

# Permitting decisions

## Variation

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We have decided to grant the variation for Myrepole Farm operated by Mr David Mark Cottam, Mrs Suna Jill Cottam, Mr Simon Marcus Cottam and Mrs Alison Kathrine Cottam.

The variation number is [EPR/KP3130NT/V002](#).

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
- 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.

We have sent out a not duly made request 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 housing, in their document reference Confirmation of BAT and dated 20/04/2018.

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	0.6 kg N/animal place/year (BAT associated total nitrogen excreted).  This confirmation was in response to the Not Duly Made Request for Further Information, received 20/04/2018, which has been referenced in Table S1.2 Operating Techniques of the Permit.  Feed specifications are prepared by the feed compounder's nutrition specialist. Protein is reduced in accordance with SGN EPR6.09 'How to comply with your environmental permit for intensive farming'.
BAT 4 Nutritional management Phosphorous excretion	0.25 kg P <sub>2</sub> O <sub>5</sub> animal place/year (BAT associated total nitrogen excreted).  This confirmation was in response to the Not Duly Made Request for Further Information, received 20/04/2018, which has been referenced in Table S1.2 Operating Techniques of the Permit.  Feed specifications are prepared by the feed compounder's nutrition specialist. Protein is reduced in accordance with SGN EPR6.09 'How to comply with your environmental permit for intensive farming'.
BAT 24 Monitoring of emissions and process	Table S3.3 Process monitoring requires the operator to undertake relevant monitoring

BAT measure	Applicant compliance measure
parameters - Total nitrogen and phosphorous excretion	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>- Feed deliveries are monitored to avoid dust or spills. The condition of the feed bins are checked daily so that any damage/leaks can be rectified ASAP.</li> <li>- Daily checks of nipple drinkers to ensure no capping to minimise spillage and prevent wetting of litter.</li> <li>- Humidity and temperature continuously monitored and ventilation adjusted accordingly to remove moisture from the poultry houses. Humidity is recorded daily and maintained in the range of 55 – 65% keeping a friable litter.</li> <li>- Clean out of the poultry houses take place immediately after destocking. Wash water tanks are emptied after wash down to avoid overflow.</li> </ul> Inspection of the houses will take place twice daily and relevant remedial action conducted ASAP if any abnormalities spotted that could lead to odour issues.
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.

### **More detailed assessment of specific BAT measures**

#### **Ammonia emission controls**

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

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

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

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

## Industrial Emissions Directive (IED)

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 Myrepole Farm (dated 21/03/2018) 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:

- Manufacture and feed selection
- Feed delivery and storage

- Ventilation techniques
- Litter conditions and management
- Carcass storage and disposal
- Cleanout

### Odour Management Plan Review

There are sensitive receptors within 400 metres of the installation boundary. The applicant has therefore submitted an Odour Management Plan (OMP), in line with Sector Guidance Note EPR 6.09, as part of the application and supporting documentation.

The Operator is required to manage the installation activities in accordance with condition 3.3.1 of the permit and the OMP. Operations with the most potential to cause odour emissions have been assessed as those listed above. The Odour Management Plan covers control measures, in particular, procedural controls addressing feed management, ventilation, litter condition and management, carcass disposal, clean out operations, management of used litter, dirty water management and abnormal operations.

We, the Environment Agency, have reviewed and approved the Odour Management Plan. The Operator's compliance with the OMP will minimise the risk of odour pollution beyond the installation boundary and the risk of odour pollution at sensitive receptors. 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**

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

Condition 3.4 of the Permit reads as follows:

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

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

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

- Vehicle movement (on and off site)
- Feed transfer from lorry to bins
- Fan operation
- Alarm system and standby generator
- Bird noise
- Personnel on site
- Repair and maintenance work

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 Bioaerosols

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 three sensitive receptors within 100 metres of the Installation boundary, the nearest sensitive receptor (the nearest point of their assumed property boundary) is approximately 28 metres to the north etc. of the installation boundary.

Guidance on our website concludes that applicants need to produce and submit a dust and bio aerosol risk assessment with their applications only if there are relevant receptors within 100 metres of their farm, e.g. the farmhouse or farm worker's houses. Details can be found via the link below:

[www.gov.uk/guidance/intensive-farming-risk-assessment-for-your-environmental-permit#air-emissions-dust-and-bioaerosols](http://www.gov.uk/guidance/intensive-farming-risk-assessment-for-your-environmental-permit#air-emissions-dust-and-bioaerosols).

As there are receptors within 100m of the Installation, the Applicant was required to submit a dust and bio aerosol risk assessment in this format.

In the guidance mentioned above it states that particulate concentrations fall off rapidly with distance from the emitting source. This fact, together with the proposed good management of the Installation such as keeping areas clean from build-up of dust, and other measures in place to reduce dust and risk of spillages (e.g. litter and feed management/delivery procedures) all reduce the potential for emissions impacting the nearest receptors. The Applicant has confirmed the following measures in their operating techniques to reduce dust:

- Feed management and delivery
- Bedding
- Litter management
- Ventilation
- Clean out operations

### Conclusion

We are satisfied that the measures outlined in the Application will minimise the potential for dust and bio aerosol emissions from the Installation.

## Biomass boilers

The applicant is varying their permit to include four biomass boilers with a net rated thermal input of 2.116 megawatts.

The Environment Agency has assessed the pollution risks and has concluded that air emissions from small biomass boilers are not likely to pose a significant risk to the environment or human health providing certain conditions are met. Therefore a quantitative assessment of air emissions will not be required for poultry sites where:

- the fuel will be derived from virgin timber, miscanthus or straw, and;
- the biomass boiler appliance and installation meets the technical criteria to be eligible for the Renewable Heat Incentive, and;
- the aggregate boiler net rated thermal input is less than or equal to 4 MWth, and no individual boiler has a net thermal input greater than 1 MWth, and;
- the stack height must be a minimum of 5 metres above the ground (where there are buildings within 25 metres the stack height must be greater than 1 metre above the roof level of buildings within 25 metres (including building housing boiler(s) if relevant) and:

- there are no sensitive receptors within 50 metres of the emission point(s).

