

Permitting decisions

Bespoke permit

We have decided to grant the permit for Hillcrest Farm Free Range Layer Unit operated by Hill Crest Eggs Limited.

The permit number is EPR/PP3030QE.

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

This is an existing operational site that was previously below the Environmental Permitting threshold for regulation. It formally comprised a single-tier house for 6,000 laying hens (Poultry house 1) and two larger end-to-end houses (Poultry houses 2 and 3). Both of these two larger buildings have been upgraded to meet BAT and to increase their capacity to up to 16,000 birds in each house in a multi-tier system. A fourth new multi-tier house has also been constructed to take up to a maximum capacity of 12,000 places taking the permitted capacity up to 44,000 free range laying hens.

However, Poultry house 1 currently does not meet BAT (perchery deep litter). The operator (Hill Crest Eggs Limited) will not have control over Poultry House 1 as it is rented out to a different operator therefore, it does not currently form part of this installation. In the future this house is likely to be converted from single-tier to multi-tier (with 11,000 laying hen places) and may be operated by Hill Crest Eggs Limited. If that is the case, an application will be made at a later date to vary the permit from 44,000 laying hen places to 55,000.

1) New Intensive Rearing of Poultry or Pigs BAT Conclusions document

The Best Available Techniques (BAT) Reference Document (BReF) for the Intensive Rearing of Poultry or Pigs was published on the 21 February 2017. There is a separate BAT Conclusions document which sets out the standards that permitted farms have to meet. Now that the BAT Conclusions are published, all 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 free range layers 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.

BAT Measure	Applicant Compliance Measure
BAT 3 – nutritional management for nitrogen excretion.	BAT-AEL for free range layers 0.8kgN/animal place/yr.
BAT 4 - nutritional management for phosphorous excretion.	BAT-AEL for free range layers 0.45kgP/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 Applicant to undertake relevant monitoring that complies with these BAT Conclusions.
BAT 25 - monitoring of emissions and process parameters for ammonia emissions.	
BAT 26 – periodic monitoring of odour emissions to air.	
BAT 27 - monitoring of emissions and process parameters for dust emissions.	
BAT 31 – ammonia emissions from poultry houses for laying hens in non-caged systems.	BAT-AEL for free range layers 0.13kgNH ₃ /animal place/yr.

All bespoke applications issued after the 21 February 2017, including those where there is a mixture of old and new housing, will now need to meet the BAT-AEL. With regards to specific BAT measures that the Applicant has to ensure compliance with, BAT 27 (monitoring of dust emissions and process parameters) will be required. The requirements are given in Table S3.3 - process monitoring requirements – and the Applicant is required to undertake relevant monitoring that complies with these BAT conclusions.

The Applicant confirmed that the new poultry house and the two existing and upgraded poultry houses at installation comply in full with all the BAT conclusion measures. The Applicant has submitted a BAT Conclusions assessment as part of their application on 27 July 2018. All poultry houses have been reviewed on the basis of the IRPP BAT Conclusions – Appendix 10 document date July 2018. These set out the standards that permitted farms will need to meet. The changes have been incorporated within the permit template for application EPR/PP3030QE/A001. The key BAT issues are considered to be the following:

BAT 31

The housing systems on the farm will meet the requirements which for non-cage systems includes the technique ‘manure belts (in case of aviary)’. There will be no on-farm manure storage.

BAT 25

The ammonia emissions to air are to be monitored using ‘estimation by using emission factors’. This will be undertaken at a frequency of once per year for laying hens.

BAT 3 and 4

A nutritional strategy will be in place to reduce the levels of nitrogen and phosphorus excretion and to demonstrate compliance with BAT associated excretion levels.

BAT 24

This will be by ‘calculation by mass balance’.

BAT 27

This will be by ‘estimation by using emission factors’. This will be undertaken at a frequency of once per year for laying hens.

2) 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. As a result of the requirements of the IED, all permits are now required to contain a condition relating to protection of soil, groundwater and groundwater monitoring. However, the Environment Agency's Guidance states that it is only necessary for the Applicant 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.

The Guidance further states that it is not essential for the Applicant 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 Hillcrest Farm Free Range Layer Unit (dated 27 July 2018) 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.

