

# Permitting decisions

## Variation

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We have decided to grant the variation for Grange Farm Poultry Unit operated by Mr Philip A Buck & Mrs Judith V Buck.

The variation number is [EPR/ZP3631MF/V004](#).

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

## Purpose of this document

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

- highlights [key issues](#) in the determination
- summarises the decision making process in the [decision checklist](#) to show how all relevant factors have been taken into account
- shows how we have considered the [consultation responses](#)

Unless the decision document specifies otherwise we have accepted the applicant's proposals.

Read the permitting decisions in conjunction with the environmental permit and the variation notice. The introductory note summarises what the variation covers.

# Key issues of the decision

## New Intensive Rearing of Poultry or Pigs BAT Conclusions document

The new Best Available Techniques (BAT) Reference Document (BREF) for the Intensive Rearing of poultry or pigs (IRPP) was published on the 21st February 2017. There is now a separate BAT Conclusions document which will set out the standards that permitted farms will have to meet.

The BAT Conclusions document is as per the following link

<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017D0302&from=EN>

Now the BAT Conclusions are published **all new housing within variation applications** issued after the 21<sup>st</sup> 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.

**This variation determination includes a review only of BAT compliance for new housing introduced with this variation. A BAT review of existing housing compliance with BAT conclusions document is to be the subject of a sector permit review and is beyond the scope of this variation application permit determination, however we have considered how the applicant will be BAT compliant for their existing housing by 21/02/21 and have included details in the consolidated permit and below.**

### New BAT conclusions review

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

The Applicant has confirmed their compliance with all BAT conditions for the new housing, in their document reference 'Application for variation of an Environmental Permit' and dated August 2019.

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	<p>The Applicant has confirmed it will demonstrate it achieves levels of Nitrogen excretion below the required BAT-AEL of 0.6 kg N/animal place/year by an estimation using manure analysis for total Nitrogen content or using a mass balance of nitrogen based on the feed intake, dietary content of crude protein, and animal performance.</p> <p>This confirmation was received 03/09/19, which has been referenced in Table S1.2 Operating Techniques of the Permit.</p> <p>Table S3.3 of the Permit concerning process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions.</p>
BAT 4 Nutritional management Phosphorus excretion	<p>The Applicant has confirmed it will demonstrate it achieves levels of Phosphorus excretion below the required BAT-AEL of 0.25 kg P<sub>2</sub>O<sub>5</sub> animal place/year by an estimation using manure analysis for total Phosphorus content or using a mass balance of Phosphorus based on the feed intake, dietary content of crude protein, and animal performance.</p> <p>This confirmation was received 03/09/19, which has been referenced in Table S1.2 Operating techniques of the Permit.</p> <p>Table S3.3 of the Permit concerning process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions.</p>
BAT 24 Monitoring of emissions and process	Table S3.3 Process monitoring requires the operator to undertake relevant monitoring that

BAT measure	Applicant compliance measure
parameters - Total nitrogen and phosphorus excretion	complies with these BAT conclusions.  The operator will estimate annually by calculation by using a mass balance of nitrogen and phosphorus based on the feed intake, crude protein content of the diet, total phosphorus and animal performance or estimation by using manure analysis for total nitrogen and total phosphorus content.
BAT 25 Monitoring of emissions and process parameters - Ammonia emissions	Table S3.3 of the Permit concerning process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions.  The operator will estimate annually by using emission factors.
BAT 26 Monitoring of emissions and process parameters - Odour emissions	The approved OMP includes the following details for on Farm Monitoring and Continual Improvement: <ul style="list-style-type: none"> <li>• Sniff testing at end of poultry houses 1&amp;7 when the wind is blowing from the south or south-west</li> <li>• Daily checking the actions to minimise odour and odour risks from related issues are being adhered to and sniff testing</li> </ul>
BAT 27 Monitoring of emissions and process parameters -Dust emissions	Table S3.3 Process monitoring requires the operator to undertake relevant monitoring that complies with these BAT conclusions.  The Applicant has confirmed they will report dust emissions to the Environment Agency annually by multiplying the dust emissions factor for broilers by the number of birds on site.  This confirmation was present in the application document 'PA Buck & JV Buck, Grange Farm Poultry Unit Supporting Information' dated August 2019, which has been referenced in Table S1.2 Operating techniques of the Permit.
BAT 32 Ammonia emissions from poultry houses - Broilers	The BAT-AEL to be complied with is 0.01 – 0.08 kg NH <sub>3</sub> /animal place/year.  The Applicant will meet this as the emission factor for broilers is 0.034 kg NH <sub>3</sub> /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 32**

The new BAT conclusions include a set of BAT-AEL's for ammonia emissions to air from animal housing for broilers.

