

# Permitting decisions

## Bespoke permit

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We have decided to grant the permit for Crawcroft Farm operated by L.J. Fairburn and Son Limited.

The permit number is EPR/QP3732JL.

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. 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 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 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 21<sup>st</sup> February 2017.

The Applicant has confirmed their compliance with all BAT conditions for the new installations or new housing, in their Technical Standards document received 28/03/18.

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 of 0.8 kg N/animal place/year by an estimation using manure analysis for total Nitrogen content.  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 of 0.45 kg P <sub>2</sub> O <sub>5</sub> /animal place/year by an estimation using manure analysis for total Phosphorous content.  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 - Total nitrogen and phosphorous excretion	Table S3.3 Process monitoring requires the operator to undertake relevant monitoring that complies with these BAT conclusions.
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.
BAT 27 Monitoring of emissions and process	Table S3.3 Process monitoring requires the operator to undertake relevant

BAT measure	Applicant compliance measure
parameters - Dust emissions	monitoring that complies with these BAT conclusions.
BAT 31 Ammonia emissions from poultry houses - Laying hens	The BAT-AEL to be complied with is 0.13 kg NH <sub>3</sub> /animal place/year. The Applicant will meet this as the emission factor for layers with non-cage housing is 0.08 kg NH <sub>3</sub> /animal place/year.

### 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.

The new BAT conclusions include a set of BAT-AELs for ammonia emissions to air from animal housing for laying hens. All new bespoke applications issued after the 21<sup>st</sup> February, including those where there is a mixture of old and new housing, will now need to meet the 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.

### **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 Crawcroft Farm (dated 23/03/18) 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](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:

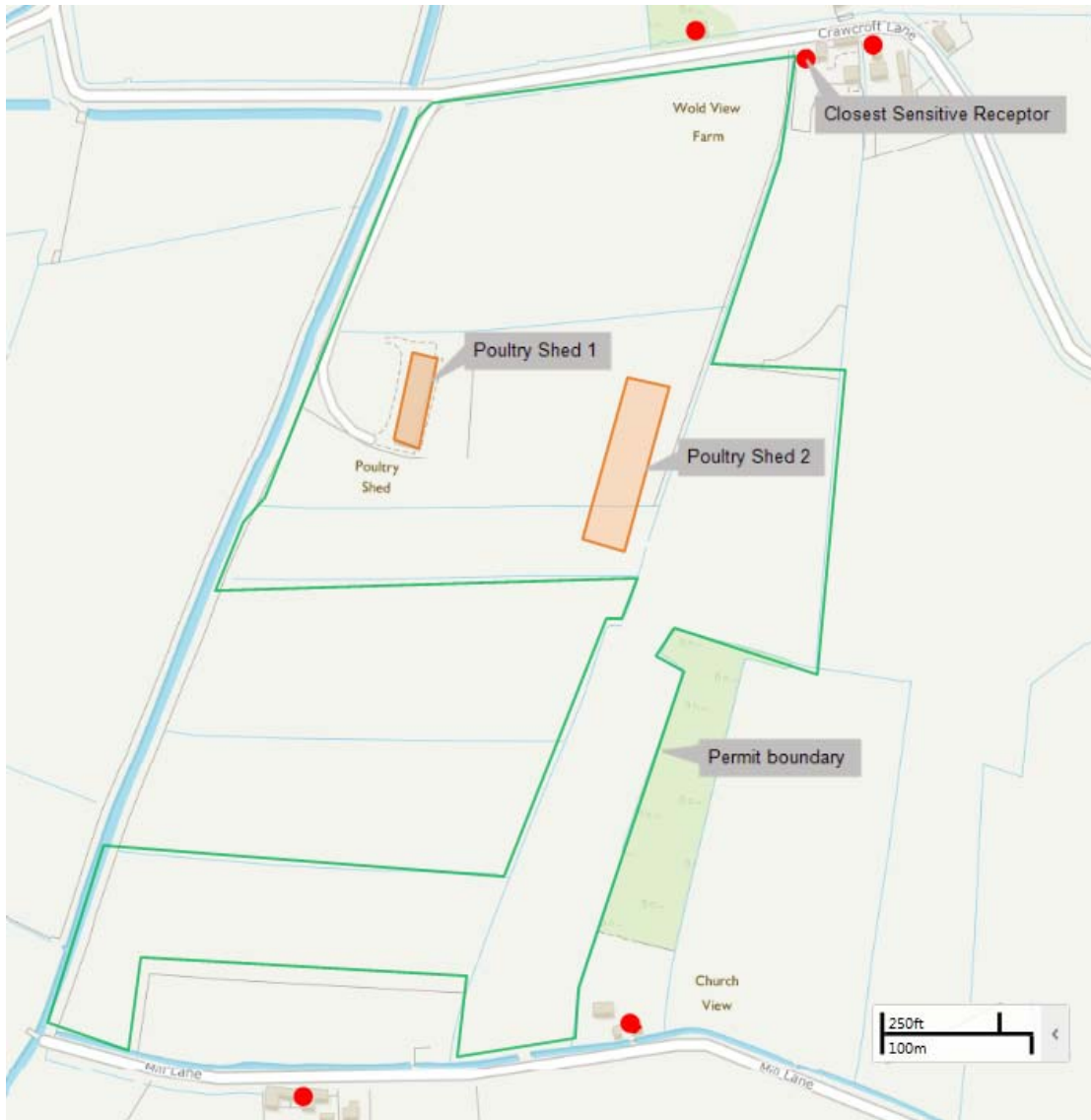
- Feed delivery and storage
- Ventilation and dust
- Litter management
- Carcase disposal
- House clean out
- Washing operations including vehicles
- Dirty water management

