Permitting decisions

Variation

We have decided to grant the variation for Lark Hall Farm operated by Daniel Blenkiron trading as Blenkiron Farming Company.

The variation number is EPR/CP3937CD/V003.

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 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 housing within variation applications** issued after the 21st February 2017 must be compliant in full from the first day of operation.

There are some new requirements for permit holders. The conclusions include BAT Associated Emission Levels for ammonia emissions which will apply to the majority of permits, as well as BAT associated levels for nitrogen and phosphorous excretion.

For some types of rearing practices stricter standards will apply to farms and housing permitted after the new BAT Conclusions are published.

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.

New BAT conclusions review

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

We have sent out a schedule 5 requiring the Applicant to confirm that the new installation complies in full with all the BAT conclusion measures.

The Applicant has confirmed their compliance with all BAT conditions for the new installations or new housing, in their document reference 'Schedule 5 response summary' dated 27th June 2018.

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 0.6 kg N/animal place/year by an estimation using manure analysis for total Nitrogen content. This confirmation was in response to the Schedule 5 Notice request for further information, received 28/06/18, which has been referenced in Table S1.2 Operating Techniques of the Permit. 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 0.25 kg P_2O_5 animal place/year by an estimation using manure analysis for total Phosphorous content. This confirmation was in response to the Schedule 5 Notice request for further information, received 28/06/18, which has been referenced in Table S1.2 Operating techniques of the Permit. Table S3.3 of the Permit concerning process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions.

BAT measure	Applicant compliance measure
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 26 Monitoring of emissions and process parameters - Odour emissions	The approved Odour Management Plan (OMP) includes the following details for on Farm Monitoring and Continual Improvement: - All odour complaints are recorded and investigated. - The OMP is reviewed annually to ensure that all points relevant to the ongoing operation are included and updates/improvements are made as appropriate. - Bi-annual inspections involving points such as waste water tanks, chemical stores and pest control. - Shed temperatures, humidity levels and carbon dioxide levels are monitored and recorded daily. - Visual checks of the roof fans during operation. - Maintenance checks of the roof fans when the houses are depopulated. - Weekly visual inspections of the litter store to ensure there are no obstructions to the boiler feeder.
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.
BAT 32 Ammonia emissions from poultry houses - Broilers	The BAT-AEL to be complied with is 0.08 kg NH3/animal place/year. The Applicant will meet this as the emission factor for broilers is 0.034 kg NH3/animal place/year. Ammonia emissions will be reported annually through estimation using emission factors. The Installation does not include an air abatement treatment facility, hence the standard emission factor complies with the BAT AEL.

In order to reduce total nitrogen and phosphorus excreted and consequently ammonia emissions while meeting the nutritional needs of the animals the following will be undertaken at the Poultry Site;

Diet formulation adapted to specific requirements of the production period, as detailed in the Technical Standards document.

Rations are under continual review and contain appropriate enzymes and other additives to minimise nitrogen and phosphorus excretion as well as ammonia.

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)

The Environmental Permitting (England and Wales) (Amendment) Regulations 2013 were made on the 20 February 2013 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 Lark Hall Farm (amended version received 28/06/18) demonstrates that there are no hazards or likely pathways 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).

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 relating to odour pollution beyond the Installation boundary. These activities are as follows:

- Feed delivery and storage.
- Problems with housing ventilation and inadequate air movement.
- Poultry litter storage.
- High humidity in poultry sheds.
- Insufficient or poor quality litter.
- Spillage of water from drinking systems.
- Disease outbreaks leading to wet litter.
- Inadequate storage of carcasses.
- House clean out.

Odour Management Plan Review

The sensitive receptors that have been considered relating to odour and noise do not include the operator's property and other people associated with the farm operations. This is because odour and noise are not considered as amenity issues for the people that are associated with the farm. Therefore these people are not considered relevant sensitive receptors with regards to noise and odour.

The closest relevant receptor is Green Acres at grid reference SE 34566 92823, approximately 135m west of the installation boundary. Therefore, an Odour Management Plan (OMP) is formally required under our guidance.

It is noted that no odour complaints have been received regarding the installation to date.

The OMP (within document reference 'IPPC Report v2') dated 28th June 2018 is considered acceptable having been assessed against the requirements of Integrated Pollution Prevention and Control (IPPC) SRG 6.02 (Farming): Odour Management at Intensive Livestock Installations, the NFU 'Top Tips Guidance and Poultry Industry Good Practice Checklist' and with regard to the site specific circumstances at the installation. The operator is required to manage activities at the installation in accordance with condition 3.3.1 of the environmental permit and this Odour Management Plan.

There is the potential for odour pollution from this installation, however the operator's compliance with their Odour Management Plan, should minimise the risk of odour pollution beyond the installation boundary. The risk of odour pollution at sensitive receptors beyond the installation boundary is not considered significant. We, the Environment Agency, have reviewed and approved the Odour Management Plan and consider 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.

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 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 below.

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

- Vehicles travelling to and from the farm.
- Vehicles on site.
- Feed transfer from lorry to bins.
- Operation of fans.
- Alarm system and stand-by generator.
- Chickens.
- Personnel.
- Repairs.