3) Odour

Intensive farming is by its nature a potentially odorous activity. This is recognised in our 'How to Comply with your Environmental Permit for Intensive Farming' EPR 6.09 guidance (http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/297084/geho0110brsb-e-e.pdf).

Condition 3.3 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 Applicant 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, carcass disposal, dirty water management and abnormal operations.

We have assessed the 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 all sources and receptors have been identified, and that the proposed mitigation measures will minimise the risk of odour pollution/nuisance.

4) 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 Applicant 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 400m of the Installation boundary. The Applicant has provided a noise management plan (NMP) as part of the Application supporting documentation, and further details are provided 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 bird loading and unloading, vehicle movements, ventilation fans, feed delivery and transfer, fuel delivery, egg collection, staff and staff movements, alarm systems 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.

5) 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.

Whilst the applicant has submitted a Dust and Bio-aerosols Management Plan (DMP) there are no sensitive receptors within 100m of the installation boundary. The nearest sensitive receptor (the nearest point of their assumed property boundary) is approximately 125m to the north-west of the installation boundary (Poultry House 4).

6) Ammonia

There are four Sites of Special Scientific Interest (SSSI) within 5km and four Local Wildlife Sites (LWS) within 2km of the facility.

Assessment of SSSI

If the process contribution (PC) is below 20% of the relevant critical level (CL_e) or critical load (CL_o) then the farm can be permitted with no further assessment. The applicant did not undertake an initial ammonia screening assessment for Willowby Wood, Willowby Meadow, Hoplands Wood and Sea Bank Clay Pits SSSIs as they provided detailed ammonia modelling as part of their application (refer to discussion below).

Assessment of LWS

The following trigger thresholds have been applied for the assessment of non-statutory LWS:

- If PC is <100% of relevant CL_e or CL_o then the farm can be permitted (H1 or ammonia screening tool)
- If PEC <CL_e or CL_o then the farm can be permitted
- If further modelling shows PC <100%, then the farm can be permitted.

The applicant did not undertake initial ammonia screening for Willowby Branch Line, Butterbumps, Field Farm Meadow and Patman's Close LWSs as they provided detailed ammonia modelling as part of their application.

Detailed Ammonia Modelling Assessment

The detailed ammonia modelling assessment report by AS Modelling & Data Ltd 'A Report on the Modelling of the Dispersion and Deposition of Ammonia from the Existing and Proposed Free Range Egg Laying Chicken Houses at Hill Crest Eggs Ltd., Cumberworth, near Alford, in Lincolnshire' dated 26 July 2018 was submitted as part of the application.

Data used within the report details that the background ammonia concentration (annual mean) in the area around the facility is $2.19\mu\text{gNH}_3/\text{m}^3$. The background nitrogen deposition rate to woodland is $32.9\text{kgN}/\text{ha}/\text{yr}$ and to short vegetation is $19.46\text{kgN}/\text{ha}/\text{yr}$. The background acid deposition rate to woodland is $1.65\text{keq}/\text{ha}/\text{yr}$ and to short vegetation is $1.0\text{keq}/\text{ha}/\text{yr}$. The source of these background figures is the Air Pollution Information System (APIS, July 2018). These figures will also include the current contribution from Hillcrest Farm Free Range Layer Unit as this is an existing operational site coming under Environmental Permitting regulation.

The birds have access to outdoor ranging areas therefore some of the birds' droppings are likely to be deposited on these ranging areas. For modelling purposes, it is assumed that 12% of the droppings are deposited on the ranging areas based upon figures from "*Ammonia emission factors for UK agriculture*" (*Misselbrook et al*). A figure of 20% is sometimes assumed but this figure is probably based primarily upon the widely accepted figure of 80% of dropping occurring at night when birds are housed. Even under optimal conditions not all of the birds go outside or far from the houses.

Ammonia emission rates from the existing and proposed poultry houses have been assessed and quantified based upon the Environment Agency's standard ammonia emission factors. The ammonia emission rates have then been used as inputs to an atmospheric dispersion and deposition model which calculates ammonia exposure levels and nitrogen and acid deposition rates in the surrounding area.

The modelling predicts that the PC of the poultry unit to annual ammonia concentration and nitrogen deposition rate would be below the Environment Agency's lower threshold percentage of CLe or CLo (20% for a SSSIs and 100% for the LWS) at all the sites considered.

