

Permitting decisions

Bespoke permit

We have decided to grant the permit for Bromtrees Hall Poultry Unit operated by Bromtrees Farm Limited.

The permit number is EPR/KP3239ED.

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. The decision checklist summarises the decision making process to show how all relevant factors have been taken in to account.

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

- highlights [key issues](#) in the determination;
- summarises the decision making process in the [decision checklist](#) to show how all relevant factors have been taken into account; and
- 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 sets 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 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 (BAT-AELs) for ammonia emissions, which will apply to the majority of permits, as well as BAT-AELs 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 were published.

New BAT Conclusions review

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

The Applicant has confirmed their compliance with all BAT conditions for the new installation in their document reference Bromtrees Hall Farm Poultry Unit (submitted with the application), which has been referenced in Table S1.2 Operating Techniques of the permit.

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. Table S3.3 of the permit concerning process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions. 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 P2O5 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	Table S3.3 Process monitoring requires the operator to undertake relevant monitoring that complies with these BAT conclusions.

BAT measure	Applicant compliance measure
<ul style="list-style-type: none"> - Total nitrogen and phosphorous excretion 	
BAT 25 Monitoring of emissions and process parameters <ul style="list-style-type: none"> - Ammonia emissions 	Table S3.3 of the Permit concerning process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions – estimation using emission factors will be the monitoring method.
BAT 26 Monitoring of emissions and process parameters <ul style="list-style-type: none"> - Odour emissions 	The approved OMP (submitted 09/11/22) includes the following details for on Farm Monitoring and Continual Improvement: In addition to the twice daily olfactory checks by staff on site, monitoring by a person not directly involved with the poultry will be undertaken once a week at the site boundary, this will be recorded as no odour, low intermittent odour, low continuous, medium, high, very high. Odour detection recorded above 'low continuous' will result in staff being alerted to implement contingency measures, once implemented retesting will be redone to ensure levels have been reduced. In the event of complaints being received frequency of monitoring will be increased subject to agreement with Area Officer. All records will be held on site for inspection.
BAT 27 Monitoring of emissions and process parameters <ul style="list-style-type: none"> - Dust emissions 	Table S3.3 Process monitoring requires the operator to undertake relevant monitoring that complies with these BAT conclusions. Example text: The Applicant has confirmed they will report the dust emissions to the Environment Agency annually by multiplying the dust emissions factor for broilers by the number of birds on site.
BAT 32 Ammonia emissions from poultry houses <ul style="list-style-type: none"> - Broilers 	The BAT-AEL to be complied with is 0.01 – 0.08 kg NH ₃ /animal place/year. The Applicant will meet this as the emission factor for broilers is 0.034 kg NH ₃ /animal place/year. The Installation does not include an air abatement treatment facility; hence the standard emission factor complies with the BAT AEL.

More detailed assessment of specific BAT measures

Ammonia emission controls

A BAT Associated Emission Level (AEL) provides us with a performance benchmark to determine whether an activity is BAT.

Ammonia emission controls – BAT conclusion 32

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

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

Industrial Emissions Directive (IED)

This permit implements the requirements of the European Union Directive on Industrial Emissions.

Groundwater and soil monitoring

As a result of the requirements of the Industrial Emissions Directive, all permits are now required to contain a condition relating to protection of soil, groundwater and groundwater monitoring. However, the Environment Agency's H5 Guidance states **that it is only necessary for the operator to take samples** of soil or groundwater and measure levels of contamination where there is evidence that there is, or could be existing contamination and:

- The environmental risk assessment has identified that the same contaminants are a particular hazard; or
- The environmental risk assessment has identified that the same contaminants are a hazard and the risk assessment has identified a possible pathway to land or groundwater.

H5 Guidance further states that it is **not essential for the operator** to take samples of soil or groundwater and measure levels of contamination where:

- The environmental risk assessment identifies no hazards to land or groundwater; or
- Where the environmental risk assessment identifies only limited hazards to land and groundwater and there is no reason to believe that there could be historic contamination by those substances that present the hazard; or
- Where the environmental risk assessment identifies hazards to land and groundwater but there is evidence that there is no historic contamination by those substances that pose the hazard.

