Permitting decisions

Bespoke permit

We have decided to grant the permit for Coppice Farm operated by Mercer Farming Limited.

The permit number is EPR/AP3147JH/A001.

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; 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 phosphorus 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 Coppice Farm received with the application dated 05/09/2022 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 that the installation achieves levels of Nitrogen excretion below the required BAT-AEL of 0.6 kg N/animal place/year for broilers.
BAT 4 Nutritional management - Phosphorus excretion	The Applicant has confirmed it will demonstrate that the installation achieves levels of Phosphorus excretion below the required BAT-AEL of 0.25 kg P_2O_5 animal place/year for broilers.
BAT 24 Monitoring of emissions and process parameters - Total nitrogen and phosphorus excretion	Table S3.3 concerning process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions. The Operator will monitor by estimation using manure analysis for total nitrogen content and total phosphorus content, as shown within Table S3.3 of the permit.
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. Estimation using standard ammonia emission factors.

BAT 27 Monitoring of emissions and process parameters - Dust emissions	Table S3.3 concerning process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions. 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 - Broilers	The BAT-AEL to be complied with is 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.

More detailed assessment of specific BAT measures

Ammonia emission controls

A BAT Associated Emission Level (AEL) provides us with a performance benchmark to determine whether an activity is BAT. The BAT Conclusions include a set of BAT AEL's for ammonia emissions to air from animal housing for broilers.

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 Coppice Farm (dated 05/09/2022 and received 06/10/2023) 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/Noise

There are no relevant sensitive receptors within 400 metres of the installation boundary.

Dust and Bio aerosols

There are no relevant sensitive receptors within 100 metres of the installation boundary.

Standby Generator

There is one standby generator with a net thermal rated input of 606 kw, and it will not be tested more than 50 hours per year. This generator will not be operated more than 500 hours per annum averaged over three years and will only be used as backup for mains electricity interruption.

Heat Exchangers

Heat exchangers are being fitted on poultry houses 3 and 4 with this application. These heat exchangers will be of sufficient capacity to provide minimum ventilation requirements for the first 19 days of the bird cycle, well beyond the normal brooding period.

The heat exchangers will be positioned adjacent to poultry houses 3 and 4, centrally along the length of each house with air being drawn from the poultry houses and passing through a matrix of pipes of a high thermal conductivity material before being exhausted to atmosphere by a high velocity extraction fan at the end of the machine. Clean air is drawn into the machine passing around the pipe matrix allowing heat transference to occur from the warm air drawn out of the poultry houses. This air is then blown back centrally into the poultry houses and then evenly distributed along the length of poultry houses by means of circulation fans to ensure even distribution of air and temperature. Typically this will reduce the consumption of LPG and in turn lead to reduced humidity levels and gasses caused by combustion. Each heat exchanger will have the capacity to provided minimum ventilation for approximately 19 days of bird age for the number of birds and size of house.

The heat exchangers will be of the type and operated to the same conditions as per the heat exchangers details document submitted with this application on 06/10/2023, this has demonstrated an accepted 35% reduction in ammonia emissions for broilers.

Standard Broiler Emission Factor 0.034 kg NH_3/ bird place/year.

0.034 x 65% = 0.0221 kg NH_3/ bird place/year (factor used in detailed modelling report supplied 14/08/2023).

Poultry houses 1 and 2 have no heat exchangers so the standard emission factor for broilers of 0.034 kg NH_3/animal place/year is used for these two houses.

These heat exchangers have a dry filter cartridge, but they will still produce condensate which is held in a tank under each heat exchanger and will be emptied along with the dirty water tank at the end of the cycle. The operation and maintenance of the heat exchangers will be in accordance with manufacturer's instructions.

Ammonia

There is one Special Area of Conservation (SAC) and one Ramsar site located within 5 kilometres (km) of the installation. There are four Sites of Special Scientific Interest (SSSI) located within 5km of the installation. There are also thirteen Local Wildlife Sites (LWS) and Ancient Woodlands (AW) within 2km of the installation.

Ammonia assessment – SAC/Ramsar

The following trigger thresholds have been designated for the assessment of European sites:

- If the process contribution (PC) is below 4% of the relevant critical level (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 10 km of the SAC/Ramsar.

Initial screening using ammonia screening tool version 4.6 (dated 23/03/2023) has indicated that emissions from Coppice Farm will only have a potential impact on the SAC/Ramsar sites with a precautionary CLe of 1µg/m^3 if they are within 2849 metres of the emission source.

