

Permitting decisions

Bespoke permit

We have decided to grant the permit for Brandy Wharf Piggery operated by Holmefield Farm Services Limited.

The permit number is EPR/MP3133QD.

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
- shows how we have considered the <u>consultation responses</u>.

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 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 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 for ammonia emissions which will apply to the majority of permits, as well as BAT associated levels for nitrogen and phosphorus excretion.

For some types of rearing practices stricter standards will apply to farms and housing permitted after the new BAT Conclusions are published.

New BAT conclusions review

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

We have sent out a not duly made request on 15/05/18 to the Applicant to confirm that the new installation complies in full with all the BAT conclusion measures.

The Applicant has confirmed their compliance with all BAT conditions for the new installation, in their email response received 15/05/18.

The following is a more specific review of the measures the Applicant has applied to ensure compliance with the above key BAT measures in Table 1 below:

BAT measure	Applicant compliance measure
BAT 3 - Nutritional management Nitrogen excretion	The Applicant has confirmed it will demonstrate it achieves levels of Nitrogen excretion below the required BAT-AEL for the following pig types:
	30 kg N/animal place/year for mating and gestating sows
	30 kg N/animal place/year for farrowing sows (including suckling piglets)
	4 kg N/animal place/year for weaners (pigs up to 30kg)
	13 kg N/animal place/year for fattening pigs (production pigs > 30kg)
	by using a mass balance of nitrogen based on the feed intake, dietary content of crude protein, and animal performance or estimation by using manure analysis for total nitrogen content.
	This confirmation was in response to the Request for Further Information received 02/07/18, 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 4 Nutritional management Phosphorus excretion	The Applicant has confirmed it will demonstrate it achieves levels of Phosphorus excretion below the required BAT-AEL for the following pig types:
	15 kg P_2O_5 animal place/year for mating and gestating sows

Table 1 BAT compliance

BAT measure	Applicant compliance measure
	15 kg P_2O_5 animal place/year for farrowing sows (including suckling piglets)
	2.2 kg P_2O_5 animal place/year for weaners (pigs up to 30kg)
	5.4 kg P_2O_5 animal place/year for fattening pigs (production pigs > 30kg)
	by using a mass balance of phosphorus based on the feed intake, dietary content of crude protein, and animal performance or estimation by using manure analysis for total phosphorus content.
	This confirmation was in response to the Request for Further Information received 02/07/18, 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	Table S3.3 Process monitoring requires the operator to undertake relevant monitoring that complies with these BAT conclusions.
 Total nitrogen and phosphoros excretion 	
BAT 25 Monitoring of emissions and process parameters	Table S3.3 of the Permit concerning process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions.
- Ammonia emissions	
BAT 27 Monitoring of emissions and process	Table S3.3 Process monitoring requires the operator to undertake relevant monitoring that complies with these BAT conclusions.
parameters	Example text:
-Dust emissions	The Applicant has confirmed they will report the dust emissions to the Environment Agency annually by multiplying the dust emissions factor for pigs by the number of pigs on site.
	This confirmation was in response to the Request for Further Information received 02/07/18, 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 :
	2.7 kg NH3/animal place/year for mating and gestating sows
	5.6 kg NH3/animal place/year for farrowing sows (including suckling piglets)
	0.53 kg NH3/animal place/year for weaners (pigs up to 30kg)
	2.6 kg NH3/animal place/year for fattening pigs (production pigs > 30kg)
	The standard emission factors does not comply with the BAT AEL for some categories of pigs, however additional measures detailed below have been incorporated to ensure compliance.

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.

'New plant' is defined as plant first permitted at the site of the farm following the publication of the BAT conclusions.

All new bespoke applications issued after the 21st February 2017, including those where there is a mixture of old and new housing, will now need to meet the BAT-AEL.

More detailed assessment of BAT AEL's

Pig housing

The operator has confirmed that the housing systems are fully slatted flooring (FSF) with frequent slurry removal systems which meet the following criteria:

• All slurry pits are to be operated with a maximum slurry liquor depth of 800 mm as defined as optimal depth in section 4.7.1.2 of the latest Intensive Farming BREF

http://eippcb.jrc.ec.europa.eu/reference/BREF/IRPP/JRC107189 IRPP Bref 2017 published.pdf, and

• Slurry removal frequency of a maximum of 10 weeks.

In addition, where necessary, the operator has included additional information to show that the ammonia BAT AELs can be achieved. A full description is given below:

Sows: BAT AEL = 2.7 kg NH3/animal place/year

Actual emission factor for FSF, frequent slurry removal (as defined above) = 2.26 kg NH3/animal place/year therefore below the BAT AEL.