The site condition report (SCR) for Bromtrees Hall Poultry Unit (dated 12/01/2022) 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).

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:

- Odour from the manufacture and selection of feed
- Odour from feed delivery or storage
- Odours arising from problems with housing ventilation system
- Litter management

- Carcass disposal
- House clean out

Odour Management Plan Review

The Installation is located within 400m of approximately 8 sensitive receptors, as listed within the Odour Management Plan. The closest receptors, not associated with the farm, are located to the west of the farm, starting at approximately 200m from the Installation boundary.

The operator has provided an OMP (revised version provided 09/11/22) and this has been assessed against the requirements of 'How to Comply with your Environmental Permit for Intensive Farming' EPR 6.09 (version 2), Appendix 4 guidance 'Odour Management at Intensive Livestock Installations' and our Top Tips Guidance and Poultry Industry Good Practice Checklist (August 2013) as well as the site specific circumstances at the Installation. We consider that the OMP is acceptable because it complies with the above guidance, with details of odour control measures, contingency measures and complaint procedures described below.

The Operator is required to manage activities at the Installation in accordance with condition 3.3.1 of the Permit and its OMP. The OMP includes odour control measures, in particular, procedural controls such as manufacture and selection of feed, feed delivery and storage, ventilation and heating systems, litter management, carcass disposal, house clean out, used litter, washing operations, fugitive emissions, dirty water management, abnormal operations, waste production storage and materials storage. The operator has identified the potential sources of odour (see risks bullet pointed above), as well as the potential risks and problems, and detailed actions taken to minimise odour including contingencies for abnormal operations. Odour contingency details have also been provided.

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

The Environment Agency has reviewed the OMP and considers it complies with the requirements of our H4 Odour management guidance note. We agree with the scope and suitability of key measures but this should not be taken as confirmation that the details of equipment specification design, operation and maintenance are suitable and sufficient. That remains the responsibility of the Operator.

Conclusion

We have assessed the OMP and the H1 risk assessment for odour and conclude that the Applicant has followed the guidance set out in H4 Odour management guidance note. Although there is the potential for odour pollution from the Installation, the Operator's compliance with the Permit and its OMP will minimise the risk of odour pollution beyond the Installation boundary. The risk of odour pollution at sensitive receptors beyond the Installation boundary is therefore not considered significant.

Noise

Intensive farming by its nature involves activities that have the potential to cause noise pollution. This is recognised in our 'How to Comply with your Environmental Permit for Intensive Farming' EPR 6.09 guidance. Under section 3.4 of this guidance a Noise Management Plan (NMP) must be approved as part of the permitting determination, if there are sensitive receptors within 400m of the Installation boundary.

Condition 3.4 of the Permit reads as follows:

Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan, to prevent or where that is not practicable to minimise the noise and vibration.

There are sensitive receptors within 400 metres of the Installation boundary as stated in section 4.4.2 above. The Operator has provided a noise management plan (NMP) as part of the Application supporting documentation, and further details are provided in section 4.5.2 below.

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

- Movement of large vehicles
- Litter removal
- Dirty water removal
- Feed transfer from lorry to feed bins
- Ventilation fans
- Alarm system/standby generator
- Chickens
- Personnel working on site
- Repairs and servicing

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

Sensitive receptors have been listed under 'Odour' section.

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

A noise management plan (NMP) has been provided by the operator as part of the application supporting documentation (reference 'Noise Management Plan' and part of the original application submission submitted on 25/01/22 and duly made on 26/10/22).

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

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

We have included our standard noise and vibration condition 3.4.1 in the Permit, which requires that emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the 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 (which is captured through condition 2.3 and Table S1.2 of the Permit), to prevent or where that is not practicable to minimise the noise and vibration.

We are satisfied that the manner in which operations are carried out on the Installation will minimise the risk of noise pollution.

Conclusion

We have assessed the NMP and the H1 risk assessment for noise and conclude that the Applicant has followed the guidance set out in EPR 6.09 Appendix 5 'Noise management at intensive livestock installations'. We are satisfied that all sources and receptors have been identified, and that the proposed mitigation measures will minimise the risk of noise pollution / nuisance.

