

Permitting decisions

Bespoke permit

We have decided to grant the permit for Fordington Lodge Pig Unit operated by Shedden Farms Limited

The permit number is EPR/VP3404LU

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 <u>decision checklist</u> to show how all relevant factors have been taken into account; and
- 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. The introductory note summarises what the permit 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 sets 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 installation farming permits 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 (BAT-AELs) for ammonia emissions, which will apply to the majority of permits, as well as BAT-AELs 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 were published.

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 installation in their document Technical Standards dated 12/11/20 and revised OMP dated 19/01/21 which have been referenced in Table S1.2 Operating Techniques of the permit.

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	The Applicant is required to demonstrate they achieve levels of nitrogen excretion below the required BAT-AELs for the following pig types:
- Nitrogen excretion	Fattening pigs (production pigs > 30 kg): 13 kg N/animal place/year by estimation using manure analysis for total nitrogen content.
	Table S3.3 of the Permit concerning process monitoring requires the Applicant to undertake relevant monitoring that complies with these BAT Conclusions.
BAT 4 Nutritional management	The Applicant is required to demonstrate they achieve levels of phosphorus excretion below the required BAT-AELs for the following pig types:
- Phosphorous	Fattening pigs (production pigs > 30 kg): 5.4 kg P_2O_5 animal place/year
excretion	by estimation using manure analysis for total phosphorus content.
	Table S3.3 of the Permit concerning process monitoring requires the Applicant to undertake relevant monitoring that complies with these BAT Conclusions.
BAT 24 Monitoring of emissions and process parameters	Table S3.3 concerning process monitoring requires the Applicant to undertake relevant monitoring that complies with these BAT Conclusions. The Applicant will use manure analysis.
- Total nitrogen and phosphorous excretion	
BAT 25 Monitoring of emissions and process parameters	Table S3.3 of the permit concerning process monitoring requires the Applicant to undertake relevant monitoring that complies with these BAT Conclusions.

BAT measure	Applicant compliance measure
- Ammonia emissions	The Applicant has confirmed standard ammonia emission factors will be used
BAT 26 Monitoring of emissions and process parameters - Odour emissions	The staff will perform a boundary walk twice daily in respond to odour complaints and continued until odour complaint resolved. Checks will be performed in the surrounding area by persons who do not regularly work on the farm.
BAT 27 Monitoring of emissions and process parameters - Dust emissions	Table S3.3 Process monitoring requires the Applicant to undertake relevant monitoring that complies with these BAT conclusions.
	The Applicant is required to report the dust emissions to the Environment Agency annually, this can be completed by calculation using standard dust emissions factors for each type of pig.
	The Applicant has confirmed standard dust emission factors will be used.
BAT 30 Ammonia emissions from pig houses	The Applicant is required to demonstrate they achieve levels of ammonia below the required BAT-AEL for the following pig types:
	Fattening pigs > 30kg: 5.65 kg NH3/animal place/year (solid floor straw system)
	The standard emission factor for such housing is 2.97 and AHDB Pork monitoring data from 2017 has shown a conservative emission factor of 2 can be complied with.
	Hence the BAT AEL is complied with.

Other specific BAT measures

BAT 15 Solid manure storage controls to minimise impact to soil and water

The requirement is for at least two of list of measures within 2017 BAT conclusions document section on BAT 15 to be employed

The Applicant has confirmed BAT measures 15 c) and 15 e) will be employed. We accept these measures as BAT compliant

Industrial Emissions Directive (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 Applicant 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 Applicant** 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 Fordington Lodge Pig Unit (dated November 2020) 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 (<u>http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/297084/geho0110brsb-e-e.pdf</u>).

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 Applicant 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 Applicant has supplied an OMP dated 19/01/21. It confirms that there are no relevant local receptors within 400 metres of the installation boundary; the only named receptor is an Applicant owned property which is excluded from the list of relevant receptors.

