm_PU_Ammonia_Report” version 2” dated 27/07/2018 (received 12/09/2018), has determined that the process contribution of ammonia emissions/nitrogen deposition/acid deposition from the application site is over the 4% significance threshold. As such, it is not possible to conclude no adverse effect alone. Where the process contribution falls between 4% and 20%, Environment Agency guidance indicates that an in combination assessment should be undertaken.

There are no other farms acting in combination with this application. The PC is predicted to be less than 20% of the critical level / load significance threshold. It is possible to conclude no adverse effect to the site from the installation and therefore no further assessment is required. The River Avon has no prescribed critical load values. See results below.

Table 2 – Ammonia emissions

Site	**Critical level ammonia µg/m^3**	**Predicted process contribution µg/m^3**	**% of critical level**
River Avon SAC (1)	3*	0.502	16.7
Note (1) – used for all the results obtained from the operator’s detailed modelling			

* Critical level values taken from APIS website (www.apis.ac.uk) – 12/01/2018

Table 3 – Nitrogen deposition

Site	**Critical load kg N/ha/yr***	**Predicted PC kg N/ha/yr.**	**PC % of critical load**
River Avon SAC (1)	---	2.61	---

Note (1) – used for all the results obtained from the operator's detailed modelling

* Critical load values taken from APIS website (www.apis.ac.uk) – 12/01/2018

Table 4 – Acid deposition

Site	Critical load keq/ha/yr*	Predicted PC keq/ha/yr.	PC % of critical load
River Avon SAC (1)	---	0.2	---
Note (1) – used for all the results obtained from the operator's detailed modelling			

* Critical load values taken from APIS website (www.apis.ac.uk) – 12/01/2018

No further assessment is required.

Detailed modelling "Manor_Farm_PU_Ammonia_Report" version 2" dated 27/07/2018 (received 12/09/2018), has determined that emissions of ammonia are in excess of Z% of the relevant Critical Level at the Salisbury Plain SAC – see table 5.

Table 5 – Ammonia emissions

Site	Critical level ammonia µg/m^3	Predicted process contribution µg/m^3	% of critical level
Salisbury Plain SAC (1)	1*	0.415	41.5
Porton Down SPA (1)	1*	0.415	41.5
Note (1) – used for all the results obtained from the operator's detailed modelling			

We have consulted Natural England for this exceedance at Salisbury Plain SAC/Porton Down SPA. Natural England confirmed on 13/07/2018 that the process contribution from the proposed changes will have no significant impact on the SAC/SPA.

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 Manor Farm will only have a potential impact on SSSI sites with a precautionary critical level of 1µg/m^3 if they are within 3,492 m of the emission source.

Beyond 3,492 m the PC is less than 0.2µg/m^3 (i.e. less than 20% of the precautionary 1µg/m^3 critical level) and therefore beyond this distance the PC is insignificant. In this case the Lower Woodford Water Meadows SSSI is beyond this distance (see table below) and therefore screen out of any further assessment.

Where the precautionary level of 1µg/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 1µg/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 6 – SSSI Assessment

Name of SSSI	Distance from site (m)
Lower Woodford Water Meadows	5,000

Detailed modelling "Manor_Farm_PU_Ammonia_Report" version 2" dated 27/07/2018 (received 12/09/2018) has indicated that the PCs for Cockey Down and the River Avon System SSSIs are predicted to be less than 20% of the critical level for ammonia emissions/nitrogen/acid deposition therefore it is possible to conclude no damage. The results of the detailed ammonia modelling are given in the tables below.

Table 7 – Ammonia emissions

Site	Ammonia Cle (µg/m^3)	PC (µg/m^3)	PC % critical level
Cockey Down SSSI	3**	0.164	5.5
River Avon System SSSI (1)	3**	0.502	16.7
Note (1) – used for all the results obtained from the operator's detailed modelling			

* Critical level values taken from APIS website (www.apis.ac.uk) – 12/01/2018

Table 8 – Nitrogen deposition

Site	Critical load kg N/ha/yr*	PC kg N/ha/yr.	PC % critical load
Cockey Down SSSI	15	0.85	5.7
River Avon System SSSI (1)	---	2.61	---
Note (1) – used for all the results obtained from the operator's detailed modelling			

* Critical load values taken from APIS website (www.apis.ac.uk) – 12/01/2018

Table 9 – Acid deposition

Site	Critical load keq/ha/yr*	PC keq/ha/yr.	PC % critical load
Cockey Down SSSI	4.856	0.1	4.0
River Avon System SSSI (1)	---	0.2	---
Note (1) – used for all the results obtained from the operator's detailed modelling			

* Critical load values taken from APIS website (www.apis.ac.uk) – 12/01/2018

No further assessment is required.