Dust and Bio aerosols

The use of Best Available Techniques and good practice will ensure minimisation of emissions. There are measures included within the Permit (the 'Fugitive Emissions' conditions) to provide a level of protection. Condition 3.2.1 'Emissions of substances not controlled by an emission limit' is included in the Permit. This is used in conjunction with condition 3.2.2 which states that in the event of fugitive emissions causing pollution following commissioning of the Installation, the Operator is required to undertake a review of site activities, provide an emissions management plan and to undertake any mitigation recommended as part of that report, once agreed in writing with the Environment Agency.

There is one sensitive receptor within 100m of the Installation boundary, the nearest sensitive receptor (the nearest point of their assumed property boundary) is approximately 90 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:

- Silo vents fitted with dust cyclones
- Spillage of feed cleaned up immediately
- Integrity of feed bins checked frequently
- No on-site milling and mixing of food
- Use of roof extraction fans to aid dispersion
- Poultry houses located downwind of nearest receptors
- Stock inspections carried out by trained staff to avoid disturbance of birds
- All trailers sheeted before leaving the site

Please see the relevant plan (dated October 2022) for full details of mitigation measures in place.

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 Boilers

The Applicant is applying for a permit to include 7 biomass boiler(s) with a net rated thermal input of 1.54MW.

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(s).

Our risk assessment has shown that the biomass boilers should meet the requirements of the criteria 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 NH3 BAT-AEL.

There is one Sites of Special Scientific Interest (SSSI) located within 5 km of the Installation. There are also 12 Local Wildlife Site(s) (LWS), /Ancient Woodland(s) (AW) within 2 km of the installation. There are no European/Ramsar sites within 5km of the Installation.

Ammonia assessment – SSSI

The following trigger thresholds have been applied for assessment of SSSIs:

- If the process contribution (PC) is below 20% of the relevant critical level (CLe) or critical load (CLo) then the farm can be permitted with no further assessment.
- Where this threshold is exceeded an assessment alone and in combination is required. An in-combination assessment will be completed to establish the combined PC for all existing farms identified within 5 km of the SSSI.

Initial screening using the ammonia screening tool version 4.6 has indicated that emissions from Bromtrees Hall Poultry Unit will only have a potential impact on SSSI with a precautionary CLe of 1µg/m³ if they are within 1577 metres of the emission source.

Beyond 1577m the PC is less than 0.2µg/m³ (i.e. less than 20% of the precautionary 1µg/m³ CLe) 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 1µg/m³ is used and the PC is assessed to be less than 20%, the site automatically screens out as insignificant and no further assessment of CLo is necessary. In this case the 1µg/m³ level used has not been confirmed by Natural England, but it is precautionary. It is therefore possible to conclude no likely damage to these sites.

Table 1 – SSSI Assessment

Name of SSSI	Distance from site (m)
Birchend	4196

No further assessment is required.

Ammonia assessment - LWS/AW

The following trigger thresholds have been applied for the assessment of these sites:

- If the process contribution (PC) is below 100% of the relevant critical level (CLe) or critical load (CLo) then the farm can be permitted with no further assessment.

Initial screening using ammonia screening tool version 4.6 has indicated that emissions from Bromtrees Hall Poultry Unit will only have a potential impact on the LWS/AW sites with a precautionary CLe of $1\mu\text{g}/\text{m}^3$ if they are within 541 metres of the emission source.

Beyond 541m the PC is less than $1\mu\text{g}/\text{m}^3$ and therefore beyond this distance the PC is insignificant. In this case the LWS/AWs are beyond this distance (see table below) and therefore screen out of any further assessment.

