

Permitting decisions

Variation

We have decided to grant the variation for Kirkburn Grange Farm operated by J.K.B. Megginson and Sons Limited.

The variation number is EPR/QP3931GS/V004.

We have also carried out an Environment Agency initiated variation to the permit.

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;
- explains why we have also made an Environment Agency initiated variation; 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 Conclusions document dated 21st February 2017.

The Applicant has confirmed their compliance with all BAT conditions for new housing in their document referenced Kirkburn Grange Farm and dated 07/02/19 which has been referenced in 'Table S1.2 Operating Techniques' in 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 S3.3 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 that the installation achieves levels of Phosphorous excretion below the required BAT-AEL of 0.25 kg P ₂ O ₅ 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 25 Monitoring of emissions and process parameters - Ammonia emissions	Table S3.3 of the permit concerning process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions.
BAT 26 Monitoring of emissions and process parameters	The approved odour management plan (OMP) includes the following details for on Farm Monitoring and Continual Improvement: <ul style="list-style-type: none">• The staff will perform twice daily olfactory checks for high levels of odour.

BAT measure	Applicant compliance measure
- Odour emissions	
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 0.01 – 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-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.

'New plant' is defined as plant first permitted at the site of the farm following the publication of the BAT Conclusions.

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 Kirkburn Grange Farm (dated 28/01/19) 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 selection of feed, movement of feed/feed delivery, house ventilation, litter management and used litter, house clean out, carcass disposal, dirty water management and abnormal operations.

We have assessed the revised and updated OMP and the H1 risk assessment for odour and conclude that the Applicant has followed the guidance set out in EPR 6.09 and Environment Agency guidance on preparing OMPs for Intensive Farm installations. We are satisfied that all sources and receptors have been identified, and that the proposed mitigation measures will minimise the risk of odour pollution/nuisance.

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 400m 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 ventilation fans, deliveries, alarm systems, bird catching, clean out operations, standby generator testing.

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 no sensitive receptors within 100m of the installation boundary for the new housing (Houses 7 and 8), therefore the Applicant is not required to provide a dust and bio aerosol risk assessment.

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 100m 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.

Biomass Boiler

The Applicant is varying their permit to add two additional biomass boilers with a total thermal input 0.442 MWth to the four existing biomass boilers already on site with a total thermal input 0.8 MWth. This makes a total of six biomass boilers with a net rated thermal input of 1.242 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 farms 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.

Our risk assessment has shown that the biomass boiler 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 Site of Special Scientific Interest (SSSI) located 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 5km of the SSSI.

Initial screening using the ammonia screening tool version 4.5 has indicated that emissions from Kirkburn Grange Farm will only have a potential impact on the SSSI with a precautionary CLe of 1µg/m³ if it is within 2,147m of the farm emission source.

Beyond 2,147m 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 screens 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 significant damage to this site.

Table 1 – SSSI Assessment

Name of SSSI	Distance from site (m)
River Hull Headwaters	2,362

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: <ul style="list-style-type: none"> • Public Health England and Director of Public Health • Local Authority – Planning • Local Authority – Environmental Health • Health and Safety Executive The comments and our responses are summarised in the consultation section .
The facility	
The regulated facility	We considered the extent and nature of the facility at the site in accordance with RGN2 'Understanding the meaning of regulated facility'. The extent of the facility are 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 revised 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. <ul style="list-style-type: none"> • River Hull Headwaters (SSSI) 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
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; • 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. <p>The proposed techniques for priorities for control are in line with the benchmark levels contained in the Sector Guidance Note EPR6.09 and we consider them to represent appropriate techniques for the facility. The permit conditions ensure compliance with relevant BREFs.</p>
Odour management	<p>We have reviewed the odour management plan in accordance with our guidance on odour management.</p> <p>We consider that the odour management plan is satisfactory.</p>
Noise management	<p>We have reviewed the noise management plan in accordance with our guidance on noise assessment and control.</p> <p>We consider that the noise management plan is satisfactory.</p>
Permit conditions	
Updating permit conditions during consolidation	<p>We have updated permit conditions to those in the current generic permit template as part of permit consolidation. The conditions will provide the same level of protection as those in the previous permit.</p>
Changes to the permit conditions due to an Environment Agency initiated variation	<p>We have varied the permit to update permit conditions to those in the current generic permit template as part of permit consolidation. The conditions will provide the same level of protection as those in the previous permit.</p>
Raw materials	<p>We have specified limits and controls on the use of raw materials and fuels.</p> <p>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.</p>
Emission limits	<p>ELVs and technical measures based on BAT have been set for the following substances.</p>

Aspect considered	Decision
	<ul style="list-style-type: none"> • nitrogen • phosphorous • ammonia.
Monitoring	<p>ELVs and equivalent parameters or technical measures based on BAT have been set for the following substances:</p> <ul style="list-style-type: none"> • ammonia • nitrogen • phosphorous.
Reporting	<p>With the publication of the IRPP BAT Conclusion Document, we have specified reporting in the permit. These reporting requirements have been added in order to comply with the IRPP BAT Conclusion Document.</p>
Operator competence	
Management system	<p>There is no known reason to consider that the Operator will not have the management system to enable it to comply with the permit conditions.</p>
Growth Duty	
Section 108 Deregulation Act 2015 – Growth duty	<p>We have considered our duty to have regard to the desirability of promoting economic growth set out in section 108(1) of the Deregulation Act 2015 and the guidance issued under section 110 of that Act in deciding whether to vary this permit.</p> <p>Paragraph 1.3 of the guidance says:</p> <p>“The primary role of regulators, in delivering regulation, is to achieve the regulatory outcomes for which they are responsible. For a number of regulators, these regulatory outcomes include an explicit reference to development or growth. The growth duty establishes economic growth as a factor that all specified regulators should have regard to, alongside the delivery of the protections set out in the relevant legislation.”</p> <p>We have addressed the legislative requirements and environmental standards to be set for this operation in the body of the decision document above. The guidance is clear at paragraph 1.5 that the growth duty does not legitimise non-compliance and its purpose is not to achieve or pursue economic growth at the expense of necessary 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
Public Health England (PHE)
Brief summary of issues raised
No concerns were raised. It is assumed by PHE that the installation will comply in all respects with the requirements of the permit, including the application of Best Available Techniques (BAT). This should ensure that emissions present a low risk to human health. The control measures proposed, together with good on-site management, should ensure that the emissions of dust and odour will pose a low risk to human health.
Summary of actions taken or show how this has been covered
Conditions have been set within the permit ensure compliance with sector specific guidance and BAT.

No responses were received from Local Authority – Planning, Local Authority – Environmental Health, members of the public and Health and Safety Executive.