Farrowers: BAT AEL = 5.6 kg NH3/animal place/year

Actual emission factor for FSF = 5.84 NH3/animal place/year, applying 25% reduction for frequent slurry removal (as defined above) = 4.38 kg NH3/animal place/year therefore below the BAT AEL.

Pigs 7 - 30kg: BAT AEL = 0.53 kg NH3/animal place/year

Actual emission factors used for ammonia assessments are for the weight ranges 7 - 15kg and 15 - 30kg, therefore a 'weighted average ' calculation has been used to calculate an emission factor which can be achieved with the measures proposed by the applicant as follows:

Actual emission factor for 7 – 15 kg pigs on FSF with frequent slurry removal = 0.22 kg NH3/animal place/year

Applying a reduction for 92.9% occupancy rate and 2% crude protein reduction (giving 20% reduction in emissions = $0.22 \times 0.929 \times 0.8 = 0.164 \text{ kg NH3/animal place/year}$

Actual emission factor for 15 – 30kg pigs on FSF with frequent slurry removal = 1.19

Applying a reduction for 92.9% occupancy rate and 1% crude protein reduction (giving 10% reduction in emissions = $1.19 \times 0.929 \times 0.9 = 0.995$ kg NH3/animal place/year

The application is for 1280 pigs 7 - 15kg and 960 pigs 15 - 30kg = 2240 pigs 7 - 30kg.

Calculating a weighted average emission factor = $((1280 \times 0.164) + (960 \times 0.995)0/2240 = 0.52 \text{ kg NH3/animal place/year}$ therefore below the BAT AEL of 0.53 kg NH3/animal place/year.

Pigs > 30kg: BAT AEL = 2.6 kg NH3/animal place/year

Actual emission factor for FSF with frequent slurry removal = 3.11 kg NH3/animal place/year

Applying a reduction for 90.5% occupancy rate and 1.8% crude protein reduction (giving 18% reduction in emissions = $3.11 \times 0.905 \times 0.82 = 2.31 \text{ kg NH3}/animal place/year therefore below the BAT AEL.$

As further substantiation of compliance, based on the report titled: "Establishing Ammonia Emissions Factors for Shallow Pit, Fully Slatted Finisher Buildings (September 2017)" it has been agreed that a conservative emission factor of 2 kg NH₃/animal place/year can be applied for production pigs over 30kg, where pig housing meets the above criteria for fully slatted flooring with frequent slurry removal, which is less than the 2.6 kg NH₃/animal place/year BAT-AEL.

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.

Pre-operational condition

Pre-operational condition PO1 in table S1.3 of the permit has been included to ensure that the infrastructure is in place to enable the operator to comply with BAT 16 and BAT 30 of the BAT Conclusions, prior to stocking pigs over the EPR threshold. The requirement is that the slurry store is constructed to the correct standards, and infrastructure and procedural measures are in place to enable the operator to frequently remove slurry from the housing every 10 weeks or sooner, and ensure the liquor depth in the slurry pits underneath the pig housing does not exceed 800mm.

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 Brandy Wharf Piggery (dated March 2018, received 15/05/18) 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 3.3.1 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 there are sensitive receptors (sensitive receptors in this instance excludes properties associated with the farm) within 400m of the Installation boundary. The Installation is not located within 400m of sensitive receptors, and therefore the Applicant has not submitted an odour management plan. However condition 3.3.2 has been included in the permit which requires the Applicant to submit for approval, and implementation, an OMP, if notified by the Environment Agency that activities are giving rise to pollution outside the site due to odour.

We are satisfied that the measures outlined in the application will minimise the potential for odour emissions from the Installation.

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 3.4.1 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. "

The Installation is not located within 400m of sensitive receptors, and therefore the Applicant has not submitted a noise management plan. However condition 3.4.2 has been included in the permit which requires the Applicant to submit for approval, and implementation, an NMP, if notified by the Environment Agency that activities are giving rise to pollution outside the site due to noise and vibration.

We are satisfied that the measures outlined in the application will minimise the potential for noise emissions from the Installation.

Dust and Bioaerosols

The use of Best Available Techniques and good practice is intended to 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 Operator must undertake a review of site activities, provide an emissions management plan and undertake any mitigation recommended as part of that report, once agreed in writing with the Environment Agency.

There are no sensitive receptors within 400m of the Installation boundary. This fact, together with measure included in the application, such as good management of the Installation, keeping areas clean from build up of dust, and other measures in place to reduce dust and risk of spillages, such as feed management/delivery procedures, all reduce the potential for emissions impacting the nearest receptors.