Table 2 – LWS/AW Assessment

Name of LWS/AW	Distance from site (m)
Hopton Dingle	1873
River Frome	1832
Cowarne Wood	886
Ponds at Lower Moorend Farm	1080
Growland Coppice	1571
Ash Bed	1456
The Horns Coppy	1846
Hall Court Coppice	1167
Unnamed	1797
Ash Coppice	1146
Hanging Covert	886

Bromtrees Coppice AW

The Applicant's detailed modelling (A Report on the Modelling of the Dispersion and Deposition of Ammonia from the Existing Turkey Rearing Houses and the Proposed Broiler Chicken Rearing Houses at Bromtrees Hall Farm, Near Stoke Lacy in Herefordshire (revised version received 10/11/22) has indicated that PCs at Bromtrees Coppice AW are >100% threshold for ammonia and nitrogen deposition and therefore cannot be screened out as insignificant. There were no results shown for acid deposition but we have estimated this from the nitrogen deposition PC divided by 14.

The results for the proposed broiler operation is as follows (Tables 3-5):

Table 3 - Ammonia emissions

Site	Critical level ammonia $\mu\text{g}/\text{m}^3$	Predicted PC $\mu\text{g}/\text{m}^3$	PC % of critical level
Bromtrees Coppice AW	3*	9.835	327.8

* CLe 3 applied as no protected lichen or bryophytes species were found when checking Easimap layer – November 2022

Table 4 – Nitrogen deposition

Site	Critical load kg N/ha/yr. [1]	Predicted PC kg N/ha/yr.	PC % of critical load
Bromtrees Coppice AW	10	76.62	766.2

Note [1] Critical load values taken from APIS website (www.apis.ac.uk) – November 2022

Table 5 – Acid deposition

Site	Critical load keq/ha/yr. [1]	Predicted PC keq/ha/yr.	PC % of critical load
Bromtrees Coppice AW	1.614	5.47	338.9

Note [1] Critical load values taken from APIS website (www.apis.ac.uk) – November 2022

For Bromtrees Coppice AW we only have limited information about why the site was designated and its current management. Therefore, the Environment Agency consulted with Herefordshire Biological Records Centre (HBRC), Herefordshire Wildlife Trust (HWT), the Forestry Commission (FC), the Woodland Trust (WT), and the Country Ecologist for Herefordshire Council, in order to determine:

- Is the ancient woodland relevant for consideration as part of the impact assessment for potential airborne ammonia emissions from the farm;
- Which features are vulnerable to ammonia emissions and/or nitrogen deposition;
- Are the important ancient woodland species being actively conserved;
- Are the objectives for the management of the ancient woodland being met;
- Is the woodland improving as a result of the management;
- Are there any other management activities that may change the current status of the ancient woodland.

Based upon this consultation we have determined that there is no known management plan or other instrument which covers the wood. We were advised that the site is likely to be sensitive to the effects of ammonia. Due to the uncertainty in the site's status, we have considered it in our assessment.

The Applicant has included, in their modelling, a comparison of the current predicted PCs with that of the proposal, for ammonia and nitrogen deposition (we have again calculated the acid deposition PC based on the PC for nitrogen deposition divided by 14). The impacts from the existing farm, which stocks turkeys are as follows:

Table 6 - Ammonia emissions

Site	Critical level ammonia µg/m ³	Predicted PC µg/m ³	PC % of critical level
Bromtrees Coppice AW	3*	17.929	597.6

* CLe 3 applied as no protected lichen or bryophytes species were found when checking Easimap layer – November 2022

Table 7 – Nitrogen deposition

Site	Critical load kg N/ha/yr. [1]	Predicted PC kg N/ha/yr.	PC % of critical load
Bromtrees Coppice AW	10	139.69	1396.9

Note [1] Critical load values taken from APIS website (www.apis.ac.uk) – November 2022

Table 8 – Acid deposition

Site	Critical load keq/ha/yr. [1]	Predicted PC keq/ha/yr.	PC % of critical load
Bromtrees Coppice AW	1.614	9.98	618.3

Note [1] Critical load values taken from APIS website (www.apis.ac.uk) – November 2022

Comparison conclusions:

Detailed modelling provided by the Applicant has been audited in detail by our Air Quality Modelling and Assessment Unit (AQMAU). We have confidence that we can agree with the report conclusions. However checks have indicated that the reduction is less than that predicted by the Applicant's modelling (which was predicted to

be approximately 45%); further sensitivity checks were carried out with the number of turkeys slightly reduced and downtime considered (based on turkey placement data provided by the Applicant for the last 5 years of operations) and this indicated that the impact from ammonia emissions and nitrogen deposition for the proposal with broiler chickens to be approximately 35-40% lower at Bromtrees Coppice ancient woodland compared to the current operation with stag turkeys.

