

# Permitting decisions

## Variation

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We have decided to grant the variation for Pickenham Farm operated by Hook 2 Sisters Limited.

The variation number is EPR/YP3332YA/V002.

We have also carried out an Environment Agency initiated variation to the permit.

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

## Purpose of this document

This decision document provides a record of the decision making process. It summarises the decision making process in the decision checklist to show how all relevant factors have been taken into account.

This decision document provides a record of the decision making process. It:

- highlights key issues in the determination
- summarises the decision making process in the decision checklist to show how all relevant factors have been taken into account
- explains why we have also made an Environment Agency initiated variation
- 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 was published on the 21 February 2017. There is now a separate BAT Conclusions document which sets out the standards that permitted farms have to meet. Now that the BAT Conclusions are published, all new installation farming permits issued after the 21 February 2017 must be compliant in full from the first day of operation. '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'.

There are some new requirements for permit holders. The conclusions include BAT Associated Emission Levels (BAT-AELs) for ammonia which apply to the majority of permits as well as BAT-AELs for nitrogen and phosphorous excretion. A BAT-AEL provides us with a performance benchmark to determine whether an activity is BAT. For some types of rearing practices stricter standards apply to farms and housing permitted after the new BAT Conclusions are published.

There are 33 BAT conclusion measures in total within the BAT Conclusions document dated 21 February 2017. The new BAT Conclusions include a set of BAT-AELs for ammonia emissions to air from animal housing for broilers and therefore an ammonia emission limit value has been included within the permit. Some of the ammonia BAT-AELs allow a higher value for existing plant.

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

BAT Measure	Operator Compliance Measure
BAT 3 – nutritional management for nitrogen excretion.	BAT-AEL for broilers 0.2 to 0.6kgN/animal place/yr.
	BAT-AEL for turkeys 1.0 to 2.3kgN/animal place/yr.
BAT 4 - nutritional management for phosphorous excretion.	BAT-AEL for broilers 0.05 to 0.25kgP/animal place/yr.
	BAT-AEL for turkeys 0.15 to 1.0kgP/animal place/yr.
BAT 24 – monitoring of emissions and process parameters for total nitrogen and phosphorous excreted.	Table S3.3: Process monitoring. This table requires the operator to undertake relevant monitoring that complies with these BAT Conclusions.
BAT 25 – monitoring and process parameters for ammonia emissions.	
BAT 26 - monitoring of odour emissions	
BAT 27 - monitoring of emissions and process parameters for dust emissions.	
BAT 32 – ammonia emissions from poultry houses for broilers.	
	BAT-AEL for broilers is 0.01 to 0.08kgNH <sub>3</sub> /animal place/yr.

The changes have been incorporated within the permit template for application EPR/YP3332YA/V002, the main alterations to the permit are as follows but are not limited to:

- Sections 1.1, 1.2, 1.3, 1.4, 2.1, 2.3, 3.2 and 4.2
- Schedules 3 and 4.

## 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](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 provided with the Application lists key potential risks of odour pollution beyond the Installation boundary. These activities are movement of feed/feed delivery, house ventilation, litter management and used litter, dirty water management, de-stocking and abnormal operations.

We have assessed the revised and updated OMP and the H1 risk assessment for odour and conclude that the Applicant has followed the guidance set out in EPR 6.09 and Environment Agency guidance on preparing OMPs for Intensive Farm installations. We are satisfied that, for the 34 sheds in current use, all sources and receptors

have been identified, and that the proposed mitigation measures will minimise the risk of odour pollution/nuisance.

## 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 as stated in section 4.4.2 above. The Operator has provided a revised and updated NMP as part of the Application supporting documentation, and further details are provided in section 4.5.2 below.

The risk assessment for the Installation provided with the Application lists key potential risks of noise pollution beyond the Installation boundary. These activities are as follows: bird loading and unloading, vehicle movements, ventilation fans, staff and staff movements and maintenance.

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 Bio aerosols

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 Operator 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 sensitive receptor is a go-karting track which is within the site area but excluded from the installation boundary.

Guidance on our website concludes that applicants need to produce and submit a dust and bio aerosol 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](http://www.gov.uk/guidance/intensive-farming-risk-assessment-for-your-environmental-permit#air-emissions-dust-and-bioaerosols). 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 risk of spillages (e.g. litter and feed management/delivery procedures) all reduce the potential for emissions impacting the nearest receptors. The Applicant has confirmed the following measures in their operating techniques to reduce dust:

- All bulk feed deliveries are in sealed and covered trailers. Discharged directly into silos through sealed pipe work. Silo vent pipes covered with containment bags.
- Feed delivered to sheds via sealed auger system and dropped directly to feed pans inside.
- All feed is pelleted and coated to prevent break up and dust production
- Initial bedding is of dust extracted woodchip or wood shavings
- Relative humidity and temperature controlled to maintain best litter conditions.