Beyond 2849 m the PC is less than 0.04µg/m^3 (i.e. less than 4% of the precautionary 1µg/m^3 CLe) and therefore beyond this distance the PC is insignificant. In this case both the SAC and Ramsar are beyond this distance (see table below) and therefore screen out of any further assessment.

Where the precautionary level of 1µg/m^3 is used and the PC is assessed to be less than 4%, the site automatically screens out as insignificant and no further assessment of CLo is necessary. In this case the 1µg/m^3 level used has not been confirmed by Natural England, but it is precautionary. It is therefore possible to conclude no likely significant effect

Table 1 – SAC/Ramsar Assessment

Name of SAC/SPA/Ramsar	Distance from site (m)*
West Midlands Mosses SAC	4889
Midland Meres & Moses Phase 1 Ramsar	4889

* These figures are based on the standard broiler emission factor and do not include the 35% reduction from the two heat exchangers.

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 (dated 23/03/2023) has indicated that emissions from Coppice Farm will only have a potential impact on SSSIs with a precautionary CLe of 1µg/m^3 if they are within 977 metres of the emission source.

Beyond 977 m the PC is less than 0.2µg/m^3 (i.e. less than 20% of the precautionary 1µg/m^3 CLe) and therefore beyond this distance the PC is insignificant. In this case all SSSIs are beyond this distance (see table below) and therefore screen out of any further assessment.

Where the precautionary level of 1µg/m^3 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/m^3 level used has not been confirmed by Natural England, but it is precautionary. It is therefore possible to conclude no likely damage to these sites.

Table 2 – SSSI Assessment

Name of SSSI	Distance from site (m)*
Blithfield Reservoir SSSI	3801
Forest Banks SSSI	2504
Goat Lodge SSSI	2270
Chartley Moss SSSI	4889

* These figures are based on the standard broiler emission factor and do not include the 35% reduction from the two heat exchangers.

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 (dated 23/03/2023) has indicated that emissions from Coppice Farm will only have a potential impact on the LWS/AW sites with a precautionary CLe of 1µg/m^3 if they are within 335 metres of the emission source.

Beyond 335m the PC is less than 1µg/m^3 and therefore beyond this distance the PC is insignificant. In this case most of the LWS/AW are beyond this distance (see table below) and therefore screen out of any further assessment.

Table 3 – LWS/AW Assessment

Name of LWS/AW	Distance from site (m)*
Willslock Farm LWS	1251
Bagot Forest LWS	574
Thorn Tree Farm LWS	732
Marlpit Farm Track LWS	862
Quee Lane Farm Fields LWS	1562
Shoul's Wood LWS	1826
Darcel's Rough LWS	1597
Frame Bank LWS	927
Buttermilk Hill LWS	1958
Bagots Wood AW	554
Bolton Coppice AW	1824
Greaves Wood AW	920

* These figures are based on the standard broiler emission factor and do not include the 35% reduction from the two heat exchangers.

Screening using detailed modelling (A Report on the Modelling of the Dispersion and Deposition of Ammonia from the Poultry Rearing Houses at Coppice Farm, Hobb Lane, near Scounslow Green in Staffordshire dated 09/08/2023) has determined that the PC on the nearby unnamed AW (at approximately SK 08111 28899 to the west of the farm) for ammonia emissions/nitrogen deposition/acid deposition from the application site are under the 100% significance threshold and can be screened out as having no likely significant effect. See results below.

Table 4 - Ammonia emissions

Site	Critical level ammonia µg/m^3	Predicted PC µg/m^3	PC % of critical level
Unnamed AW	1*	0.825**	82.8**

* Precautionary CLe of 1 µg/m^3 has been used in the detailed modelling report. Where the precautionary level of 1 µg/m^3 is used, and the PC is assessed to be less than100% the site automatically screens out as insignificant, and no further assessment of critical load is necessary. In these cases the 1 µg/m^3 level used has not been confirmed, but it is precautionary.

** The detailed modelling report is based on broiler numbers of 200,000 when in fact there are 180,000 broilers so these figures will be lower in reality (these figures also include the 35% reduction from the two heat exchangers).

However it has been confirmed that critical level of 3 µg/m^3 can be used for the unnamed AW, so the detailed modelling report results have been adjusted for this critical level (see below), and as the process contributions are less than 70% this report did not require to be audited by our Air Quality Modelling and Assessment Unit (AQMAU).

