

Permitting decisions

Variation

We have decided to grant the variation for Worlingworth Poultry Unit operated by Crown Chicken Limited.

The variation number is EPR/QP3637MN/V004.

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

Purpose of this document

This decision document provides a record of the decision making process. It:

- highlights [key issues](#) in the determination;
- summarises the decision making process in the [decision checklist](#) to show how all relevant factors have been taken into account; and
- shows how we have considered the [consultation responses](#).

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

Read the permitting decisions in conjunction with the environmental permit 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

The new conclusions on Best Available Techniques (BAT) for the Intensive Rearing of poultry or pigs (IRPP) were published on 21/02/17. This sets out the standards that permitted farms will have to meet. It is available here: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017D0302&from=EN>.

There are some new requirements for permit holders. The conclusions include BAT-Associated Emission Levels (BAT-AELs) for ammonia emissions, which will apply to the majority of permits, as well as BAT-AELs for nitrogen and phosphorus excretion. BAT-AELs provide us with a performance benchmark to determine whether an activity is BAT.

All new housing within variation applications issued after the 21/02/17 must be compliant in full from the first day of operation.

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.

Review of BAT conclusions

There are 34 BAT conclusions in total. The Operator has confirmed their compliance with all BAT conditions for the new housing in their document reference 'Technical Standards' (received on 27/06/19).

The following is a more specific review of the measures the Operator has applied to ensure compliance with the key BAT measures:

BAT measures	Operator compliance measures
BAT 3 – Nutritional management – Nitrogen excretion	The Operator has confirmed it will demonstrate levels of Nitrogen excretion below the required BAT-AEL of 0.6 kg N/animal place/year.
BAT 4 – Nutritional management – Phosphorus excretion	The Operator has confirmed it will demonstrate levels of Phosphorus excretion below the required BAT-AEL of 0.25 kg P ₂ O ₅ animal place/year.
BAT 24 – Monitoring of emissions and process parameters – total Nitrogen and Phosphorus excretion	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 – odour emissions	The Operator has committed to undertaking daily sniff testing around the site to detect odour. The location of monitoring will vary depending on the wind direction. Litter conditions within the poultry housing is also monitored daily to manage capping and the associated risk of odour.
BAT 27 – Monitoring of emissions and process parameters – dust emissions	Table S3.3 of the permit concerning process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT conclusions.

BAT measures	Operator compliance measures
BAT 32 – Ammonia emissions from poultry houses – broilers	The BAT-AEL to be complied with is 0.08 kg NH ₃ /animal place/year as the installation does not include an air abatement treatment facility. The Operator will meet this as the standard emission factor for broilers is 0.034 kg NH ₃ /animal place/year.

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 Worlingworth Poultry Unit (dated 31/10/06) 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.’

Section 3.3 of the EPR 6.09 guidance states that 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 400 metres of the installation boundary. It is appropriate to require an OMP when such sensitive receptors have been identified within 400 metres 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 as follows:

- Feeds which lead to increased excretion, litter moisture and emissions of ammonia and other odorous compounds.
- Spillage of feed during deliveries to the site.
- Inadequate ventilation in the livestock units leading to poor dispersion of air.
- High moisture content in the litter within the livestock units.
- Release of odours during the catching of livestock at the end of the rearing cycles.
- Release of odours during the cleanout of the livestock units.
- Collection and potential stagnation of water used to clean the livestock units.
- Storage of carcasses.
- Poor livestock health.

Review of Odour Management Plan

We have reviewed the OMP and the H1 risk assessment for odour and conclude that the Operator has followed the guidance set out in EPR 6.09 Appendix 4 ‘Odour management at intensive livestock installations’. The Operator has described routine measures used to prevent the formation and release of odour from the facility and they have proposed contingency measures to be implemented in the event of abnormal operations or the detection of odours outside of the site boundary.

The OMP contains a monitoring procedure which includes daily sniff testing for odour and checks on the quality of litter within the livestock units. The OMP also contains a complaints procedure, which will ensure that the Operator responds promptly to any reports of odour from the site. The Operator will review their OMP at least once per year to ensure that the measures are effective in minimising the risk of odour from their permitted facility.