### Odour Management Plan Review

The odour management plan identifies the receptors within 400m of the permit boundary, with some as close as 20m from the boundary. As the majority of the site is a range area for the layers to roam, the main emissions of odour are expected to be from near the two poultry sheds. The closest receptor to the poultry sheds is approximately 250m. This is demonstrated by the site plan shown below.

The Operator is required to manage the installation activities in accordance with condition 3.3.1 of the permit and the OMP. Operations with the most potential to cause an odour emissions have been assessed as those listed above. The Odour Management Plan covers control measures, in particular, procedural controls addressing feed management, ventilation, litter condition and management, bird destocking/restocking, clean out operations and management of used litter and dirty water.

We, the Environment Agency, have reviewed and approved the Odour Management Plan. The Operator's compliance with the OMP will minimise the risk of odour pollution beyond the installation boundary and the risk of odour pollution at sensitive receptors. 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.



*Site Plan 1: Range area and closest sensitive receptors.*

## 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 the noise management plan review section 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:

- Feed deliveries
- Egg collection

- Feeding systems
- Fuel deliveries
- Alarm systems
- Bird catching
- Clean out operations
- Maintenance and repairs
- Set up and placement
- Standby generator testing

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.

#### Noise Management Plan Review

There are sensitive receptors within 400 metres of the installation boundary. The applicant has therefore submitted a Noise Management Plan (NMP), in line with Sector Guidance Note EPR 6.09 Appendix 5 'Noise management at intensive livestock installations', as part of the application and supporting documentation.

The Operator is required to manage the installation activities in accordance with condition 3.4.1 of the permit and the NMP. Operations with the most potential to cause noise emissions have been assessed as those listed above. The NMP covers measures, in particular, procedural controls addressing vehicle movement, feed transfer to bins, fan ventilation operation, bird and personnel noise and repair work.

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 are a number of sensitive receptors within 100m of the Installation boundary, the nearest sensitive receptor (the nearest point of their assumed property boundary) is approximately 10 metres to the north east of 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).

As there are receptors within 100m of the Installation, the Applicant was required to submit a dust and bio aerosol risk assessment 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 in their operating techniques to reduce dust:

- Feed delivered in sealed systems.

- Closed system delivery of feed from silo to poultry house.
- Computer controlled environment keeping humidity between 55 and 60% minimising dust.
- Litter removed carefully during cleanout minimising dust. Full trailers sheeted before leaving installation.
- Houses and exhaust vents pre-soaked with low pressure hose to minimise dust release. Exhaust vents then high pressure hosed minimising any lightly contaminated water release onto roofs.

### Conclusion

There are sensitive receptors within 100 metres of the installation boundary, but these are a minimum of 250m from the main activity areas of the site. The applicant has submitted a Dust Management Plan (DMP) as part of the application and supporting documentation.

The Operator is required to manage the installation activities in accordance with condition 3.2 of the permit and the DMP. Operations with the most potential to cause noise emissions have been assessed as those listed above.

We have assessed the DMP and the H1 risk assessment for dust and conclude that the Applicant has followed the guidance set out in EPR 6.09 Appendix 11 'Assessing dust control measures on intensive poultry installations'. We are satisfied that all sources and receptors have been identified, and that the proposed mitigation measures will minimise the risk of dust pollution.