Noise Management Plan Review

There is the potential for noise pollution from this installation, however the operator's compliance with their Noise Management Plan, should minimise the risk of noise pollution beyond the installation boundary. The risk of noise pollution at neighbouring properties, which are over 100 metres away from the installation, is therefore not considered significant.

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 satisfactory level of protection. Condition 3.2.1 'Emissions of substances not controlled by an emission limit' is included in the Permit. This is used in conjunction with condition 3.2.2 which states that in the event of fugitive emissions causing pollution following commissioning of the Installation, the Operator is required to undertake a review of site activities, provide an emissions management plan and to undertake any mitigation recommended as part of that report, once agreed in writing with the Environment Agency.

There is one sensitive receptor within 100 metres of the Installation boundary. The nearest sensitive receptor Lark Hall Farmhouse at grid reference SE 34951 92607 is approximately 50 metres to the south 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.

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:

- High velocity roof extraction fans.
- Vehicles will be sheeted when delivering feed to the site.
- Delivery vehicles will be kept stationary when the feed is blown into the feed silos.
- Bedding material and wood shavings will be delivered to site in sealed vehicles.
- Used poultry litter will be cleared from the site at the end of each cycle in fully sheeted trailers.
- Filters are fitted to the gable end fans.
- The carcass incinerator loading chamber is locked during the burn period so gases cannot escape even if the main chamber were to be opened.

Conclusion

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

Biomass boiler

The applicant is varying their permit to add one biomass boiler with a net rated thermal input of 0.995MWth to the site.

The Environment Agency has assessed the pollution risks and has concluded that air emissions from small biomass boilers are not likely to pose a significant risk to the environment or human health providing certain conditions are met. Therefore a quantitative assessment of air emissions will not be required for poultry sites where:

- the fuel will be derived from virgin timber, miscanthus or straw, and;
- the biomass boiler appliance and installation meets the technical criteria to be eligible for the Renewable Heat Incentive, and;
- the aggregate boiler net rated thermal input is less than or equal to 4 MWth, and no individual boiler has a net thermal input greater than 1 MWth, and;
- the stack height must be a minimum of 5 metres above the ground (where there are buildings within 25 metres the stack height must be greater than 1 metre above the roof level of buildings within 25 metres (including building housing boiler(s) if relevant) and:
- there are no sensitive receptors within 50 metres of the emission point(s).

This is in line with the Environment Agency's document "Air Quality and Modelling Unit C1127a Biomass firing boilers for intensive poultry rearing", an assessment has been undertaken to consider the proposed addition of the biomass boiler.

Our risk assessment has shown that the biomass boiler should meet the requirements of the criteria above, and is, therefore, considered not likely to pose a significant risk to the environment or human health and no further assessment is required.

Poultry litter burner

The European Union (EU) has recently amended the Animal By-Products Regulations (ABPR) effectively recognising that poultry manure can be defined as a by-product. From 15 July 2014, unprocessed poultry manure can be burnt in a burner meeting the requirements of the ABPR on the site where the poultry manure is produced. Where this is the case the Animal and Plant Health Agency (APHA) regulate the burner under the ABPR. Where the burner is installed on an installation under the Environmental Permitting Regulations (EPR) and the heat and electricity is utilised by the farm it is deemed to be a directly associated activity (DAA). The Environment Agency regulate the emissions from the burner within the Environmental Permit for the installation but approval from APHA is required in order to operate the burner at the installation.

The Environment Agency (EA) is satisfied that the poultry manure used in the proposed burner(s) can be classed as an animal by-product.

Human Health Assessment

If the litter is a by-product, all heat from the burner is utilised by the poultry sheds and the proposed litter burner meets the following criteria, no further assessment of the combustion emissions will be required where all of the following criteria are met:

- the boiler has an ABPR permit issued by the APHA;
- no individual boiler has a net thermal input greater than 1MWth;
- the aggregated thermal input capacity of all boiler units is less than 5MW net thermal input.
- stack emission velocity at or greater than 20m/s;
- stack height at least 11 m above ground and 1.5m above the roof level of the boiler house and nearby buildings; and
- there are no sensitive receptors within 50m of the emission points where the aggregated net rated thermal input is greater than 2MWth

The Environment Agency's risk assessment has shown that the poultry litter burner meets the requirements above, and are therefore considered not likely to pose a significant risk to the environment or human health and no further assessment is required.

Ammonia

The applicant has demonstrated that the housing will meet the relevant NH_3 BAT-AEL.

There are no Special Areas of Conservation (SAC), no Special Protection Areas (SPA) and no Ramsar sites located within 10 kilometres of the installation. There are no Sites of Special Scientific Interest (SSSI) located within 5 km of the installation. Nor are there any Local Wildlife Sites (LWS), Ancient Woodlands (AW) or Local Nature Reserves (LNR) within 2 km of the installation.

Because there are no relevant nature conservation sites within the screening distances, it is not necessary to undertake any further assessment. It can be concluded that there will be no adverse effects on nature conservation sites as a result of the proposed installation.