Table 5- Ammonia emissions

Site	Critical level ammonia µg/m^3	Predicted PC µg/m^3	PC % of critical level
Unnamed AW	3*	0.825**	27.5**

* CLe 3 applied as no protected lichen or bryophytes species were found when checking Easimap layer, CLe 3 was also confirmed the best figure to use by our Biodiversity Environment and Business Team

** The detailed modelling report is based on broiler numbers of 200,000 when in fact there are 180,000 broilers so these figures will be lower in reality (these figures also include the 35% reduction from the two heat exchangers).

Table 6 – Nitrogen deposition

Site	Critical load kg N/ha/yr*	Predicted PC kg N/ha/yr.	PC % of critical load
Unnamed AW	10*	6.45**	64.5**

* Critical load values taken from APIS website (www.apis.ac.uk) – 23/03/2023

** The detailed modelling report is based on broiler numbers of 200,000 when in fact there are 180,000 broilers so these figures will be lower in reality (these figures also include the 35% reduction from the two heat exchangers).

Table 7 – Acid deposition

Site	Critical load keq/ha/yr*	Predicted PC keq/ha/yr.	PC % of critical load
Unnamed AW	2.941*	0.460**	15.6***

* Critical load values taken from APIS website (www.apis.ac.uk) – 23/03/2023

** Acid deposition based on 1/14th of the maximum nitrogen deposition PC provided in the ammonia modelling report (A Report on the Modelling of the Dispersion and Depostion of Ammonia from the Poultry Rearing Houses at Coppice Farm, Hobb Lane, near Scounslow Green in Staffordshire dated 09/08/2023).

*** The detailed modelling report is based on broiler numbers of 200,000 when in fact there are 180,000 broilers so these figures will be lower in reality (these figures also include the 35% reduction from the two heat exchangers).

Note: Floyers Coppice candidate AW is adjacent to this farm, however after consultation from many habitat parties it was concluded with our Biodiversity Environment and Business Team that this site did not need to be considered at this time, this was due to the lack of knowledge about this site.

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	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. No responses were received. We consulted the following organisations: East Staffordshire Borough Council Environmental Health Health and Safety Executive The comments and our responses are summarised in the consultation section.
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	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 and baseline reporting under the Industrial Emissions Directive.
Biodiversity, heritage, landscape and nature conservation	The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat. 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. We consider that the application will not affect any sites of nature conservation, landscape and heritage, and/or protected species or habitats identified.

Aspect considered	Decision
	We have not consulted Natural England on the application. The decision was taken in accordance with our guidance.
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	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 are as follows: • All 4 poultry houses are ventilated via high velocity roof fans. Houses 3 and 4 also have heat exchangers fitted and the condensate is collected in tanks underneath them, which are emptied along with the dirty water tanks at the end of the cycle. • Roof water from the poultry houses goes to sealed drains adjacent to the poultry houses. These drains overflow to an unlined attenuation pond (which acts as a soakaway) at the southwest of the installation. This attenuation pond overflows to a tributary of Tad Brook. • Water draining from the yard will be separated and facilitated towards either the dirty water tanks or the unlined attenuation pond, using a divertor valve. • At the end of the growing period the houses are depopulated, the litter is removed, the houses and equipment washed and disinfected before being restocked. • Litter is sold and exported from the installation and wash water is conveyed to dirty water tanks for temporary storage before being exported off-site. • There will be one stand-by generator with an integrated diesel storage tank on site. • Mortalities are removed daily and stored in secure containers for removal under the Fallen Stock Scheme. 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.
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.

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 21/02/2017. These limits are included in table S3.3 of the permit.
Monitoring	Monitoring requirements have been imposed in order to ensure compliance with Intensive Farming BAT conclusions document dated 21/02/2017.
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. We made these decisions in order to ensure compliance with the Intensive Farming sector BAT conclusions document dated 21/02/2017.
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. 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 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.
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 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 vary 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
Health and Safety Executive
Brief summary of issues raised
No response received
Summary of actions taken or show how this has been covered
No further action required.

Response received from
East Staffordshire Borough Council Environmental Health (response received 22/05/2023)
Brief summary of issues raised
No comments or concerns in relation to noise, dust/particulates or odour. We are not qualified to comment further on ammonia emissions.
Summary of actions taken or show how this has been covered
No further action required.