

# Permitting decisions

## Variation

---

We have decided to grant the variation for Cross House Farm Poultry Unit operated by Mr Robert Parkinson, Mrs Jean Parkinson and Mr Walter Parkinson (Trading as W & J Parkinson).

The variation number is EPR/MP3931AV/V003.

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
- shows how we have considered the [consultation responses](#)

Unless the decision document specifies otherwise we have accepted the applicant's proposals.

Read the permitting decisions in conjunction with the environmental permit and the variation notice. The introductory note summarises what the variation covers.

# Key issues of the decision

## New Intensive Rearing of Poultry or Pigs BAT Conclusions document

The new Best Available Techniques (BAT) Reference Document (BREF) for the Intensive Rearing of poultry or pigs (IRPP) was published on the 21st February 2017. There is now a separate BAT Conclusions document which will set out the standards that permitted farms will have to meet.

The BAT Conclusions document is as per the following link

<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017D0302&from=EN>

Now the BAT Conclusions are published **all new housing within variation applications** issued after the 21<sup>st</sup> February 2017 must be compliant in full from the first day of operation.

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

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

**This variation determination includes a review only of BAT compliance for new housing introduced with this variation. A BAT review of existing housing compliance with BAT conclusions document is to be the subject of a sector permit review and is beyond the scope of this variation application permit determination.**

### New BAT conclusions review

There are 33 BAT conclusion measures in total within the BAT conclusion document dated 21<sup>st</sup> February 2017.

The Applicant has confirmed their compliance with all BAT conditions for the new housing, in their document reference non-technical summary dated 02/03/18.

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	<p>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.</p> <p>This confirmation was received 02/03/18, which has been referenced in Table S1.2 Operating Techniques of the Permit.</p> <p>Table S3.3 of the Permit concerning process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions.</p>
BAT 4 Nutritional management Phosphorous excretion	<p>The Applicant has confirmed it will demonstrate it achieves levels of Phosphorous excretion below the required BAT-AEL of 0.25 kg P<sub>2</sub>O<sub>5</sub> animal place/year by an estimation using manure analysis for total Phosphorous content.</p> <p>This confirmation was received 02/03/18, which has been referenced in Table S1.2 Operating techniques of the Permit.</p> <p>Table S3.3 of the Permit concerning process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions.</p>

BAT measure	Applicant compliance measure
BAT 24 Monitoring of emissions and process parameters - Total nitrogen and phosphorous excretion	Table S3.3 Process monitoring requires the operator to undertake relevant monitoring that complies with these BAT conclusions
BAT 25 Monitoring of emissions and process parameters - Ammonia emissions	Table S3.3 of the Permit concerning process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions.
BAT 26 Monitoring of emissions and process parameters - Odour emissions	The approved OMP includes the following details for on Farm Monitoring and Continual Improvement: <ul style="list-style-type: none"> <li>• Twice a daily olfactory checks including stock inspections, condition of feed bins and feed stock levels, inspection of ventilation system and any abnormalities recorded.</li> <li>• Feed deliveries are monitored and drinker height and pressure are checked as part of the routine inspection and maintenance schedule.</li> <li>• Carcass storage bin is checked daily for integrity and incinerator serviced regularly by a qualified service engineer.</li> </ul>
BAT 27 Monitoring of emissions and process parameters - Dust emissions	Table S3.3 Process monitoring requires the operator to undertake relevant monitoring that complies with these BAT conclusions.
BAT 32 Ammonia emissions from poultry houses - Broilers	The BAT-AEL to be complied with is 0.08 kg NH <sub>3</sub> /animal place/year. The Applicant will meet this as the emission factor for broilers is 0.034 kg NH <sub>3</sub> /animal place/year. The Installation does not include an air abatement treatment facility, hence the standard emission factor complies with the BAT AEL.

### **Ammonia emission controls – BAT conclusion 32**

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

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

### **Industrial Emissions Directive (IED)**

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

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

## Groundwater and soil monitoring

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

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

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

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

The site condition report (SCR) for Cross House Farm Poultry Unit (dated 16/02/2018) 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](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:

- Feed delivery and storage
- Ventilation techniques
- Management of drinking water systems
- Litter conditions and management
- Carcass storage and disposal
- Destocking of live stock

- Cleanout operations

### Odour Management Plan Review

There is a sensitive receptor within 400 metres of the installation boundary. The applicant has therefore submitted an Odour Management Plan as part of the application supporting documentation.

Operations with the most potential to cause an odour emissions have been assessed as those listed above. The Odour Management Plan covers control measures, in particular, procedural controls addressing ventilation and heating, litter condition and management, bird destocking/restocking, clean out operations, management of used litter and dirty water, and abnormal operations. The operator has also provided a list of contingency measures that they will consider to reduce the odour emissions from site and meet BAT requirements.