For variations all new housing on existing farms will need to meet the BAT-AEL.

### **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 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 Grange Farm Poultry Unit (received with application, duly made 03/09/19) 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](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 as follows:

- Manufacture and selection of feed
- Feed delivery and storage
- Ventilation systems
- Litter quality
- Drinking systems
- Catching and collection
- Removing litter
- Cleaning
- Managing dirty water

- Carcass disposal
- Bio-security
- Waste skip

### Odour Management Plan Review

The Installation is located within 400m of a number of sensitive receptors, as listed below (please note, the distances stated are only an approximation from the Installation boundary to the assumed boundary of the properties):

1. Grange Farm House – approximately 8m to the east of the Installation boundary.
2. Portland Cottage – approximately 21m to the north east of the Installaton boundary.
3. Honeysuckle Cottage – approximately 24m to the north east of the Installation boundary.
4. 2 Lundy Green – approximately 45m to the north east of the Installation boundary.
5. Grange Cottage – approximately 50m to the north east of the Installation boundary.
6. Lundy Green Farm House – approximately 148m to the north east of the Installation boundary.
7. Hugmore House – approximately 230m to the north east of the Installation boundary.
8. Field House – approximately 332m to the north of the Installation boundary.

One property – Grange Farm House – is not considered as it is owned and occupied by the Operator as it is unlikely that odour complaints would be received for this property. The operator has provided an OMP and this has been assessed against the requirements of 'How to Comply with your Environmental Permit for Intensive Farming' EPR 6.09 (version 2), Appendix 4 guidance 'Odour Management at Intensive Livestock Installations' and our Top Tips Guidance and Poultry Industry Good Practice Checklist (August 2013) as well as the site specific circumstances at the Installation. We consider that the OMP is acceptable because it complies with the above guidance, with details of odour control measures, contingency measures and complaint procedures described below.

The Operator 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, in particular, procedural controls such as feed delivery, storage and distribution, ventilation systems, carcass storage, cleaning out of livestock, storing and spreading of manure and slurry, and dirty water management. The operator has identified the potential sources of odour (see risks bullet pointed above), as well as the potential risks and problems, and detailed actions taken to minimise odour including contingencies for abnormal operations.

The OMP also provides a suitable procedure in the event that complaints are made to the Operator. The OMP is required to be reviewed at least every year (as committed to in the OMP) and/or after a complaint is received, whichever is the sooner.

The Environment Agency has reviewed the OMP and considers it complies with the requirements of our H4 Odour management guidance note. 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 Operator.

### Conclusion

We have assessed the OMP and the H1 risk assessment for odour and conclude that the Applicant has followed the guidance set out in H4 Odour management guidance note. Although there is the potential for odour pollution from the Installation, the Operator'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.

## 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 the 'Odour' section above. The Operator has provided a noise management plan (NMP) as part of the Application supporting documentation, and further details are provided in 'Noise Management Plan Review' below.

The risk assessment and management plan for the Installation provided with the Application lists key potential risks of noise pollution beyond the Installation boundary. These activities are as follows:

- Vehicle movements
- Ventilation fans
- Feeding equipment
- Alarm system & stand-by generator
- Building works and repairs
- Animal noise

### Noise Management Plan Review

Sensitive receptors have been listed under 'Odour' section.

The sensitive receptors that have been considered under odour and noise do not include the operator's property and other people associated with the farm operations as odour and noise are amenity issues.

A noise management plan (NMP) has been provided by the operator as part of the application supporting documentation (reference 'Noise Management Plan v2 July 2019').

The NMP also provides a suitable procedure in the event of complaints in relation to noise. The NMP is required to be reviewed at least every year (as committed to in the NMP), however the operator has confirmed that it will be reviewed if a complaint is received, whichever is sooner.

Operations with the most potential to cause noise nuisance have been assessed and control measures put in place for all vehicles accessing the site and manoeuvring around, vehicles and machinery carrying out operations on site, including the delivering of feed and birds, and to remove used litter and dirty water, ventilation fans, feeding equipment, alarm system and stand-by generator, building works and repairs, and animal noise .

