

Permitting decisions

Bespoke permit

We have decided to grant the permit for Little Plowlands Farm Pig Unit operated by Mr Anthony Rowbottom, Mr Peter Rowbottom, and Mrs Carol Rowbottom (trading as P J Rowbottom and Partners).

The permit number is EPR/QP3435YA.

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 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.

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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 phosphorous 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.

The Applicant has confirmed their compliance with all BAT conditions for the new installations or new housing, in their document reference 010 BAT Report and dated 09/10/17.

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	The Applicant has confirmed it will demonstrate it achieves levels of Nitrogen excretion below the required BAT-AEL by an estimation using manure analysis for total Nitrogen content. This is for the following pig types:
	Pigs 7 – 30kg: 4.0 kg N/animal place/year. Pigs > 30kg: 13.0 kg N/animal place/year.
	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 Phosphorous excretion	The Applicant has confirmed it will demonstrate it achieves levels of Phosphorous excretion below the required BAT-AEL by an estimation using manure analysis for total Phosphorous content. This is for the following pig types:
	Pigs 7 – 30kg: 2.2 kg P₂O₅ animal place/year.
	Pigs > 30kg: 5.4 kg P₂O₅ animal place/year.
	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

BAT measure	Applicant compliance measure
- Total nitrogen and phosphorous 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 26 Monitoring of	There are no sensitive receptors within 400m.
emissions and process parameters	In the event of substantiated odour complaints, the site will undertake daily olfactory monitoring in accordance with BAT.
- Odour emissions	
BAT 27 Monitoring of emissions and process parameters	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
-Dust emissions	Agency annually by multiplying the dust emissions factor for pigs by the number on site.
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-AELs 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, including those where there is a mixture of old and new housing, will now need to meet the BAT-AEL.

More detailed assessment of AEL's

Pig housing

Low Protein Diet

Dry feed is used, with an automatic feeding system and the diet is formulated to match the growth stage of the pigs. To comply with the new BAT AELs crude protein in the diet has been reduced against the industry by 2%, giving a 20% reduction in ammonia emissions. The new diet is outlined in the below table:

Diet	Crude Protein
Weaner Diet	20.1%
Grower Diet	17.8%
Finisher Diet	16%

Use of batch system

A batch system will be used ensuring a maximum occupancy rate of 94%.

Industrial Emissions Directive (IED)

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

This permit implements the requirements of the European Union Directive on Industrial Emissions.

Groundwater and soil monitoring

As a result of the requirements of the Industrial Emissions Directive, all permits are now required to contain a condition relating to protection of soil, groundwater and groundwater monitoring. However, the Environment Agency's H5 Guidance states **that it is only necessary for the operator to take samples** of soil or groundwater and measure levels of contamination where there is evidence that there is, or could be existing contamination and:

- The environmental risk assessment has identified that the same contaminants are a particular hazard;
 or
- The environmental risk assessment has identified that the same contaminants are a hazard and the risk assessment has identified a possible pathway to land or groundwater.

H5 Guidance further states that it is **not essential for the Operator** to take samples of soil or groundwater and measure levels of contamination where:

- The environmental risk assessment identifies no hazards to land or groundwater; or
- Where the environmental risk assessment identifies only limited hazards to land and groundwater and there is no reason to believe that there could be historic contamination by those substances that present the hazard; or
- Where the environmental risk assessment identifies hazards to land and groundwater but there is evidence that there is no historic contamination by those substances that pose the hazard.

The site condition report (SCR) for Little Plowlands Farm (dated 25/07/17) 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.

Ammonia

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

There are is a Special Area of Conservation (SAC), /Special Protection Area (SPA), /Ramsar site located within 10 kilometres of the installation. There are 2 Sites of Special Scientific Interest (SSSI) located within 5 km of the installation. There is also a Local Wildlife Site within 2 km of the installation.

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 ammonia screening tool version 4.5 has determined that the process contributions of ammonia emissions 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. See results below.

Table 1 - Ammonia emissions

Site	Critical level ammonia µg/m³	Predicted process contribution µg/m³	% of critical level
Humber Estuary SAC/SPA/Ramsar	3*	0.13	4.3

^{*}Natural England advised that a CLe of 3 for ammonia should be applied across the Humber Estuary SAC/SPA/Ramsar (March 2017)

Table 2 - Nitrogen deposition

Site	Critical load kg N/ha/yr. [1]	Predicted PC kg N/ha/yr.	PC % of critical load
Humber Estuary SAC/SPA/Ramsar	20	0.674	3.4

Note [1] Critical load values taken from APIS website (www.apis.ac.uk) - 12/06/17

No further assessment is required.

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 Little Plowlands Farm will only have a potential impact on SSSI sites with a precautionary critical level of $1\mu g/m^3$ if they are within 2,572 metres of the emission source.