- Any accumulation of dust beneath outlets cleaned up and disposed of appropriately
- Husbandry work within sheds is carried out in a quiet steady manner to reduce bird disturbance.

Conclusion

We are satisfied that the measures outlined in the Application will minimise the potential for dust and bio aerosol emissions from the Installation.

**Ammonia**

Pickenham Farm has a site specific emission factor of 0.23kg NH<sub>3</sub>/animal place/year for 700,000 turkey places. The permit also allows the operator to stock one or more crops of broilers during the production year instead of female turkeys. The production of one or more crops of broilers in each year results in an overall reduction of annual ammonia emissions from the facility because of the significantly lower emission factor for broilers (0.034kg NH<sub>3</sub>/animal place/year) compared to female turkeys.

The proposed increase from 855,000 broiler places to 948,000 broiler places, during periods when turkeys are not stocked, increases the ammonia emissions but is still significantly below the ammonia emissions if stocking female turkeys all year. The mass balance calculations are given below and show how much more lower the ammonia emissions from the facility are.

Original Bernard Matthews permit for 700,000 turkey places

Original assessment: 0.23 x 700,000 = 161,000kg NH<sub>3</sub>/Animal place/year

EPR/MP3133UP/V004 855,000 broiler places or 700,000 turkey places

Proposal assessment: 0.034x 855,000 = 29,070kg NH<sub>3</sub>/Animal place/year

EPR/YP3332YA/V002 948,000 broiler places or 700,000 turkey places

Proposal assessment: 0.034 X 948,000 = 32,232kg NH<sub>3</sub>/Animal place/year

The mass balance calculation of 32,232kg NH<sub>3</sub>/Animal place/year is lower than the currently permitted 161,000kg NH<sub>3</sub>/Animal place/year. The actual amount of ammonia emitted into the environment from this facility will ultimately depend on the length of periods when stocked with turkeys or broilers. However, this is still an environmental improvement compared to stocking with only turkeys all year, no further assessment is necessary. However, two local wildlife sites (LWS) were not included in the original assessment and therefore an assessment has been completed for these.

**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.

Screening using the ammonia screening tool version 4.5 has determined that the PC on the LWS for ammonia emissions, nitrogen deposition and acid deposition from the application site are under the 100% significance threshold and can be screened out as having no likely significant effect. The results are given in Tables 1, 2 and 3 below.

**Table 1 - Ammonia**

Site	Critical level ammonia µg/m <sup>3</sup>	Predicted PC µg/m <sup>3</sup>	PC % of critical level
Houghton Springs	3**	1.971	65.7
The Camping Land/Pickenham Church	3**	1.756	58.5

\*\* CLe 3 applied as no protected lichen or bryophytes species were found at these locations.

**Table 2 – Nitrogen deposition**

Site	Critical load kg N/ha/yr. *	Predicted PC kg N/ha/yr.	PC % of critical load
Houghton Springs	15	10.236	68.2
The Camping Land/Pickenham Church	15	9.123	60.8

\* Critical load values taken from APIS website ([www.apis.ac.uk](http://www.apis.ac.uk)) – 15/02/19

**Table 3 – Acid deposition**

Site	Critical load keq/ha/yr*	Predicted PC keq/ha/yr.	PC % of critical load
Houghton Springs	---	---	---
The Camping Land/Pickenham Church	---	---	---

\* Critical load values taken from APIS website ([www.apis.ac.uk](http://www.apis.ac.uk)) – 15/02/19

Habitats are not sensitive to acid deposition. No further assessment is required.

**Pre-operational conditions**

A pre- operational condition has been set within the permit which must be completed before the additional permitted broiler numbers can be stocked on the facility. The site surface water drainage is the original World War 2 airfield drainage system. The site is located in very sensitive surface water and groundwater designated areas (Water Framework Directive priority catchment, Source Protection Zone 1 and Drinking Water Protection Area - groundwater and surface water safeguard zones). The operator must complete a drainage survey and site drainage review of all the site drainage and site soakaways at the installation for approval by the Environment Agency. This must include any mitigation or improvement works to ensure that the site drainage is compliant.

## Decision checklist

Aspect considered	Decision
<b>Receipt of application</b>	
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.
<b>Consultation/Engagement</b>	
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:  Local Authority – Planning  Local Authority – Environmental Health  Health and Safety Executive  Director of PH/PHE  The comments and our responses are summarised in the <a href="#">consultation section</a> .
<b>The facility</b>	
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.
<b>The site</b>	
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.  Breckland (SAC)  Norfolk Valley Fens (SAC)  Breckland (SPA)  Breckland Farmland (SSSI)  Breckland Forest (SSSI)  Great Cressingham Fen (SSSI)  Houghton Springs (LWS)  The Camping Land/Pickenham Church (LWS)  We have assessed the application and its potential to affect all known sites of nature conservation and/or protected species or habitats identified in the nature conservation screening report as part of the permitting process.