7) Poultry Free Range Area Management

There is no specific guidance available on range management to protect the environment but all keepers are required to follow DEFRA's '*Protecting our Water, Soil and Air A Code of Good Agricultural Practice for farmers, growers and land managers*' guidance to minimise the risk of Avian Influenza by preventing birds from having direct access to watercourses. If the range gets very wet the birds can poach the surface and increase the risk of potentially contaminated run-off. Run-off from poached land should not be allowed to enter a watercourse without interception/treatment. Fencing off watercourses and poached areas, maintaining a good grass sward, reseeding grass sward, physical barriers between the ranging area and the nearby watercourse and providing a buffer zone can be used as standard good risk management.

The pollution potential from manure on free-range poultry ranges is usually limited as the majority of manure is collected within the sheds. Typically only 20% of birds are likely to be outside at any one time, although this will vary. Birds congregate around the pop holes and it is useful to have a different surface in this area and something that will not poach. If required these areas could drain into a SUDS system designed to cope with some lightly contaminated run-off. Manure that is deposited outside on the range will be reasonably well dispersed but rotating the fields is good practice if possible. Houses should be sited to try and avoid steep slopes.

Popholes in the house walls allow stock access to the surrounding range areas. At Hillcrest Farm Free Range Layer Unit management practices are in place to maintain the condition of the range area and to reduce the risk of surface water run-off, poaching and direct contamination of watercourses. The operator is proposing the following free range management measures:

- ensure that land is maintained in good, well-drained condition and uses range enhancements such as trees to ensure that the birds use the whole range area available more uniformly
- alongside the houses are areas of stone on both sides which assist drainage close to the buildings, recognising that these areas are well-used by the birds
- hollow and other areas which might lead to standing water are filled in
- no manure or dirty water spreading activity will be undertaken within the installation boundary area

- if parts of the range area are in danger of becoming bare because of the activities of the birds, they will be fenced off temporarily so that they have chance to recover. Re-seeding may take place according to land and climatic conditions
- the range area is fenced, mainly for predator control but it also ensures that the birds are contained within a defined area
- the ranging characteristics of laying hens are such that very few birds are likely to occupy the land which is furthest away from the houses, close to water courses. Such areas will retain good grass cover which may require occasional cutting.

In accordance with RGN2 'Understanding the meaning of regulated facility: Appendix 3 – Interpretation of Farming Installations', farmers, growers and land managers have a responsibility to protect the wider environment.

Decision checklist

Aspect considered	Decision
Receipt of application	
Confidential information	A claim for commercial or industrial confidentiality has not been made. The decision was taken in accordance with our guidance on confidentiality.
Identifying confidential information	We have not identified information provided as part of the application that we consider to be confidential. The decision was taken in accordance with our guidance on confidentiality.
Consultation	
Consultation	<p>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.</p> <p>We consulted the following organisations:</p> <ul style="list-style-type: none"> ➤ Local Authority – Planning ➤ Local Authority - Environmental Health ➤ Health and Safety Executive ➤ Public Health England. <p>The comments and our responses are summarised in the consultation section.</p>
Operator	
Control of the facility	We are satisfied that the applicant (now the operator) is the person who will have control over the operation of the facility after the grant of the permit. The decision was taken in accordance with our guidance on legal operator for environmental permits.
The facility	
The regulated facility	<p>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.</p> <p>The activities are defined in table S1.1 of the permit.</p>

Aspect considered	Decision
The site	
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. A plan is included in the permit.
Site condition report	<p>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.</p> <p>The site condition report (SCR) for Hillcrest Farm Free Range Layer Unit (dated 27 July 2018) demonstrates that there are no significant hazards or likely pathways to land or groundwater and no historic contamination sources on site that may present a significant risk. Therefore, on the basis of the assessment presented in the SCR the Environment Agency accepts that no baseline reference data needs to be provided for the site soil and groundwater conditions as part of application EPR/PP3030QE/A001.</p>
Biodiversity, heritage, landscape and nature conservation	<p>The application is within the relevant distance criteria of nature conservation and protected species or habitats. We have assessed the application and its potential to affect all known sites of nature conservation and protected species or habitats identified in the nature conservation screening report as part of the permitting process.</p> <p>In accordance with our guidance, as there are statutory sites within 5km of the installation, we are required to consult Natural England. We have completed an Appendix 4 CRoW Act Assessment for the Sites of Special Scientific Interest for information only purposes. This was done on 10 September 2018 and is recorded on the public register.</p>
Environmental risk assessment	
Environmental risk	We have reviewed the operator's assessment of the environmental risk from the facility. The operator's risk assessment is satisfactory.
Operating techniques	
General operating techniques	<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. 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	We have reviewed the odour management plan in accordance with our guidance on odour management. We consider that the odour management plan is satisfactory.
Noise management	We have reviewed the noise management plan in accordance with our guidance on noise assessment and control. We consider that the noise management plan is satisfactory.