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 Operator 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 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 are five sensitive receptors within 100m of the Installation boundary, the nearest sensitive receptor (the nearest point of their assumed property boundary) is approximately 8 metres to the east of the installation boundary.

Guidance on our website concludes that applicants need to produce and submit a dust and bioaerosol management plan 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).

As there are receptors within 100m of the Installation, the Applicant was required to submit a dust and bioaerosol management plan 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 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 (for full control measures please refer to the relevant plan) in their operating techniques to reduce dust, which will inherently reduce bioaerosols:

- Manufacture and selection of feed – No on-site milling or mixing; milling and delivering of feed in pellet form; specifications include fat as an ingredient for energy and also binding dusty ingredients together; feed supplied from mills in certification schemes so only approved ingredients are used.
- Feed delivery and storage – Installed package enclosed silos, pipes, augers and feeding equipments to minimise dust; installed package cyclone dust collectors on exhaust pipes of storage silos for houses 8-12; feed silos are protected from collision damage; feed delivery vehicles are covered minimising dust emissions; socks filled on the ends of auger pipes delivering feed into the houses and covers on the feeder bins to avoid creating dust; installed pan feeders to reduce dust.
- Ventilation – Forced ventilation installed in all the poultry houses and computer controlled to remove moisture under all weather and seasonal conditions; high velocity roof fans and medium velocity roof fans are fitted to the majority of the buildings, optimising dilution and dispersion of dust; ventilation system adjusted as required to meet the requirements of the flock; clearing build-up of dust deposits around vents during cleaning end of each cycle; maintaining a preventative maintenance programme & record keeping for buildings and equipment with stockman and professional contractors.
- Gable end fans – Gables end fans installed on houses 1 - 7 and houses 8 - 12 direct exhaust air away from sensitive receptors; installed deflector covers in exhaust apertures which are located in such a way to divert exhaust air towards the ground.
- Litter quality – Using proprietary dust extracted chopped straw or a blend of chopped straw/wood shavings for absorbent bedding; using plastic wrapped bales for direct delivery into the houses and unpacking and spreading manually rather than blowing in bulk.
- Bird activity – Installed pan feeders to reduce dust compared to track feeders and *ad-libitum* feeding.
- Catching and collection – Destocking and collecting chickens end of every growing cycle, approximately only 6/7 tiems each year and takes only a few days; using high velocity fans and chimneys also maximises dispersion into the atmosphere and reduces potential exposure at the sensitive receptors; catching and collecting techniques designed to minimise bird disturbance – this includes the use of low level lighting to keep birds calm.
- House clean out / litter removal – Removing litter at the end of the growing cycle occurs approximately only 6 times each year; professional contractors remove the litter from all of the houses; removing litter and cleaing on weekdays avoids causing annoyance at sensitive receptors which maybe downwind of the site at weekend; clearing build-up of dust deposits around vents at end of each cycle; removing litter from the floor, using a front end or skid-steer loader to shovel the bulk of the litter carefully and directly

from the floor into a waiting lorry/trailer positioned outside the doors to avoid double handling outside and tipping from minimal height; vehicles and trailers kept covered unless loading.

## 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 3 Sites of Special Scientific Interest (SSSI) located within 5 km of the installation. There are also 3 Local Wildlife Sites (LWS), /Ancient Woodlands (AW) 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 using the ammonia screening tool version 4.5 has indicated that emissions from Grange Farm Poultry Unit will only have a potential impact on SSSI sites with a precautionary critical level of  $1\mu\text{g}/\text{m}^3$  if they are within 1613 metres of the emission source.

Beyond 1613m the PC is less than  $0.2\mu\text{g}/\text{m}^3$  (i.e. less than 20% of the precautionary  $1\mu\text{g}/\text{m}^3$  critical level) and therefore beyond this distance the PC is insignificant. In this case the SSSIs are beyond this distance (see table below) and therefore screen out of any further assessment.

Where the precautionary level of  $1\mu\text{g}/\text{m}^3$  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  $1\mu\text{g}/\text{m}^3$  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 1 – SSSI Assessment**

Name of SSSI	Distance from site (m)
Shotesham-Woodton Hornbeam Woods	3,261
Pulham Market Big Wood	3,948

Screening using the ammonia screening tool version 4.5 has indicated that the PC for Fritton Common is predicted to be less than 20% of the critical level for ammonia emissions/nitrogen deposition/acid deposition therefore it is possible to conclude no damage. The results of the ammonia screening tool version 4.5 are given in the tables below.