Therefore the Applicant is not formally required to have an OMP as there are no relevant receptors within 400 metres of installation boundary. Nonetheless for completeness and good practice they have supplied one and we have reviewed it as per below.

Odour Management Plan Review

There has been no history of odour complaints for the current operation of the farm under the 2000 production pig EP regulations threshold.

The Applicant is required to manage activities at the Installation in accordance with condition 3.3.1 of the Permit and its OMP. The OMP includes odour control measures for effects of diet on odour and ammonia emissions (feed selection), manure storage and management, dirty water storage, cleanliness of yards, housing and management, emissions from housing, cleaning out, storage and disposal of carcasses, feed delivery and storage, spreading manure and dust as a vector for odour.

The OMP is required to be reviewed at least every 4 years and/or after a complaint is received, whichever is the sooner. In addition, the Applicant has confirmed in their OMP that the effectiveness of odour control measures will be reviewed at least once a year or sooner in the event of any complaint or relevant changes to operations.

Compliants will be reported to the site manager, who will log and investigate causes, and monitor odour levels at the site boundary as part of the investigation, and record on the site complaint form.

The Environment Agency has reviewed the OMP and considers it acceptable. We agree with the scope and suitability of key measures but this should not be taken as confirmation that the details of equipment specification design, operation and maintenance are suitable and sufficient. That remains the responsibility of the Applicant.

Conclusion

Although there is the potential for odour pollution from the Installation, the Applicant's compliance with the permit and its OMP will minimise the risk of odour pollution beyond the Installation boundary. The risk of odour pollution at sensitive receptors beyond the Installation boundary is therefore not considered significant. EPR/VP3404LU/A001

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 Applicant 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 no relevant sensitive receptors within 400 metres of the installation boundary.

Therefore the Applicant is not formally required to have an NMP as there are no relevant receptors within 400 metres of installation boundary. The NMP is dated 12/11/20. Nonetheless for completeness and good practice they have supplied one and we have reviewed it as per below.

There has been no history of noise complaints for the current operation of the farm under the 2000 production pig EP regulations threshold.

Noise Management Plan Review

A noise management plan (NMP) has been provided by the Applicant as part of the application supporting documentation.

The NMP is required to be reviewed at least every 4 years.

Operations with the most potential to cause noise nuisance have been assessed and control measures put in place for feeding of pigs, feed delivery, moving and loading of pigs, bedding pens, daily mucking out, dirty water filling and emptying, manure loading/transport and spreading, delivery of supplies and materials and vehicles operating within the installation boundaries.

We have included our standard noise and vibration condition 3.4.1 in the Permit, which requires that emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the Installation, as perceived by an authorised officer of the Environment Agency, unless the Applicant has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan (which is captured through condition 2.3 and Table S1.2 of the Permit), to prevent or where that is not practicable to minimise the noise and vibration.

We are satisfied that the manner in which operations are carried out on the Installation will minimise the risk of noise pollution.

Conclusion

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.

Dust and Bioaerosols

The use of Best Available Techniques and good practice will ensure minimisation of emissions. There are measures included within the permit (the 'Fugitive Emissions' conditions) to provide a level of protection. Condition 3.2.1 'Emissions of substances not controlled by an emission limit' is included in the permit. This is

used in conjunction with condition 3.2.2 which states that in the event of fugitive emissions causing pollution following commissioning of the installation, the Applicant is required to undertake a review of site activities, provide an emissions management plan and to undertake any mitigation recommended as part of that report, once agreed in writing with the Environment Agency.

There is one sensitive receptor within 100m of the installation boundary, the nearest sensitive receptor (the nearest point of their assumed property boundary) is approximately 10 metres outside the installation boundary.

In addition guidance on our website concludes that Applicants need to produce and submit a dust and bioaerosol management plan beyond the requirement of the initial risk assessment, with their applications only if there are relevant receptors within 100 metres of their farm, e.g. the farmhouse or farm worker's houses. Details can be found via the link below:

www.gov.uk/guidance/intensive-farming-risk-assessment-for-your-environmental-permit#air-emissions-dust-and-bioaerosols.