Aspect considered	Decision
Permit conditions	
Emission limits	<p>BAT-AELs based on the recently published BAT Conclusions have been set in the permit for the following substances:</p> <ul style="list-style-type: none"> ➤ ammonia ➤ nitrogen ➤ phosphorous.
Monitoring	<p>With the publication of the IRPP BAT Conclusion Document, we have included monitoring for the parameters listed in the permit, using the methods detailed and to the frequencies specified. These monitoring requirements have been added in order to comply with the IRPP BAT Conclusion Document and are not related to any perceived issues with the operation of the installation.</p>
Reporting	<p>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 and are not related to any perceived issues with the operation of the installation</p>
Operator competence	
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. 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	<p>The Case Management System and National Enforcement Database have 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.</p>
Financial competence	<p>There is no known reason to consider that the operator will not be financially able to comply with the permit conditions.</p>
Growth Duty	
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</p>

Aspect considered	Decision
	protections. We consider the requirements and standards we have set in this permit are reasonable and necessary to avoid a risk of an unacceptable level of pollution. This also promotes growth amongst legitimate operators because the standards applied to the operator are consistent across businesses in this sector and have been set to achieve the required legislative standards.

Consultation

The following summarises the responses to consultation with other organisations, our notice on GOV.UK for the public and the way in which we have considered these in the determination process.

The Local Authority Planning Department and the Health and Safety Executive were consulted on this application. However, consultation responses from them were not received.

Response received from: East Lindsey Council Environmental Health dated 14 September 2018.
Brief summary of issues raised:
The Environmental Health Team are not aware of any noise or other amenity issues or enforcement action at this site.
Summary of actions taken or show how this has been covered:
Conditions within the permit will ensure protection of the environment.

Response received from: Public Health England dated 02 October 2018.
Brief summary of issues raised:
The main emissions of potential public health significance are emissions to air of bio-aerosols, dust including particulate matter and ammonia. There are sensitive receptors (Hillcrest Farm) within 100m to the proposed location for new building House 4. 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.
Summary of actions taken or show how this has been covered:
Hillcrest Farm does not constitute a sensitive receptor in this instance as this farm is linked to the facility. Any issues around dust, bio-aerosols and ammonia emissions to air will be covered by Health and Safety Legislation. There are conditions within the permit that will prevent pollution and require the operator to monitor and report sector specific emissions to air. This includes dust and ammonia emissions to air. Conditions exist within the permit to allow the Environment Agency, as the regulatory body, to enforce any necessary installation improvements if nuisance or pollution occurs.

Response received from: Director of Public Health Lincolnshire County Council dated 08 October 2018.
Brief summary of issues raised:
There is an isolated home within 100m of one of the chicken houses and the village itself is not much further away. Particular care should be taken to ensure the residents' good health as the population profile of this area tends towards older people. People in the area tend to have poorer health and numbers living with a limiting long term illness or disability is significantly worse than county and national averages. This is an indication that residents may spend more time in their homes and affected by nuisance more than other groups. The main risk to the public's health is emissions to air of bio-aerosols, dust (including particulate matter) and ammonia.
Summary of actions taken or show how this has been covered:
There are conditions within the permit that will prevent pollution and require the operator to monitor and report sector specific emissions to air. This includes dust and ammonia emissions to air. Noise and Odour management plans have been submitted and reviewed as satisfactory and a complaints procedure will be in place. Conditions exist within the permit to allow the Environment Agency, as the regulatory body, to enforce any necessary installation improvements if nuisance or pollution occurs.

The application was advertised externally on the GOV.UK website between 10 September and 08 October 2018 to invite any responses and comments from the general public. No responses were received.