**Table 2 – Ammonia emissions**

Site	Ammonia Cle ( $\mu\text{g}/\text{m}^3$ )	PC ( $\mu\text{g}/\text{m}^3$ )	PC % critical level
Fritton Common	3*	0.345	11.5

\*A CLe of 3 for ammonia was determined from the APIS website ([www.apis.ac.uk](http://www.apis.ac.uk)) – February 2020

**Table 3 – Nitrogen deposition**

Site	Critical load kg N/ha/yr*	PC kg N/ha/yr	PC % critical load
Fritton Common	10	1.792	17.9

\* Critical load values taken from APIS website ([www.apis.ac.uk](http://www.apis.ac.uk)) – February 2020



**Table 4 – Acid deposition**

Site	Critical load keq/ha/yr*	PC keq/ha/yr	PC % critical load
Fritton Common	2.068	0.128	6.2

\* Critical load values taken from APIS website ([www.apis.ac.uk](http://www.apis.ac.uk)) – February 2020

No further assessment is required.

### **Ammonia assessment - LWS/AW**

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 (CL<sub>e</sub>) or critical load (CL<sub>o</sub>) then the farm can be permitted with no further assessment.

Initial screening using ammonia screening tool version 4.5 has indicated that emissions from Grange Farm Poultry Unit will only have a potential impact on the LWS/AW sites with a precautionary critical level of 1µg/m<sup>3</sup> if they are within 582 metres of the emission source.

Beyond 582m the PC is less than 1µg/m<sup>3</sup> and therefore beyond this distance the PC is insignificant. In this case all LWS/AW are beyond this distance (see table below) and therefore screen out of any further assessment.

**Table 5 – LWS/AW Assessment**

Name of LWS/AW	Distance from site (m)
Spring Wood LWS	932
Spring Wood AW	932
The Grove AW	1,894

No further assessment is required.

### **Site Drainage**

Currently poultry house roof water from houses 1-7 are not fully contained, treated or discharged of in line with BAT therefore improvement condition IC4 has been included to address this.

## 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.
<b>Consultation/Engagement</b>	
Consultation	<p>The consultation requirements were identified in accordance with the Environmental Permitting Regulations and our public participation statement.</p> <p>The application was publicised on the GOV.UK website.</p> <p>We consulted the following organisations:</p> <p>Local Planning Authority, Norfolk County Council</p> <p>Local Environmental Health Department, South Norfolk Council</p> <p>Health &amp; Safety Executive</p> <p>Director of Public Health (DoPH)/Public Health England (PHE)</p> <p>The comments and our responses are summarised in the <a href="#">consultation section</a>.</p>
<b>The facility</b>	
The regulated facility	<p>We considered the extent and nature of the facility at the site in accordance with RGN2 'Understanding the meaning of regulated facility',.</p> <p>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.</p>
<b>The site</b>	
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 not satisfactory. The decision was taken in accordance with our guidance on site condition reports and baseline reporting under the Industrial Emissions Directive.
Biodiversity, heritage, landscape and nature conservation	<p>The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat.</p> <p>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.</p> <p>We consider that the application will not affect any sites of nature conservation, landscape and heritage, and/or protected species or habitats identified.</p>
<b>Environmental risk assessment</b>	
Environmental risk	We have reviewed the operator's assessment of the environmental risk from the

<b>Aspect considered</b>	<b>Decision</b>
	<p>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>
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(s).</p>
Improvement programme	<p>Based on the information on the application, we consider that we need to impose an improvement programme.</p> <p>Please see the Site Drainage section in Key Issues above for further information.</p>
Emission limits	<p>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.</p>
Monitoring	<p>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.</p> <p>These monitoring requirements have been imposed in order to ensure compliance with Intensive Farming BAT conclusions document dated 21/02/17.</p>
Reporting	<p>We have specified reporting in the permit.</p> <p>We made these decisions in order to ensure compliance with Intensive Farming BAT conclusions document dated 21/02/17.</p>
<b>Operator competence</b>	
Management system	<p>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.</p>
<b>Growth Duty</b>	
Section 108 Deregulation	<p>We have considered our duty to have regard to the desirability of promoting</p>