Aspect considered	Decision
	<p>We consider that the application will not affect any sites of nature conservation and/or protected species or habitats identified.</p> <p>We have not consulted Natural England on the application. The decision was taken in accordance with our guidance.</p>
<b>Environmental risk assessment</b>	
Environmental risk	<p>We have reviewed the operator's assessment of the environmental risk from the facility.</p> <p>The operator's risk assessment is satisfactory.</p>
<b>Operating techniques</b>	
General operating techniques	<p>We have reviewed the techniques used by the operator and compared these with the relevant guidance notes and we consider them to represent appropriate techniques for the facility.</p> <p>The operating techniques that the applicant must use are specified in table S1.2 in the environmental permit.</p> <p>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.</p>
Odour management	<p>We have reviewed the odour management plan in accordance with our guidance on odour management.</p> <p>We consider that the odour management plan is satisfactory.</p>
Noise management	<p>We have reviewed the noise management plan in accordance with our guidance on noise assessment and control.</p> <p>We consider that the noise management plan is satisfactory.</p>
<b>Permit conditions</b>	
Updating permit conditions during consolidation	<p>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.</p>
Changes to the permit conditions due to an Environment Agency initiated variation	<p>We have varied the permit as stated in the variation notice.</p>
Pre-operational conditions	<p>Based on the information in the application, we consider that we need to impose pre-operational conditions.</p> <p>See <a href="#">key issues</a></p>
Emission limits	<p>ELVs based on BAT have been set for the substances ammonia, nitrogen and phosphorous.</p>
Monitoring	<p>ELVs based on BAT have been set for the substances ammonia, nitrogen and phosphorous.</p>

Aspect considered	Decision
Reporting	With the publication of the IRPP BAT Conclusion Document, we have specified reporting in the permit. These reporting requirements have been added in order to comply with the IRPP BAT Conclusion Document.
<b>Operator competence</b>	
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.
<b>Growth Duty</b>	
Section 108 Deregulation Act 2015 – Growth duty	<p>We have considered our duty to have regard to the desirability of promoting economic growth set out in section 108(1) of the Deregulation Act 2015 and the guidance issued under section 110 of that Act in deciding whether to grant this permit.</p> <p>Paragraph 1.3 of the guidance says:</p> <p>“The primary role of regulators, in delivering regulation, is to achieve the regulatory outcomes for which they are responsible. For a number of regulators, these regulatory outcomes include an explicit reference to development or growth. The growth duty establishes economic growth as a factor that all specified regulators should have regard to, alongside the delivery of the protections set out in the relevant legislation.”</p> <p>We have addressed the legislative requirements and environmental standards to be set for this operation in the body of the decision document above. The guidance is clear at paragraph 1.5 that the growth duty does not legitimise non-compliance and its purpose is not to achieve or pursue economic growth at the expense of necessary protections.</p> <p>We consider the requirements and standards we have set in this permit are reasonable and necessary to avoid a risk of an unacceptable level of pollution. This also promotes growth amongst legitimate operators because the standards applied to the operator are consistent across businesses in this sector and have been set to achieve the required legislative standards.</p>



# Consultation

## Responses from organisations listed in the consultation section

<b>Response received from</b>
Public Health England
<b>Brief summary of issues raised</b>
<ol style="list-style-type: none"><li>1. The identification and location of sensitive receptors in the vicinity of the site, including but not limited to: humans health (and associated land use) and controlled waters (including groundwater, surface water and abstractions).</li><li>2. The impact of biomass boilers, a standby generator and LPG fired brooders on air quality has not been assessed and further consideration should be given to their frequency of use, cumulative impacts, emissions and location on-site in relation to identified receptors.</li><li>3. Further detail needs to be provided on the proposed ammonia emissions and further risk assessment to allow comparison of emissions against appropriate air quality standards, odour thresholds and risks on human health receptors.</li><li>4. No detail has been given on the potential changes in particulate matter emissions, nor the potential impacts on human health receptors as a result of the variation.</li><li>5. No details have been provided on LPG and tank (diesel, sewage etc) bunding, location and storage.</li></ol>
<b>Summary of actions taken or show how this has been covered</b>
<ol style="list-style-type: none"><li>1. Sensitive receptors have been identified in updated odour, dust and noise management plans. A pre-operational condition for the variation has been set to review all site drainage at the installation.</li><li>2. No changes have been made by this variation to the biomass boilers, the standby generator or the LPG fired brooders.</li><li>3. The proposed ammonia emissions are considered an environmental improvement based on the original ammonia assessment undertaken for the stocking of only 700,000 female turkeys. Boilers and turkeys will not be stocked at the same time. See Key issues of the decision.</li><li>4. We are satisfied that the measures outlined in the Application will minimise the potential for dust and bio aerosol emissions from the Installation. See Key issues of the decision.</li><li>5. No changes have been made by this variation to the LPG and other tanks (diesel, sewage, dirty water etc) bunding, location and storage.</li></ol>

No responses were received from Local Authority – Planning, Local Authority – Environmental Health, members of the public and Health and Safety Executive.