Conclusion

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. It states in section 3.4 of this guidance that a noise management plan must be approved as part of the permitting determination if, as is the case here, there are sensitive receptors within 400 metres of the installation boundary.

Condition 3.4 of the permit also 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.’

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

- Vehicles travelling to and from the facility.
- Deliveries of feed, fuel and other supplies to the facility.
- Operation of ventilation fans and other machinery on site.
- Timing of operations, including maintenance and repairs of plant and infrastructure on site.
- Operation of feeding systems.
- Removal of litter at the end of the rearing cycles.
- Noise from livestock.

Review of Noise Management Plan

We have reviewed the NMP and the H1 risk assessment for noise and conclude that the Operator has followed the guidance set out in EPR 6.09 Appendix 5 'Noise management at intensive livestock installations'. The Operator has described preventative measures to minimise noise from the facility and a complaints procedure is provided to ensure that any reports of noise are promptly investigated. The Operator will review their NMP at least once per year to ensure that the actions are effective in minimising noise from the facility.

Conclusion

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

Guidance on our website states that applicants need to produce and submit a dust and bioaerosol management plan with their applications if there are relevant receptors within 100 metres of their farm, including farmhouse and farm worker's houses. Further details are available here: www.gov.uk/guidance/intensive-farming-risk-assessment-for-your-environmental-permit#air-emissions-dust-and-bioaerosols.

There are six sensitive receptors present within 100 metres of the Worlingworth Poultry Unit installation boundary. The nearest sensitive receptor is located approximately 10 metres to the west of the installation boundary.

There are measures included within the permit (the 'Fugitive Emissions' conditions) to provide a level of protection, such as condition 3.2.1 ('Emissions of substances not controlled by an emission limit'). 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.

Review of Dust and Bioaerosol Management Plan

The use of Best Available Techniques and good management of the installation will reduce the potential for emissions impacting the nearest receptors. The Operator will implement the following techniques to reduce dust:

- Feed is milled and mixed off-site. This will initially be delivered as a crumb for the chicks and will then be in pellet form.
- Feed is stored in enclosed silos which are protected from collision damage.
- Spillages which occur during deliveries of feed are immediately cleared.

- All of the rearing units are primarily ventilated using high velocity roof fans greater than 5.5 metres from the ground and an efflux velocity of at least 7 metres per second.
- Vents on the livestock rearing units are cleaned after each cycle.
- Gable-end fans are operated intermittently in warm weather to maintain optimum conditions for livestock. These fans are not used during cleanout of the units.
- Vegetation acts as an external barrier between the gable-end fans and the nearest sensitive receptors, which should create turbulence in the exhaust flow. This is in accordance with conclusion 13c on BAT for the IRPP.
- Dust-extracted straw/ wood shavings are unwrapped within the livestock rearing units. The high velocity ventilation will be used to limit workers' exposure to dust during placement of the litter.
- The livestock rearing units are cleared soon after collection of the broilers. Trailers used for collecting litter are covered whilst not loading.
- Litter is exported off-site.
- A complaints procedure is included within the Operator's Dust and Bioaerosol Management Plan (DBMP).
- The DBMP is to be reviewed by the Operator at least once per year to ensure that the measures are effective in minimising the risks of dust and bioaerosol emissions from the facility.

Conclusion

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

Ammonia

There are no Special Areas of Conservation, Special Protection Areas, Ramsar sites or Sites of Special Scientific Interest located within 5 kilometres of the installation. There are also no Ancient Woodlands or Local Nature Reserves but there are three Local Wildlife Sites (LWS) within 2 kilometres of the installation.

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_e) or critical load (CL_o) then the farm can be permitted with no further assessment.

Initial screening using ammonia screening tool version 4.5 has indicated that emissions from Worlingworth Poultry Unit will only have a potential impact on the LWS with a precautionary critical level of 1µg/m³ if they are within 548 metres of the emission source.