Decision checklist

Aspect considered	Decision
Receipt of application	
Confidential information	A claim for commercial or industrial confidentiality has not been made.
Identifying confidential information	We have not identified information provided as part of the application that we consider to be confidential.
Consultation	
Consultation	The consultation requirements were identified in accordance with the Environmental Permitting Regulations and our public participation statement. The application was publicised on the GOV.UK website. We consulted the following organisations: - Hambleton District Council Environmental Health department - Hambleton District Council Planning department - Health and Safety Executive The comments and our responses are summarised in the consultation section.
The facility	
The regulated facility	We considered the extent and nature of the facility at the site in accordance with RGN2 ‘Understanding the meaning of regulated facility’. The extent of the facility is defined in the site plan and in the permit. The activities are defined in table S1.1 of the permit.
The site	
Extent of the site of the facility	The operator has provided plans which we consider are satisfactory, showing the extent of the site of the facility. The plans are 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. Please see the key issues section for further information on groundwater and soil condition on site.
Biodiversity, heritage, landscape and nature conservation	The application is not within the relevant distance criteria of a site of heritage, landscape or nature conservation, or protected species or habitat.
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. Please see the key issues section for further information.

Aspect considered	Decision
Operating techniques	
General operating techniques	We have reviewed the techniques used by the operator and compared these with the relevant guidance notes and we consider them to represent appropriate techniques for the facility. The operating techniques that the applicant must use are specified in table S1.2 in the environmental permit. The operating techniques detail that the sheds have high velocity roof fans and nipple drinkers. 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. Please see the key issues section for further information on the New Intensive Rearing of Poultry or Pigs BAT Conclusions document.
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. Please see the key issues section for further information.
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. Please see the key issues section for further information.
Permit conditions	
Updating permit conditions during consolidation	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.
Raw materials	We have specified limits and controls on the use of raw materials and fuels. Fuel for biomass boiler units shall be biomass chips or pellets comprising virgin timber, straw, miscanthus, grade A waste wood or a combination of these.
Emission limits	ELVs and equivalent parameters or technical measures based on BAT have been set for the following substances. - Nitrogen: 0.6 kg N/animal place/year - Phosphorus: 0.25 kg P_2O_5 animal place/year - Ammonia: 0.08 kg NH_3/animal place/year
Monitoring	We have decided that monitoring should be carried out for the parameters listed in the permit, using the methods detailed and to the frequencies specified. These monitoring requirements have been imposed in order to comply with the relevant BAT measures. See the key issues of the decision section of this decision document for further information. We made these decisions in accordance with BAT conclusion

Aspect considered	Decision
	document dated 21st February 2017.
Reporting	We have decided that reporting should be carried out for the parameters listed in the permit, using the methods detailed and to the frequencies specified. These reporting requirements on monitoring data and performance parameters have been imposed in order to comply with the conditions of the permit. See the key issues of the decision section of this decision document for further information. We made these decisions in accordance with BAT conclusion document dated 21st February 2017.
Operator competence	
Management system	There is no known reason to consider that the operator will not have the management system to enable it to comply with the permit conditions.
Growth Duty	
Section 108 Deregulation Act 2015 – Growth duty	We have considered our duty to have regard to the desirability of promoting economic growth set out in section 108(1) of the Deregulation Act 2015 and the guidance issued under section 110 of that Act in deciding whether to grant this permit. Paragraph 1.3 of the guidance says: "The primary role of regulators, in delivering regulation, is to achieve the regulatory outcomes for which they are responsible. For a number of regulators, these regulatory outcomes include an explicit reference to development or growth. The growth duty establishes economic growth as a factor that all specified regulators should have regard to, alongside the delivery of the protections set out in the relevant legislation." We have addressed the legislative requirements and environmental standards to be set for this operation in the body of the decision document above. The guidance is clear at paragraph 1.5 that the growth duty does not legitimise non-compliance and its purpose is not to achieve or pursue economic growth at the expense of necessary protections. We consider the requirements and standards we have set in this permit are reasonable and necessary to avoid a risk of an unacceptable level of pollution. This also promotes growth amongst legitimate operators because the standards applied to the operator are consistent across businesses in this sector and have been set to achieve the required legislative standards.

Consultation

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

Responses from organisations listed in the consultation section

Response received from
Hambleton District Council Environmental Health department, dated 17/04/18
Brief summary of issues raised
The environmental health service recommends that the operator only burns virgin wood, clean wood off-cuts, clean non-virgin woodchip or clean straw in order to reduce the risk of burning material that has been treated, coated, painted or otherwise contaminated with any hazardous substance. This will help reduce the risk of contaminating the land with ash containing heavy metals or other contaminants when disposing of the biomass boiler ash by land spreading.
Summary of actions taken or show how this has been covered
Condition 2.3.36 of the permit specifies that the fuel for the biomass boiler unit must be 'biomass chips or pellets comprising virgin timber, straw, miscanthus or a combination of these'. This will ensure that the fuel used will not contain, nor produce, any harmful contaminants.