

Permitting decisions

Bespoke permit

We have decided to grant the permit for Chequerhouse Farm operated by Chequerhouse Farm Limited.

The permit number is EPR/HP3031JS.

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 <u>decision checklist</u> 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.

We sent out a request for information 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 installation in their email document reference '098 - RE: EPR/HP3031JS/A001 EPR permit application for Chequerhouse Farm' dated 02/01/2020 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 by an estimation using manure analysis for total Nitrogen content.
	Table S3.2 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 that the installation 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.
	Table S3.2 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 S3.2 concerning process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions.
 Total nitrogen and phosphorous excretion 	
BAT 25 Monitoring of emissions and process parameters	Table S3.2 of the permit concerning process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions.
- Ammonia emissions	
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:
	Site staff will undertake routine sniff testing of odour at the site boundary on a daily basis. If a complaint is received, the site operator will investigate in accordance with the complaints procedure, which will include sniff testing/boundary odour monitoring. This will be undertaken by a person who does not work continuously on the site and who is familiar with the requirements of H4 guidance. This type of odour monitoring will also be undertaken in the event of abnormally high housekeeping odours being detected on site.
	The results from all odour monitoring will be logged and available for inspection by the EA. If elevated odours are detected, the site operator will immediately investigate potential causes and will follow the Contingency Plan outlined in the previous section.
BAT 27 Monitoring of emissions and process parameters - Dust emissions	Table S3.2 concerning process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions.

BAT measure	Applicant compliance measure
BAT 32 Ammonia emissions from poultry houses	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.
- Broilers	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. All new bespoke applications issued after the 21st February 2017, including those where there is a mixture of old and new housing, will now need to meet the BAT-AEL.

Industrial Emissions Directive (IED)

The Environmental Permitting (England and Wales) (Amendment) Regulations 2013 were made on the 20 February and came into force on 27 February 2013. These Regulations transpose the requirements of the IED.

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

Groundwater and soil monitoring

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

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

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

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

The site condition report (SCR) for Chequerhouse Farm (dated 10/10/19) 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:

- Manufacture and selection of feed;
- Feed delivery and storage;
- Litter management on site;
- Ventilation systems;
- Carcass disposal;
- House clean out operations;
- House washdown water management; and,
- Manure management.

Odour Management Plan Review

The operator shall use the following measures to minimise the risk of odour pollution / nuisance:

- There will be no milling or mixing of feeds on site;
- The feed will be delivered through a sealed system;
- There is immediate cleaning in the event of feed spillage;
- Non leaking drinker systems shall be used;
- There will be high speed, roof mounted ventilation on all sheds;
- The operator shall maintain the correct house temperature;
- Carcasses shall be stored in a cold store;
- De-littering vehicles shall be covered loads;
- No manure shall be stored on site; and,
- There are a number of contingency measures should odours be detected by monitoring.

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

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 EPR/HP3031JS/A001 Date issued: 30/04/2020

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 an NMP as part of the application supporting documentation, and further details are provided below.

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

- Large vehicle movements;
- Feed delivery;
- Ventilation fans;
- The alarm system;
- Personel; and,
- The standby generator.

Noise Management Plan Review

- Deliveries shall generally occur between 7am and 6pm;
- Roads are to be maintained in good working order;
- Engines shall be switched off when not in use;
- Fans shall be checked at the end of every crop cycle, and well maintained;
- Careful handmling of birds during depopulation; and,
- The standby generator shall be tested on a weekly basis.

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 are 2 sensitive receptors within 100m of the installation boundary, the nearest sensitive receptor (the nearest point of their assumed property boundary) is adjacent to the installation boundary. This is staff accommodation for the site.

In addition guidance on our website concludes that Applicants need to produce and submit a dust and bio aerosol management plan beyond the requirement of the initial 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-andbioaerosols.

As there are receptors within 100m of the installation, the Applicant was required to submit a dust and bio aerosol management plan 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 the risk of spillages) (e.g. litter

and feed management/delivery procedures) all reduce the potential for emissions impacting the nearest receptors. The Applicant has confirmed the following measures in their operating techniques to reduce dust:

- Feed shall be delivered through a sealed system;
- Litter in the sheds shall consist of lower dust potential material;
- No litter shall be stored outdoors;
- Litter shall be placed in covered trailers as part of the clean out procedure; and,
- Biomass shall be stored in an enclosed environment and drop heights shall be minimised.

Conclusion

We are satisfied that the measures outlined in the application will minimise the potential for dust and bioaerosol emissions from the installation.

Biomass Boilers

The Applicant has applied to include 3 biomass boilers with an aggregated thermal input of 1.596 MW.

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 points.

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.

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.

Ammonia

Ammonia assessment – Special Sites of Scientific Interest (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 incombination assessment will be completed to establish the combined PC for all existing farms identified within 5 km of the SSSI.

Initial screening using the ammonia screening tool version 4.5 has indicated that emissions from Chequerhouse Farm will only have a potential impact on SSSIs with a precautionary CLe of $1\mu g/m^3$ if they are within 1,222 metres of the emission source.

Beyond 1,222m the PC is less than 0.2μ g/m³ (i.e. less than 20% of the precautionary 1μ g/m³ CLe) and therefore beyond this distance the PC is insignificant. In this case all SSSIs are beyond this distance (see Table 1 – SSSI Assessment below) and therefore screen out of any further assessment.

Where the precautionary level of $1\mu g/m^3$ 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 $1\mu g/m^3$ 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 1 – SSSI Assessment

Name of SSSI	Distance from site (m)
Clumber Park	4,354
Sutton and Lound Gravel Pits	4,779

Ammonia assessment – Local Wildlife Sites/Ancient Woodland/Local Nature Reserve (LWS/AW/LNR)

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 4.5 has indicated that emissions from Chequerhouse Farm will only have a potential impact on the LWS/AW/NNR sites with a precautionary CLe of 1μ g/m³ if they are within 419 metres of the emission source.

Beyond 419m the PC is less than $1\mu g/m^3$ and therefore beyond this distance the PC is insignificant. In this case all LWS/AW/LNRs are beyond this distance (see Table 2 – LWS/AW/LNR Assessment below) and therefore screen out of any further assessment.

Table 2 – LWS/AW/LNR Assessment

Name of SAC/SPA/Ramsar	Distance from site (m)
Chequer Bottoms	821
Morton Park	1,708
Roadside Bank, Babworth	1,452
Chesterfield Canal (Shireoaks to Welham)	777
Lower Flash Hodsock	1,755

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. The decision was taken in accordance with our guidance on confidentiality.		
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:		
	 Health and Safety Executive Public Health England and Directors of Public Health Local Authority Environmental Health 		
	There were no responses to the consultation.		
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 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 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.		
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.	
	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.	
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:	
	the fuel is derived from virgin timber;	
	 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.	
	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.	
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 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 key issues section for further information.	
Permit conditions		
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	ELVs based on BAT have been set for ammonia, nitrogen excretion and phosphorus excretion. Please see the BAT conclusion review of the Key Issues section for further	

Aspect considered	Decision	
	information.	
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 accordance with the BAT conclusions.	
Reporting	We have specified reporting in Table S4.1 of the permit, to meet the requirements of the BAT conclusions.	
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 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 issue 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.	