As there is a single receptor within 100m of the installation boundary, the Applicant was required to submit a dust and bio aerosol management in this format.

In the guidance mentioned above it states that particulate concentrations fall off rapidly with distance from the emitting source. This fact, together with the proposed good management of the installation (such as keeping areas clean from build-up of dust and other measures in place to reduce dust and the risk of spillages) we believe will minimise impact of installation on local receptors.

The Applicant provided a Dust and Bioaersol Management Plan dated 08/01/21.

The Applicant has confirmed measures to minimise dust emissions from following sources :

- Dust emissions from feed selection
- Bioaerosol emissions from manure and dirty water storage
- Dust/Bioaerosol emissions from yard areas
- Dust/Bioaerosol emissions from housing
- Bioaerosol emissions from drinking water systems
- Dust/Bioaerosol emissions from natural ventilation
- Dust/Bioaerosol emissions from cleanout
- Bioaerosol emissions from carcase storage and disposal
- Dust/bioaerosol emissions from feed storage (delivered in; mill and mix on main site Shipton Grange)
- Dust/Bioaerosol emissions from manure and dirty water spreading
- Dust/Bioaerosol emissions from dust build up

Conclusion

We are satisfied that the measures outlined in the application will minimise the potential for dust and bioaerosol emissions from the installation.

Ammonia

There are no Special Area of Conservation (SAC), Special Protection Area (SPA) or Ramsar sites located within 5 kilometres of the installation. There are no Sites of Special Scientific Interest (SSSI) located within 5 km of the installation. There are three Ancient Woodlands (AW) within 2 km of the installation.

Ammonia assessment – AW/LWS.

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.

The final screening dated **12/01/21** using ammonia screening tool version 4.5 has indicated that emissions from this installation will only have a potential impact on the AW's with a precautionary CLe of $1\mu g/m^3$ if they are within **1124** metres of the emission source.

Beyond **1124 m the** PC is less than $1\mu g/m^3$ and therefore beyond this distance the PC is insignificant. In this case the AW is beyond this distance (see table below) and therefore screen out of any further assessment.

Table 1 – AW Assessment

Site	Distance from site (m)
Unknown AW	1,386

No further assessment is required.

Where sites screen out as <100%

The Applicant decided to provide Detailed modelling for other AW's. The modelling has been reviewed and we have confidence that we can agree with the report conclusions.

The following tables summarise the maximum process contributions from the Dispersion Modelling report received 08/01/21.

It should be noted that the Dispersion Modelling Process Contributions have been utilised combined with our review and update of the Acid Deposition Critical Load dated 12/01/21.

Table 2- Ammonia emissions

Site	Critical level ammonia µg/m³	Predicted PC µg/m ³	PC % of critical level
Tindal Wood AW	3*	1.034	34.5
Dodholm Wood AW	1**	0.340	34.0

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

* Cle 1 - Critical load values taken from APIS website (www.apis.ac.uk) - 12/1/21

Table 3 – Nitrogen deposition

Site	Critical load kg N/ha/yr [1]	Predicted PC kg N/ha/yr	PC % of critical load
Tindal Wood AW	10	8.06	80.6
Dodholm Wood AW	10	2.65	26.5

Note [1] Critical load values taken from APIS website (<u>www.apis.ac.uk</u>) – 12/1/21

Table 4 – Acid deposition

Site	Critical load keq/ha/yr	Predicted PC	PC % of critical
	[1]	keq/ha/yr	load
Tindal Wood AW	2.849	0.58	20.4

Dodholm Wood AW	2.849	0.19	6.70
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Note [1] Critical load values taken from APIS website (<u>www.apis.ac.uk</u>) – 12/1/21

No further assessment is required.