On this basis we agree that the permit can be granted based on a reduction of impacts on this conservation site if the Installation becomes operational.

No further assessment is required.

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	<p>The consultation requirements were identified in accordance with the Environmental Permitting Regulations and our public participation statement.</p> <p>The application was publicised on the GOV.UK website.</p> <p>We consulted the following organisations:</p> <p>Local Authority Environmental Health – Herefordshire Council</p> <p>Health and Safety Executive (HSE)</p> <p>Director of Public Health – Herefordshire Council</p> <p>UK Health Security Agency (UKHSA)</p> <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'.</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>
The site	
Extent of the site of the facility	The operator has provided a plan which we consider is satisfactory, showing the extent of the site of the facility. The plan is included in the permit.
Site condition report	The operator has provided a description of the condition of the site, which we consider is satisfactory. The decision was taken in accordance with our guidance on site condition reports and baseline reporting under the Industrial Emissions Directive.
Biodiversity, heritage, landscape and nature conservation	<p>The application is not within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat.</p> <p>We have assessed the application and its potential to affect all known sites of nature conservation, landscape and heritage and/or protected species or habitats identified in the nature conservation screening report as part of the permitting process.</p> <p>We consider that the application will not affect any sites of nature conservation,</p>

Aspect considered	Decision
	<p>landscape and heritage, and/or protected species or habitats identified.</p> <p>In accordance with the Environment Agency's Air Quality Technical Advisory Guidance 14: "for combustion plants under 5MW, no habitats assessment is required due to the size of combustion plant". Therefore, this proposal is considered acceptable and no further assessment is required.</p>
Environmental risk assessment	
Environmental risk	<p>We have reviewed the Operator's assessment of the environmental risk from the facility.</p> <p>The Operator's risk assessment is satisfactory.</p>
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.</p> <p>The operating techniques that the Applicant must use are specified in table S1.2 in the environmental permit.</p> <p>The operating techniques are as follows:</p> <ul style="list-style-type: none"> • The fuel is derived from virgin timber, straw, miscanthus; or a combination of these.; • The biomass boiler appliance and its installation meets the technical criteria to be eligible for the Renewable Heat Incentive; and • The stacks are 1m or more higher than the apex of the adjacent buildings. • Houses 1-4 have chimney fans (discharging vertically) at the side of the houses for primary ventilation and side fans for additional ventilation. In addition houses 1-3 have high velocity roof mounted fans at the eastern gables. Houses 5-10 all have roof mounted high velocity fans. The efflux velocity of the chimney fans for houses 1-4 and the roof mounted high velocity fans for houses 5-10 is 11 metres per second. • At depletion the litter will be removed from the site and spread to land, owned by third parties. Water from the wash out of poultry houses is channelled to underground collection tanks to await export from the site to be spread to land by third parties. Drainage from yards contaminated by litter or wash water will be collected in the underground storage tanks also, to await export. • Clean roof water from the poultry houses and clean yard water (excluding all times yards are contaminated e.g., catching, mucking out or washing, when water from the yard drains to the underground tanks) from houses 1-4 drain to a ditch on site (via gutters and downspouts and pipes), which lies to the east of these houses within the Installation boundary. Clean water from the poultry houses and clean yard water (excluding all times yards are contaminated e.g., catching, mucking out or washing, when water from the yard drains to the underground tanks) from houses 5-10 drains to an unlined attenuation pond to the north of house 5 (via gutters and downspouts and pipes). Water from this attenuation pond drains via a pipe to an offsite ditch immediately to the north of this pond. <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</p>