### **Ammonia**

The applicant has demonstrated that the housing will meet the relevant NH<sub>3</sub> BAT-AEL.

There is one Special Protection Area (SPA) and one Site of Special Scientific Interest (SSSI) located within 5 km of the installation. There are no other habitats within the relevant screening distance.

#### **Ammonia assessment –SPA**

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 (CL<sub>e</sub>) or critical load (CL<sub>o</sub>) 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 SPA.

Screening using the ammonia screening tool version 4.5 has determined that the PC on the SPA for ammonia emissions/nitrogen deposition/acid deposition from the application site are under the 4% significance threshold and can be screened out as having no likely significant effect. See results below.

**Table 1 – Ammonia emissions**

Site	Critical level ammonia µg/m <sup>3</sup>	Predicted PC µg/m <sup>3</sup>	PC % of Critical level
Greater Wash SPA	3 [Note 1]	0.061	2.0

Note 1 - Natural England advised that a CL<sub>e</sub> of 3 for ammonia should be applied (January 2018)

**Table 2 – Nitrogen deposition**

Site	Critical load kg N/ha/yr. [Note 1]	Predicted PC kg N/ha/yr.	PC % of critical load
Greater Wash SPA	8	0.315	3.9

Note 1 - Critical load values taken from Air Pollution Information System (APIS) website ([www.apis.ac.uk](http://www.apis.ac.uk)) – 03/05/18

**Table 3 – Acid deposition**

Site	Critical load keq/ha/yr. [Note 1]	Predicted PC keq/ha/yr.	PC % of critical load
Greater Wash SPA	1.268	0.022	1.8

Note 1 - Critical load values taken from APIS website ([www.apis.ac.uk](http://www.apis.ac.uk)) - 03/05/18

No further assessment is necessary.

### **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 Crawcroft Farm will only have a potential impact on SSSI site with a precautionary critical level of  $1\mu\text{g}/\text{m}^3$  if they are within 1,624 metres of the emission source.

Beyond 1,624 m 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 SSSI is 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 4 – SSSI Assessment**

Name of SSSI	Distance from site (m)
Sea Bank Clay Pits	2,568

No further assessment is required.



## 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</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> <ul style="list-style-type: none"> <li>• Department of Public Health</li> <li>• Public Health England</li> <li>• Local Authority – Environmental Health</li> <li>• Health and Safety Executive</li> </ul> <p>The comments and our responses are summarised in the <a href="#">consultation section</a>.</p>
<b>Operator</b>	
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.
<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', Appendix 2 of RGN 2 'Defining the scope of the installation', Appendix 1 of RGN 2 'Interpretation of Schedule 1', guidance on waste recovery plans and permits.</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 plans which we consider are 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	<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</p>

Aspect considered	Decision
	<p>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> <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	We have reviewed the operator's assessment of the environmental risk from the facility. The operator's risk assessment is satisfactory.
<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. Some of the key operating techniques are as follows:</p> <ul style="list-style-type: none"> <li>• the use of nipple drinkers with drip trays to keep litter dry;</li> <li>• dirty water storage facilities are in place;</li> <li>• mortalities removed daily and kept in sealed bins;</li> </ul> <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> <p>See <a href="#">key issues</a> for further information.</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> <p>See <a href="#">key issues</a> for further information.</p>
<b>Permit conditions</b>	
Emission limits	<p>Emission Limit Values (ELVs) or equivalent have been set for the following substances in accordance with relevant BAT:</p> <ul style="list-style-type: none"> <li>• Nitrogen</li> <li>• Phosphorus</li> <li>• Ammonia</li> </ul>
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 comply with the relevant BAT measures.</p>

Aspect considered	Decision
Reporting	We have specified reporting in the permit. We made these decisions in accordance with the relevant BAT measures.
<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> <p>The decision was taken in accordance with the guidance on operator competence and how to develop a management system for environmental permits.</p>
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.
<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 vary 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, dated 17/05/18
<b>Brief summary of issues raised</b>
The main emissions of potential public health significance are emissions to air of bioaerosols, dust including particulate matter and ammonia. 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.
<b>Summary of actions taken or show how this has been covered</b>
No response required.

<b>Response received from</b>
Director of Public Health, Lincolnshire County Council, dated 22/05/18
<b>Brief summary of issues raised</b>
The main risk to human health is emissions to air of bioaerosols, dust and ammonia.
<b>Summary of actions taken or show how this has been covered</b>
Please see the bioaerosols and ammonia section of the <a href="#">key issues</a> .