There is the potential for odour emissions from the installation beyond the installation boundary, however the operator's compliance with the Odour Management Plan, submitted with this application, should minimise the risk of odour pollution beyond the installation boundary. We, the Environment Agency, have reviewed and approved the Odour Management Plan. We agree with the scope and suitability of key measures but this should not be taken as confirmation that the details of equipment specification design, operation and maintenance are suitable and sufficient. That remains the responsibility of the operator.

### **Noise**

There is the potential for noise pollution from the installation. There are seven sensitive receptors within 400 metres of the installation and therefore an Noise Management Plan (NMP) has been prepared, as required in chapter 3, section 3.4 of EPR 6.09 Sector Guidance Note, *How to comply with your environmental permit for intensive farming*, Version 2, published January 2010 (EPR 6.09 SGN).

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

- Large vehicle movement to and from farm, and small vehicle movement on site
- Feed delivery and system
- Transfer of feed from lorry to bins
- Operation of ventilation fans
- Standby generator
- Birds and personal on site
- Clean out operations
- Repair and maintenance work

### Noise management plan review

There is a sensitive receptor within 400 metres of the installation boundary. The applicant has therefore submitted a Noise Management Plan as part of the application supporting documentation.

Operations with the most potential to cause a noise emissions have been assessed as those listed above. Noise Management Plan covers those involving delivery vehicles travelling to and from the farm, vehicles on site, feeding system, operation of ventilation fans, noise from birds, bird restocking, bird removal and loading on to vehicles and clean out operations. The Noise Management Plan covers control measures, in particular, procedural controls addressing ventilation fans, feed deliveries, feeding systems, bird restocking, and clean out operations.

There is the potential for noise from the installation beyond the installation boundary, however the operator's compliance with the Noise Management Plan, submitted with this application, should minimise the risk of noise pollution beyond the installation boundary. The risk of noise pollution at sensitive receptors beyond the installation boundary is therefore not considered significant. 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 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.

## Biomass boiler

The applicant is varying their permit to include 1 biomass boiler with a net rated thermal input of 0.79 MW. There will therefore be 2 biomass with an aggregated thermal input of 1,837 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 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).

### For poultry sites which do not screen out through the above criteria:

- the aggregate boiler net rated thermal input is:
  - A. less than 0.5MWth, or;
  - B. less than 1MWth where the stack height is greater than 1 metre above the roof level of adjacent buildings including building housing boiler(s) if relevant (where there are no adjacent buildings, the stack height must be a minimum of 3 metres above ground), and there are:
    - no Special Areas of Conservation, Special Protection Areas, Ramsar sites or Sites of Special Scientific Interest within 500 metres of the emission point(s);
    - no National Nature Reserves, Local Nature Reserves, ancient woodlands or local wildlife sites within 100 metres of the emission point(s), or;
  - C. less than 2MWth where, in addition to the above criteria for less than 1MWth boilers, there are:
    - no sensitive receptors within 150 metres of the emission point(s).

This is in line with the Environment Agency's May 2013 document "Biomass boilers on EPR Intensive Farms", an assessment has been undertaken to consider the proposed addition of the biomass boiler(s).

The Environment Agency's risk assessment has shown that the biomass boiler(s) meet the requirements of 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 are four Special Area(s) of Conservation (SAC), /Special Protection Area(s) (SPA), /Ramsar sites located within 10 kilometres of the installation. There are two Sites of Special Scientific Interest (SSSI) located within 5 km of the installation. There are also three Local Wildlife Site(s) (LWS) within 2 km of the installation.

### **Ammonia assessment – SAC/SPA/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/SPA/Ramsar.

Initial screening using ammonia screening tool version 4.5 has indicated that emissions from Cross House Farm will only have a potential impact on the SAC/SPA/Ramsar site(s) with a precautionary critical level of  $1\mu\text{g}/\text{m}^3$  if they are within 4,846 metres of the emission source.

Beyond 4,846m the PC is less than  $0.04\mu\text{g}/\text{m}^3$  (i.e. less than 4% of the precautionary  $1\mu\text{g}/\text{m}^3$  critical level) and therefore beyond this distance the PC is insignificant. In this case all SAC/SPA/Ramsar(s) are beyond this distance (see table below) and therefore screen out of any further assessment.

Where the precautionary level of  $1\mu\text{g}/\text{m}^3$  is used, and the process contribution is assessed to be less than 4% the site automatically screens out as insignificant and no further assessment of critical load is necessary. In this case the  $1\mu\text{g}/\text{m}^3$  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/SPA/Ramsar Assessment**

<b>Name of SAC/SPA/Ramsar</b>	<b>Distance from site (m)</b>
Morecambe Bay SAC	7,600
Morecambe Bay and Duddon Estuary SPA	7,599
Bowland Fells SPA	6,992
Morecambe Bay Ramsar	7,600

### **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 4.5 has indicated that emissions from Cross House Farm will only have a potential impact on SSSI site(s) with a precautionary critical level of  $1\mu\text{g}/\text{m}^3$  if they are within 1,661 metres of the emission source.