Guidance on our website concludes that applicants need to produce and submit a dust and bioaerosol risk assessment with their applications if there are relevant receptors within 100 metres of their farm, e.g. the farmhouse or farm workers' houses. Details can be found via the link below:

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

There are no receptors within 100m of the Installation boundary therefore the Applicant has not submitted a risk assessment in this format.

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

Ammonia

The applicant has demonstrated that the housing will meet the relevant NH3 BAT-AEL.

There are no Special Areas of Conservation (SAC), Special Protection Areas (SPA) or Ramsar sites located within 5 kilometres (km) of the installation. There is one Site of Special Scientific Interest (SSSI) located within 5 km of the installation. There is also one Local Wildlife Site (LWS) within 2 km of the installation.

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 dated 23/05/18 using the ammonia screening tool version 4.5 has indicated that emissions from Brandy Wharf Piggery will only have a potential impact on SSSI sites with a precautionary critical level of 1μ g/m³ if they are within 1,938m metres of the emission source.

Beyond 1,938m the PC is less than $0.2\mu g/m^3$ (i.e. less than 20% of the precautionary $1\mu g/m^3$ critical level) and therefore beyond this distance the PC is insignificant. In this case the SSSI is beyond this distance (see table 2 below) and therefore screen out of any further assessment.

Where the precautionary level of $1\mu g/m^3$ 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 $1\mu g/m^3$ 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 2 – SSSI Assessment

Name of SSSI	Distance from site (m)
Kingerby Beck Meadows SSSI	4,855

Where a critical level of 1 is used then the nitrogen and acid deposition do not need to be considered.

No further assessment is required.

Ammonia assessment - 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.

Initial screening dated 23/05/18 using ammonia screening tool version 4.5 has indicated that emissions from Brandy Wharf Piggery will only have a potential impact on the LWS site with a precautionary critical level of $1\mu g/m^3$ if it is within 676 metres of the emission source.

Beyond 676m the PC is less than $1\mu g/m^3$ 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 3 – LWS Assessment

Name of LWS	Distance from site (m)
New River Ancholme LWS	1,336

Where a critical level of 1 is used then the nitrogen and acid deposition do not need to be considered.

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.	
	The decision was taken in accordance with our guidance on confidentiality.	
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:	
	West Lindsey District Council Environmental Health	
	Health and Safety Executive	
	No responses were received.	
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 operator 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 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.	
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 consider that the application will not affect any sites of nature conservation,	

Aspect considered	Decision	
	landscape and heritage, and/or protected species or habitats identified.	
	We have not consulted Natural England on the application. The decision was taken in accordance with our guidance.	
Environmental risk assess	ment	
Environmental risk	We have reviewed the operator's assessment of the environmental risk from the facility.	
	The operator's risk assessment is satisfactory.	
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 operating techniques are as follows:	
	• Pig houses A, B, C, D, 1, 2 and 3 are ventilated by high velocity roof fans	
	 Slurry is kept to a depth of less than 800mm and frequently removed every 10 weeks, and spread on land owned by a third party 	
	 Dirty wash water is channelled to underground slurry tanks 	
	Roof water drains to a dyke, yard water is directed to the slurry storage	
	Feed is milled and mixed on site	
	Carcasses are stored in a lockable container and disposed of via a licensed contractor, with smaller carcasses being disposed of in an on-site incinerator	
	 Phosphorus and protein levels are reduced over the production and growing cycle by providing different feeds 	
	The proposed techniques for priorities for control are in line with the benchmark levels contained in the Sector Guidance Note EPR6.09 and we consider them to represent appropriate techniques for the facility. The permit conditions ensure compliance with relevant BREFs.	
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.	
Pre-operational conditions	Based on the information in the application, we consider that we need to impose a pre-operational condition (PO1).	
	Please refer to 'Pre-operational condition' section in the Key Issues section above.	
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	

Aspect considered	Decision
	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.
	These monitoring requirements have been imposed in order to ensure compliance with Intensive Farming BAT conclusions document dated 21/02/17.
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.
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.
	The decision was taken in accordance with the guidance on operator 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 operator satisfies the criteria in our guidance on operator competence.
Financial competence	There is no known reason to consider that the operator 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 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

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.

Responses from organisations listed in the consultation section

West Lindsey District Council Environmental Health and the Health and Safety Executive were consulted, with a deadline for responses of 29/06/18, but no responses were received.

In addition, the application was publicised on the www.gov.uk website, but no comments were received by the deadline of 26/06/18.