Aspect considered	Decision
	relevant BREFs.
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.
Permit conditions	
Use of conditions other than those from the template	Based on the information in the application, we consider that we do not need to impose conditions other than those in our permit template.
Raw materials	We have specified limits and controls on the use of raw materials and fuels. We have specified that only virgin timber (including wood chips and pellets), straw, miscanthus or a combination of these, are acceptable. These materials are never to be mixed with or replaced by, waste.
Emission limits	We have decided that emission limits are required in the permit. BAT AELs have been added in line with the Intensive Farming sector BAT conclusions document dated 21/02/17. These limits are included in permit table S3.3.
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.
Reporting	We have specified reporting in the permit. We made these decisions in order to ensure compliance with Intensive Farming BAT conclusions document dated 21/02/17.
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. The decision was taken in accordance with the guidance on operator competence and how to develop a management system for environmental permits.
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.
Growth Duty	
Section 108 Deregulation	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

Aspect considered	Decision
Act 2015 – Growth duty	<p>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

Response received from
UK Health Security Agency (UKHSA) – 02/12/2022
Brief summary of issues raised
<p>The application is for a permit to operate an intensive farming installation, with 370,000 rearing places for broilers. The application identifies the farm owner's residence that is located 90 metres from the site boundary. Other receptors lie beyond 200 metres of the boundary.</p> <p>The main emissions of potential public health significance are emissions to air of products of combustion from the operation of biomass boilers. Fugitive emissions to air will include bioaerosols, dust including particulate matter and ammonia. The application describes control measures and includes qualitative assessments that conclude that off-site impacts will not be significant.</p> <p>Regarding the consideration of emissions generated by the biomass boilers, the Environment Agency have provided clarification that the boiler specifications and operating characteristics are below their criterion to take assessments forwards.</p> <p>The Environment Agency screen intensive livestock rearing units using a distance of 100m to the nearest sensitive receptor(s). This is based on a 2009 DEFRA report. In line with guidance, where there are sensitive receptors within 100m from the boundary of such units, the applicant has undertaken a bioaerosol risk assessment and provides an associated management plan. This identifies potential sources and sets out control and mitigations measures for these emissions.</p> <p>UKHSA is currently updating its Intensive Farming position paper as part of wider work on the health impacts on exposure to bioaerosols from intensive farming. The evidence base for human exposure to bioaerosols from intensive livestock rearing units remains limited, compared to composting facilities. The nature of the evidence that is available however indicates that there are differences between both sources (pig or poultry). The nature of the bioaerosols (fungal or bacteriological) is also important.</p> <p>In relation to intensive farming and bioaerosols, a recent systematic review describes the evidence base which clearly demonstrated that published studies have so far detected inconsistent results with studies reporting no effect, mixed effects, harmful effects and protective effects. In addition, studies conducted to date have typically been cross-sectional in design, hindering the ability to assign effects to farming exposure.</p> <p>It is assumed by UKHSA that the installation will comply in all respects with the requirements of the permit, including the application of Best Available Techniques (BAT). This should ensure that emissions present a low risk to human health.</p> <p>More information is available on the public health impacts of intensive farms in the UK Health Security Agency Position Statement which can be found at: http://webarchive.nationalarchives.gov.uk/20140714084352/http://www.hpa.org.uk/web/HPAweb&HPAwebStandard/HPAweb_C/1195733812766</p>
Summary of actions taken or show how this has been covered
<p>The Environment Agency is satisfied following a review of the information provided by the Applicant, and the conditions present within the permit, that emissions of odour and noise from the Installation will not pose an unacceptable risk of pollution to the environment or harm to human health.</p> <p>To prevent significant emissions from the site the Operator has proposed appropriate measures to manage</p>

dust and bio aerosols - a generic risk assessment has been provided by the Operator, which incorporates dust as a potential risk from the site, together with a dust and bio aerosols management plan. This includes the use of appropriate housing design and management and appropriate containment of feedstuff. We are satisfied that these measures will appropriately mitigate emissions to prevent a significant impact from the site.

Notwithstanding the above, Condition 3.2 of the environmental permit also deals with emissions of substances not controlled by emission limits. Under this condition, if notified by the Environment Agency that the activities are giving rise to pollution, the Operator must submit an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits.

The Local Authority Environmental Health – Herefordshire Council, Health and Safety Executive (HSE), and the Director of Public Health – Herefordshire Council, were also consulted, but did not submit any responses.