Aspect considered	Decision
Act 2015 – Growth duty	<p>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

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

<b>Response received from</b>
Public Health England (PHE) – Received 29/11/2019
<b>Brief summary of issues raised</b>
<p>The main emissions of potential public health significance are emissions to air of bioaerosols, dust including particulate matter and ammonia. There are 5 residential properties within 100 m of the installation, odour, dust and bioaerosol management plans have been produced. The Environment Agency has agreed that the environmental impact of ammonia will be limited, and therefore have not requested ammonia modelling. However, the Environment Agency as the Regulator, needs to consider whether there will be an impact from ammonia on public health considering how close residential properties are. There has also been no mention as to whether there are private water supplies nearby, and if they will be impacted by the expansion of this installation.</p> <p>The accident management plan was not included in the documents accessed and reviewed by PHE, therefore the Environment Agency as the Regulator need to ensure they are satisfied that the accident management plan is sufficient.</p> <p><b>Bioaerosols</b></p> <p>The Environment Agency screen intensive livestock rearing units using a distance of 100m to the nearest sensitive receptor(s). This is based on a 2009 DEFRA report. Should it be identified by the applicant that there are sensitive receptors within 100m from the boundary of such units the applicant is required to carry out a bioaerosol risk assessment.</p> <p>PHE is currently updating its Intensive Farming position paper as part of wider work on the health impacts on exposure to bioaerosols from intensive farming. The evidence base for human exposure to bioaerosols from intensive livestock rearing units remains limited, compared to composting facilities. The nature of the evidence that is available however indicates that there are differences between both sources (pig or poultry). The nature of the bioaerosols (fungal or bacteriological) is also important.</p> <p>In relation to intensive farming and bioaerosols, a recent systematic review describes the evidence base which clearly demonstrated that published studies have so far detected inconsistent results with studies reporting no effect, mixed effects, harmful effects and protective effects. In addition studies conducted to date have typically been cross-sectional in design, hindering the ability to assign effects to farming exposure.</p> <p>It is assumed by PHE that the installation will comply in all respects with the requirements of the permit, including the application of Best Available Techniques (BAT). This should ensure that emissions present a low risk to human health.</p> <p>More information is available on the public health impacts of intensive farms in the Public Health England Position Statement which can be found at: <a href="http://webarchive.nationalarchives.gov.uk/20140714084352/http://www.hpa.org.uk/web/HPAweb&amp;HPAwebStandard/HPAweb_C/1195733812766">http://webarchive.nationalarchives.gov.uk/20140714084352/http://www.hpa.org.uk/web/HPAweb&amp;HPAwebStandard/HPAweb_C/1195733812766</a></p>
<b>Summary of actions taken or show how this has been covered</b>
<p>The Environment Agency is satisfied following a review of the information provided by the Applicant, and the conditions present within the permit, that emissions of odour and noise from the Installation will not pose an unacceptable risk of pollution to the environment or harm to human health. Accidents are addressed in the risk assessment provided with the application.</p> <p>To prevent significant emissions from the site the Operator has proposed appropriate measures to manage dust and bioaerosols - a generic risk assessment has been provided by the Operator, which incorporates dust as a potential risk from the site, together with a dust and bioaerosols management plan. This includes the use of appropriate housing design and management and appropriate containment of feedstuff. We are satisfied that these measures will appropriately mitigate emissions to prevent a significant impact from the site.</p> <p>Notwithstanding the above, Condition 3.2 of the environmental permit also deals with emissions of substances not controlled by emission limits. Under this condition, if notified by the Environment Agency that the activities are giving rise to pollution, the Operator must submit an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits.</p>

<b>Response received from</b>
Local Environmental Health South Norfolk Council – Received 01/11/2019
<b>Brief summary of issues raised</b>
We have reviewed our records for Grange Farm Poultry Unit for the past five years and note that we are not aware of any noise or other amenity issues at this site during this period and thus no enforcement action has been taken and neither is any pending. Having regard to the above we have no adverse comments to offer regarding the variation of an environmental permit relating to Grange Farm Poultry Unit.
<b>Summary of actions taken or show how this has been covered</b>
No action required.

The Local Planning Authority Norfolk County Council, the Director of Public Health (DoPH) and the Health and Safety Executive (HSE) were also consulted, with a deadline of 27/11/19 but no responses were received.

No responses were received from members of the public by the deadline of 27/11/19.