This is in line with the Environment Agency’s document “Air Quality and Modelling Unit C1127a Biomass firing boilers for intensive poultry rearing”, an assessment has been undertaken to consider the proposed addition of the biomass boiler(s).

Our risk assessment has shown that the biomass boilers should meet the requirements of the criteria above, and are, therefore, considered not likely to pose a significant risk to the environment or human health and no further assessment is required.

## **Ammonia**

The applicant has demonstrated that the housing will meet the relevant NH3 BAT-AEL.

There are two Special Protection Areas (SPA) and two Ramsar sites located within ten kilometres of the installation. There are also two Local Wildlife Sites (LWS) within two km of the installation.

### **Ammonia assessment – SPA and 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 SPA and Ramsar.

Initial screening using ammonia screening tool version 4.5 has indicated that emissions from Myrepole Farm will only have a potential impact on the SPA and Ramsar sites with a precautionary critical level of 1µg/m3 if they are within 5,352 metres of the emission source.

Beyond 5,352 metres the PC is less than 0.04µg/m3 (i.e. less than 4% of the precautionary 1µg/m3 critical level) and therefore beyond this distance the PC is insignificant. In this case all the SPAs and Ramsars are beyond this distance (see table below) and therefore screen out of any further assessment.

Where the precautionary level of 1µg/m3 is used, and the 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 1µg/m3 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 – SPA and Ramsar Assessment**

<b>Name of SPA/Ramsar</b>	<b>Distance from site (m)</b>
Ribble & Alt Estuaries SPA	10,049
Morecambe Bay and Duddon Estuary SPA	9,542
Ribble & Alt Estuaries Ramsar	10,049
Morecambe Bay Ramsar	9,542

### **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 (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 Myrepole Farm will only have a potential impact on the LWS sites with a precautionary critical level of 1µg/m3 if they are within 673 metres of the emission source.

Beyond 673 metres the PC is less than 1µg/m<sup>3</sup> and therefore beyond this distance the PC is insignificant. In this case all LWSs are beyond this distance (see table below) and therefore screen out of any further assessment.

**Table 2 – LWS Assessment**

<b>Name of LWS</b>	<b>Distance from site (m)</b>
Carr House Green Common LWS	977
Lancaster Canal Whole Length in Lancashire	1,890



## 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.  The decision was taken in accordance with our guidance on confidentiality.
<b>Consultation</b>	
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"> <li>• Environmental Health;</li> <li>• Health and Safety Executive;</li> <li>• Director of Public Health; and</li> <li>• Public Health England</li> </ul> The comments and our responses are summarised in the <a href="#">consultation section</a> .
<b>The facility</b>	
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', Appendix 2 of RGN 2 'Defining the scope of the installation', Appendix 1 of RGN 2 'Interpretation of Schedule 1', guidance on waste recovery plans and permits.  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.
<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	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

Aspect considered	Decision
	<p>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 in accordance with our guidance.</p> <p>See Key Issues 'Ammonia emissions' section for further information.</p>
<b>Environmental risk assessment</b>	
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> <p>The assessment shows that, applying the conservative criteria in our guidance on environmental risk assessment, all emissions may be categorised as environmentally insignificant.</p> <p>See Key Issues 'Ammonia emissions' section 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> <p>The operating techniques are as follows:</p> <ul style="list-style-type: none"> <li>• fan ventilated house with a fully littered floor equipped with non-leaking drinking systems;</li> <li>• selection of diets used to reduce nitrogen;</li> <li>• phosphorus levels are reduced and recorded over the rearing and production cycle;</li> <li>• housing is well insulated with a damp proof course</li> <li>• dirty water storage facilities are in place;</li> <li>• mortalities removed daily and kept in sealed bins</li> <li>• the biomass boiler appliance and it's installation meets the technical criteria to be eligible for the Renewable Heat Incentive; and</li> <li>• the biomass boiler stack is 1 metre or more higher than the apex of the adjacent buildings.</li> </ul> <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>

Aspect considered	Decision
	<p>We consider that the odour management plan is satisfactory.</p> <p>See Key Issues 'Odour' section of the 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 Key Issues 'Noise' section of the 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.</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> <p>See Key Issues 'Biomass Boiler' section for further information.</p>
Emission limits	<p>Emission Limit Values (ELVs) or equivalent have been set for the following substances in accordance with relevant BAT:</p> <ul style="list-style-type: none"> <li>• Nitrogen: 0.6 kg N/animal place/year</li> <li>• Phosphorus: 0.25 kg P2O5 animal place/year</li> <li>• Ammonia: 0.08 kg NH3/animal place/year</li> </ul>
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> <p>See the key issues of the decision section of this decision document for further information. We made these decisions in accordance with BAT conclusion document dated 21st February 2017.</p>
Reporting	<p>We have specified reporting in the permit. We made these decisions in accordance with the relevant BAT measures.</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> <p>The decision was taken in accordance with the guidance on operator competence and how to develop a management system for environmental permits.</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>

Aspect considered	Decision
	<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>
Public Health England – received on 04/06/2018
<b>Brief summary of issues raised</b>
No significant concerns regarding the proposal. However, due to sensitive receptors within 400 metres of the site the permit should contain conditions to ensure that noise, odour, fugitive emissions of ammonia and dust do not impact public health.
<b>Summary of actions taken or show how this has been covered</b>
No action required – standard conditions included in the permit.