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Decision checklist

Aspect considered	Decision		
Receipt of application	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			
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:		
	Health and Safety Executive		
	Local Council – Environmental Health		
	Public Health England/Director of Public Health		
	There were no public responses within set period. The details of consultation responses are provided in this document.		
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 legal operator for environmental permits.		
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 Applicant has provided a plan which we consider is satisfactory, showing the extent of the site of the facility. The plan is included in the permit.		
Site condition report	The Applicant 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.		
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.		
	There are no European/Ramsar sites within 5km of the installation and therefore there is no requirement for a HRA1 assessment. We consider that the application will not affect any sites of nature conservation, landscape and heritage, and/or protected species or		

Aspect considered	Decision	
	habitats identified.	
Environmental risk assessment		
Environmental risk	We have reviewed the Applicant's assessment of the environmental risk from the facility.	
	The Applicant's risk assessment is satisfactory.	
Climate change	We have assessed the climate change adaptation risk assessment.	
adaptation	We consider the climate change adaptation risk assessment is satisfactory.	
	We have decided to include a condition in the permit requiring the Applicant to review and update their climate change risk assessment over the life of the permit.	
Operating techniques		
General operating techniques	We have reviewed the techniques used by the Applicant and compared these with the relevant guidance notes and we consider them to represent appropriate techniques for the facility. The operating techniques that the Applicant must use are specified in table S1.2 in the environmental permit.	
	The operating techniques are as follows:	
	All Pig houses 1 to 5 are ventilated by natural ventilation	
	All Pig houses 1 to 5 are straw based solid floor systems	
	Associated pig feed bins	
	FYM (Farm Yard Manure Storage)	
	Dead stock contained storage and removal	
	Clean and dirty water separate drainage systems	
	BAT compliant monitoring techniques.	
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.	
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.	
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.	
Emission limits	We have decided that emission limits are required in the permit. BAT AELs have been added in line with the Intensive Farming sector BAT conclusions document dated 21/02/17. These limits are included in permit table S3.3	
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. We have made these decisions in order to ensure compliance with Intensive Farming BAT conclusions document dated 21/02/17	

Aspect considered	Decision
Reporting	We have specified reporting in the permit.
	We made these decisions in order to ensure compliance with Intensive Farming BAT conclusions document dated 21/02/17.
Applicant competence	
Management system	There is no known reason to consider that the Applicant will not have the management system to enable it to comply with the permit conditions.
	The decision was taken in accordance with the guidance on Applicant competence and how to develop a management system for environmental permits.
Relevant convictions	The Case Management System has been checked to ensure that all relevant convictions have been declared.
	No relevant convictions were found. The Applicant satisfies the criteria in our guidance on Applicant competence.
Financial competence	There is no known reason to consider that the Applicant will not be financially able 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 vary this permit.
	Paragraph 1.3 of the guidance says:
	"The primary role of regulators, in delivering regulation, is to achieve the regulatory outcomes for which they are responsible. For a number of regulators, these regulatory outcomes include an explicit reference to development or growth. The growth duty establishes economic growth as a factor that all specified regulators should have regard to, alongside the delivery of the protections set out in the relevant legislation."
	We have addressed the legislative requirements and environmental standards to be set for this operation in the body of the decision document above. The guidance is clear at paragraph 1.5 that the growth duty does not legitimise non-compliance and its purpose is not to achieve or pursue economic growth at the expense of necessary protections.
	We consider the requirements and standards we have set in this permit are reasonable and necessary to avoid a risk of an unacceptable level of pollution. This also promotes growth amongst legitimate Applicants because the standards applied to the Applicant 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

Public Health England 12/02/21

Brief summary of issues raised

Generic concerns regarding bio aerosol emissions

Summary of actions taken or show how this has been covered

We have assessed dust and bio aerosol risk through our review of operator dust and bio aerosol management plan and consider risks to have been reduced to an acceptable level.

In addition, the application was publicised on the www.gov.uk website, with a deadline for comments of 15/02/21, but no comments were received.