For the Porton Down SSSI, detailed modelling "Manor_Farm_PU_Ammonia_Report version 2" has determined that the PCs of ammonia emissions from the application site are over the 20% threshold, and therefore may cause damage to features of the SSSI. An in combination assessment has therefore been carried out.

There are no other farms acting in combination with this application. The PC is predicted to be less than 50% of the critical level significance threshold. Under Environment Agency guidelines it is therefore possible to conclude no likely damage to the site from the installation, no further assessment is required.

Table 10 – Ammonia emissions

Site	Critical level ammonia µg/m^3	Predicted process contribution µg/m^3	% of critical level
Porton Down SSSI (1)	1*	0.415	41.5

*a precautionary critical level of 1 µg/m^3 has been assigned to this site. Where the precautionary level of 1µg/m^3 is used, then the nitrogen acid deposition tables are not needed.

Detailed modelling "Manor_Farm_PU_Ammonia_Report" version 2" dated 27/07/2018 (received 12/09/2018), determined that the PCs of ammonia emissions from the application site are over the 20% threshold (see results below), and therefore may cause damage to features of the SSSI. An in combination assessment has therefore been carried out.

There are no other farms acting in combination with this application. The PC is predicted to be less than 50% of the critical level / load significance threshold. Under Environment Agency guidelines it is therefore possible to conclude no likely damage to the site from the installation, no further assessment is required.

Table 11 – Ammonia emissions

Site (SSSI)	Critical level ammonia µg/m^3	Predicted process contribution µg/m^3	% of critical level
Porton Meadows	3**	0.63	21
Figsbury Ring (1)	3**	1.29	43.1
Bracknell Croft (1)	3**	1.11	37
Note (1) – used for all the results obtained from the operator's detailed modelling			

* Critical load values taken from APIS website (www.apis.ac.uk) – 12/01/2018

Table 12 – Nitrogen deposition

Site	Critical load kg N/ha/yr*	Predicted PC kg N/ha/yr.	PC % of critical load
Porton Meadows	20	3.273	16.4
Figsbury Ring (1)	15	6.71	44.7
Bracknell Croft (1)	15	5.76	38.4
Note (1) – used for all the results obtained from the operator's detailed modelling			

* Critical load values taken from APIS website (www.apis.ac.uk) – 12/01/2018

Table 13 – Acid deposition

Site	Critical load keq/ha/yr*	Predicted PC keq/ha/yr.	PC % of critical load
Porton Meadows	4.373	0.234	5.4
Figsbury Ring (1)	1.52	0.5	32
Bracknell Croft (1)	1.52	0.4	26.3
Note (1) – used for all the results obtained from the operator's detailed modelling			

* Critical load values taken from APIS website (www.apis.ac.uk) – 12/01/2018

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.

Initial screening using ammonia screening tool version 4.5 has indicated that emissions from Manor Farm will only have a potential impact on the LWS sites with a precautionary critical level of 1µg/m^3 if they are within 1415 metres of the emission source.

Beyond 1415 metres the PC is less than 1µg/m^3 and therefore beyond this distance the PC is insignificant. In this case the LWS is beyond this distance (see table below) and therefore screen out of any further assessment.

Table 14 – LWS Assessment

Name of SAC/SPA/Ramsar	Distance from site (m)
Cockey Down Chalk	1601

Screening using the ammonia screening tool version 4.5 has determined that the PC on the LWS 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.

Table 15 - Ammonia emissions

Site	Critical level ammonia µg/m^3	Predicted PC µg/m^3	PC % of critical level
Winterbourne Earls Meadows	3**	1.65	55.1
Winterbourne Gunner Meadows	3**	1.52	50.6
Figsbury Farm Meadow	3**	1.10	36.7

** CLe 3 applied as no protected lichen or bryophytes species were found when checking Easimap layer

Table 16 – Nitrogen deposition

Site	Critical load kg N/ha/yr. *	Predicted PC kg N/ha/yr.	PC % of critical load
Winterbourne Earls Meadows	10	8.59	85.9
Winterbourne Gunner Meadows	10	7.89	78.9
Figsbury Farm Meadow	10	5.71	57.1

* Critical load values taken from APIS website (www.apis.ac.uk) – 12/01/2018

Table 17 – Acid deposition

Site	Critical load keq/ha/yr*	Predicted PC keq/ha/yr.	PC % of critical load
Winterbourne Earls Meadows	4.856	0.61	12.6
Winterbourne Gunner Meadows	4.856	0.57	11.6
Figsbury Farm Meadow	---	0.41	---

* Critical load values taken from APIS website (www.apis.ac.uk) – 12/01/2018
Figsbury Farm Meadow is not sensitive to acid deposition therefore no CLo has been assigned.