Beyond 2,572m 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 all SSSI are beyond this distance (see table 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 3 - SSSI Assessment

Name of SSSI	Distance from site (m)
Humber Estuary SSSI	3,352

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 using ammonia screening tool version 4.5 has indicated that emissions from Little Plowlands Farm will only have a potential impact on the LWS sites with a precautionary critical level of $1\mu g/m^3$ if they are within 966 metres of the emission source.

Beyond 966m 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 4 - LWS Assessment

Name of SAC/SPA/Ramsar	Distance from site (m)	
Hollym Carrs LWS	1,800	

No further assessment is necessary.

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	
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 between 24/01/17 and 02/03/18.
	We consulted the following organisations:
	Food Standards Agency
	Health and Safety Executive
	Local Authority – Environmental Health
	Public Health England
	The comments and our responses are summarised in the consultation section.
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' and Appendix 2 of RGN 2 'Defining the scope of the installation'.
	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	The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat.
conservation	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

Aspect considered	Decision
	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, 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. See 'Ammonia' section above for further information.
Environmental risk ass	essment
Environmental risk	We have reviewed the operator's assessment of the environmental risk from the facility.
	The operator's risk assessment is satisfactory.
	Please see <u>key issues</u> for further information on odour, noise, dust and bio aerosols, and ammonia emissions.
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:
	 Slurry is piped to the on-site slurry tank. This tank will be covered with Light Expanded Clay Aggregate (LECA) balls within 6 months of the permit being issued.
	 The sheds will operate on a fully slatted flooring system with frequent slurry removal. They will operate with roof or side ventilation with medium velocity fans
	 Protein is reduced over the growing cycle by providing different feeds and phosphorus levels in rations are reduced over the production cycle;
	 Deadstock are collected in lockable bins ready for collection by a licenced deadstock collection service;
	 Between each batch of pigs (approximately 22 weeks per batch) all buildings are mucked out, pressure washed and disinfected.
	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.
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. There are no sensitive receptors within 400m.
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. There are no sensitive

Aspect considered	Decision
	receptors within 400m.
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	ELVs [and/or] equivalent parameters or technical measures [based on BAT] have been set for the following substances.
	Nitrogen:
	Pigs 7 – 30kg: 4.0 kg N/animal place/year
	Pigs > 30kg: 13.0 kg N/animal place/year
	Phosphorus:
	Pigs 7 – 30kg: 2.2 kg P2O5 animal place/year
	Pigs > 30kg: 5.4 kg P2O5 animal place/year
	Ammonia:
	Pigs 7 – 30kg: 0.53 kg NH3/animal place/year
	Pigs > 30kg: 2.6 kg NH3/animal place/year
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 comply with the relevant BAT measures.
	We made these decisions in accordance with the BAT conclusion document dated 21st February 2017.
	See the key issues of the decision section of this decision document for further information.
	Based on the information in the application we are [not fully] satisfied that the operator's techniques, personnel and equipment have either MCERTS certification or MCERTS accreditation as appropriate.
Reporting	We have specified reporting in the permit. These reporting requirements on monitoring data and performance parameters have been imposed in order to comply with the conditions of the permit.
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.
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	

Aspect considered	Decision
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

Response received from

Public Health England, Centre for Radiation, Chemical and Environmental Hazards, Nottingham, dated 12/02/2018.

Brief summary of issues raised

PHE noted that their response was based on the assumption that the installation will comply in all respects with the requirements of all relevant domestic and European legislation, including:

- Environmental Permitting (England and Wales) Regulations 2010;
- Groundwater Regulations (2009) and the European Groundwater Directives (80/68/EEC and 2006/118/EC);
 and
- European Air Quality Framework Directive 96/62/EC and daughter directives and new Air Quality Directive 2008/50/EC.

It was further noted that compliance with the legislation, together with good management and regulation, should ensure that emissions present a low risk to human health.

The main potential issues of relevance from a health perspective were reported to be diffuse emissions to air (including ammonia, bioaerosols and particulate matter), and emissions which may cause nuisance (including noise and odour).

It was further noted that whilst the applicant has indicated that there are no active sensitive receptors within 400 metres of the application site there is a derelict property approximately 45m from the site. Should this property be restored a bioaerosol risk assessment must be provided.

PHE indicated that the above comments are made based upon the following assumption:

- the permit holder uses Best Available Techniques (BAT);
- further comments are sought from the Food Standards Agency (FSA) for matters relating to impact on human health of pollutants deposited on land used for food production; and
- comments are sought from the Director of Public Health regarding any wider public health impacts.

Summary of actions taken or show how this has been covered

Conditions 3.1.1, 3.2.1, 3.3.1, and 3.4.1, concerning noise, odour and fugitive emissions included in permit.

No other responses were received from organisations or members of the public.