Beyond 1,661m the PC is less than  $0.2\mu\text{g}/\text{m}^3$  (i.e. less than 20% of the precautionary  $1\mu\text{g}/\text{m}^3$  critical level) and therefore beyond this distance the PC is insignificant. In this case all SSSI(s) are beyond this distance (see table below) and therefore screen out of any further assessment.



Where the precautionary level of  $1\mu\text{g}/\text{m}^3$  is used, and the process contribution is assessed to be less than 20% the site automatically screens out as insignificant and no further assessment of critical load is necessary. In this case the  $1\mu\text{g}/\text{m}^3$  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)
Winmarleigh Moss SSSI	4,681
Rough Hey Wood SSSI	4,078

**Ammonia assessment - LWS**

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 (CL<sub>e</sub>) or critical load (CL<sub>o</sub>) then the farm can be permitted with no further assessment.

Initial screening using ammonia screening tool version 4.5 has indicated that emissions from Cross House Farm will only have a potential impact on the LWS site(s) with a precautionary critical level of  $1\mu\text{g}/\text{m}^3$  if they are within 570 metres of the emission source.

Beyond 570m the PC is less than  $1\mu\text{g}/\text{m}^3$  and therefore beyond this distance the PC is insignificant. In this case all LWS are beyond this distance (see table below) and therefore screen out of any further assessment.

**Table 3 – LWS Assessment**

Name of SAC/SPA/Ramsar	Distance from site (m)
Rawcliffe Moss LWS	1,114
Lancaster Canal Whole Length in Lancashire including Glasson Branch	1,118
Greenhalgh Castle Tarn	1,949

No further assessment is necessary.

## Decision checklist

Aspect considered	Decision
<b>Receipt of application</b>	
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.
<b>Consultation/Engagement</b>	
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> <ul style="list-style-type: none"> <li>• Local Authority Environmental Health</li> <li>• Local Authority Planning</li> <li>• Health and Safety Executive</li> </ul> <p>The comments and our responses are summarised in the <a href="#">consultation section</a>.</p>
<b>The facility</b>	
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>
<b>The site</b>	
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 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, landscape and heritage, and/or protected species or habitats identified.</p> <p>We have not consulted Natural England on the application. The decision was taken</p>

Aspect considered	Decision
	in accordance with our guidance.
<b>Environmental risk assessment</b>	
Environmental risk	<p>We have reviewed the operator's assessment of the environmental risk from the facility.</p> <p>There are no sensitive receptors with the relevant distance criteria for fugitive dust emissions.</p> <p>The operator's risk assessment is satisfactory.</p> <p>See <a href="#">key issues</a> section of this decision document for further information.</p>
<b>Operating techniques</b>	
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>
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> <p>See <a href="#">key issues</a> section of this decision document for further information.</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> <p>See <a href="#">key issues</a> section of this decision document for further information.</p>
<b>Permit conditions</b>	
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(s).</p>
Emission limits	<p>We have decided that emission limits should be set for the parameters listed in the permit.</p> <p>The following substances have been identified as being emitted in significant quantities and ELVs based on new BAT conclusion document dated 21<sup>st</sup> February 2017 have been set for those substances:</p> <ul style="list-style-type: none"> <li>• Nitrogen</li> <li>• Phosphorus</li> <li>• Ammonia</li> </ul> <p>See <a href="#">key issues</a> section of this decision document for further information.</p>
Monitoring	<p>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.</p> <p>These monitoring requirements have been imposed in order to comply with the relevant BAT measures.</p>

Aspect considered	Decision
	<p>We made these decisions in accordance with BAT conclusion document dated 21<sup>st</sup> February 2017.</p> <p>See <a href="#">key issues</a> section of this decision document for further information.</p>
Reporting	<p>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.</p> <p>These monitoring requirements have been imposed in order to comply with the conditions of the permit.</p>
<b>Operator competence</b>	
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>
<b>Growth Duty</b>	
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 grant 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

<b>Response received from</b>
Local Authority Environmental Health on 15/03/2018
<b>Brief summary of issues raised</b>
Environmental Health Officer confirmed that there is no record of any complaints having been received in respect to Cross House Farm, and there are no issues of any relevance that may have any significant impact in respect of the proposed variation. They are satisfied that satisfactory steps are in place to control odour, noise, dust and control insect and rodent infestation. Therefore, they have no objections and no further comments.
<b>Summary of actions taken or show how this has been covered</b>
No action taken.

## Representations from individual members of the public.

<b>Brief summary of issues raised</b>
No response received.
<b>Summary of actions taken or show how this has been covered</b>
No action required.