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	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: • Wiltshire Council – Environmental Health • Wiltshire Council – Local Authority • Health and Safety Executive • Public Health England – Chilton, Oxfordshire • Animal and Plant Health Agency • Director of Public Health The comments and our responses are summarised in the consultation section.
The facility	
The regulated facility	We considered the extent and nature of the facility at the site in accordance with RGN2 'Understanding the meaning of regulated facility'. The extent of the facility is defined in the site plan and in the permit. The activities are defined in table S1.1 of the permit.
The site	
Extent of the site of the facility	The operator has provided plans which we consider are satisfactory, showing the extent of the site of the facility. The site boundary 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 have consulted Natural England by email and on our Habitats Regulations Assessments and have taken their comments into account in the permitting decision. We consider that the application will not affect any sites of nature conservation, landscape and heritage, and/or protected species or habitats identified.
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.

Aspect considered	Decision
Operating techniques	
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 main operating techniques are as follows: • Water troughs and feeders are constructed to minimise waste, nipple drinkers are used to minimise water spillage; • Slurry will be cleared frequently to avoid build-up of slurry beneath the farrowing building; and • Buildings with solid floors will be washed out and cleaned thoroughly between batches, should the front of the pens become excessively dirty, the pens will be scraped, this will also prevent ponding.
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 section.
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 section.
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.
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.
Raw materials	We have not specified limits and controls on the use of raw materials and fuels.
Emission limits	ELVs based on BAT have been set for the following substances: • kg N excreted/animal place/year • kg P_2O_5 excreted/animal place/year • Kg NH_3/animal place/year This variation is for the increase in permitted pig numbers and also involves the construction of a new pig house. The existing pig houses have not been altered as a result of this variation. The new pig house is expected to comply with the emission limits from permit issue. Existing housing does not need to comply with these emission limits until 21/02/21. Details with regards to how the operator will comply with these BAT requirements will be the subject of a future sector permit review.
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, 26 and 27 of the IRPP BAT

Aspect considered	Decision
	Conclusions. We made these decisions in accordance with the IRPP BAT Conclusions. This variation is for the increase in permitted pig numbers and also involves the construction of a new pig house. The existing pig houses have not been altered as a result of this variation. Monitoring of emissions from the new pig house is expected to commence from permit issue. Monitoring of emissions and compliance with the BAT-AELs at existing housing does not need to commence until 21/02/21. Details with regards to how the operator will comply with these BAT requirements will be the subject of a future sector permit review.
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. This variation is for the increase in permitted pig numbers and also involves the construction of a new pig house. The existing pig houses have not been altered as a result of this variation. Reporting of monitored emissions from the new house is expected to commence from permit issue. Reporting of monitored emissions and compliance with the BAT-AELs at existing housing does not need to commence until 21/02/21. Details with regards to how the operator will comply with these BAT requirements will be the subject of a future sector permit review.
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	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.

Aspect considered	Decision
	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

Responses from organisations listed in the consultation section

Response received from
Wiltshire Council – Environmental Health
Brief summary of issues raised
Wiltshire Council – Environmental Health has expressed concerns about odour pollution from the installation stating that they have received numerous odour complaints regarding the operation of this installation.
Summary of actions taken or show how this has been covered
The operator has submitted an Odour Management Plan, which we consider appropriate for control and management of odour emissions from this installation. We have considered that this OMP will ensure that the odour management condition 3.3 in the variation notice, is not breached. Any breach of this condition 3.3 will be enforced against.

Response received from
Public Health England – Chilton, Oxfordshire
Brief summary of issues raised
Public Health England Chilton have recommended that we consider a sensitive receptors with 250 metres of the installation for the impact of bioaerosols and dust.
Summary of actions taken or show how this has been covered
Our screening distance for dust and bioaerosols in Intensive Farming Applications remains 100 metres so we have not asked the operator for a Dust/Bioaerosols Management Plan. The operator submitted an Environmental Risk Assessment in support of this application and we consider this satisfactory. This risk assessment covers the potential impacts of any emissions of dust, odour and noise. We are satisfied that the mitigation measures for emissions of dust contained in the risk assessment represent appropriate measures for this activity.

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

- Wiltshire Council – Local Authority
- Health and Safety Executive
- Animal and Plant Health Agency
- Director of Public Health

This proposal was also publicised on the Environment Agency's website between 17/05/2018 and 15/06/18, but no representations were received during this period.