Beyond 548 metres the PC is less than 1µg/m³ 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 1 – LWS Assessment

Name of LWS	Distance from site (m)
RNR 199	1,745
Old Rectory Meadow	1,971
RNR 193	1,112

Decision checklist

Aspect considered	Decision
Receipt of application	
Confidential information	A claim for commercial or industrial confidentiality has not been made.
Identifying confidential information	We have not identified information provided as part of the application that we consider to be confidential.
Consultation	
Consultation	<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"> • Local Planning Authority – East Suffolk • Local Authority Environmental Health – East Suffolk • Health and Safety Executive • Public Health England • Director of Public Health <p>The comments and our responses are summarised in the consultation section.</p>
The site	
Extent of the site of the facility	<p>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.</p> <p>The extent of the permit has been reduced to exclude a residential dwelling from the permit boundary. The land associated with this dwelling has not been used in connection with the permitted facility and appears to have been previously included in the permit in error.</p>
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 in accordance with our guidance.</p>
Environmental risk assessment	
Environmental risk	We have reviewed the Operator's assessment of the environmental risk from the facility.

Aspect considered	Decision
	The Operator's risk assessment is satisfactory.
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 operator 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>
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	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).
Use of conditions other than those from the template	Based on the information in the application, we consider that we do not need to impose conditions other than those in our permit template.
Emission limits	<p>ELVs based on BAT have been set for the following substances: ammonia, nitrogen and phosphorus.</p> <p>These ELVs are immediately applicable to the new housing (numbered 1 – 6) and they will apply to the existing housing (numbered 10 – 12) from 21/02/21.</p> <p>These emission limits have been imposed in order to implement the BAT conclusions.</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>Monitoring has been set for the following substances: ammonia, nitrogen, phosphorus and dust.</p> <p>Monitoring of emissions from existing housing (numbered 10 – 12) is required from 21/02/21.</p> <p>These monitoring requirements have been imposed in order to implement the BAT conclusions.</p>
Reporting	We have specified reporting in the permit to implement 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.

Aspect considered	Decision
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 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

Response received from
Public Health England (PHE)
Brief summary of issues raised
<p>PHE noted that the Applicant had not assessed the impact of ammonia on human health or included a bioaerosol risk assessment in their application.</p> <p>PHE also noted that the Applicant had not submitted a detailed accident management plan or a site condition report with this application.</p> <p>PHE further commented that they are currently updating their position statement on the impacts of exposure to bioaerosols from intensive livestock rearing units, and that application of Best Available Techniques (BAT) should ensure that emissions from the facility present a low risk to human health.</p>
Summary of actions taken or show how this has been covered
<p>An environmental risk assessment has been provided for dust, which encompasses bioaerosols. We have reviewed the Operator's Dust and Bioaerosol Management Plan and consider that this demonstrates BAT. Conditions 3.2.1, 3.2.2 and 3.3.1 in the permit will also ensure that fugitive emissions and odours are controlled from the facility.</p> <p>The Health Protection Agency (now PHE) stated in their Position Statement (Intensive Farming, 2006) that ammonia emissions from a well-run and regulated farm would be unlikely to be sufficient to cause ill health. Whilst the potential adverse effects of ammonia include respiratory irritation and may also give risk to odour complaints, levels of ammonia in ambient air decrease rapidly with distance from a source.</p> <p>The Operator's measures to minimise emissions from the Installation, which will also minimise ammonia emissions, are included in its Odour Management Plan and Dust and Bioaerosol Management Plan. We have assessed these Plans and have determined that they represent BAT for this activity.</p> <p>We have not required an updated accident management plan to be submitted as part of this application as the changes do not significantly alter the accident risk posed by the site. The Operator was previously permitted to rear 230,000 broilers and to utilise associated infrastructure (including feed silos and fuel storage).</p> <p>Applicants are required to submit updated site condition reports where a variation increases the permitted area. In this instance, the replacement of housing is within the footprint of the existing site and there is no increase to the permit boundary. A site condition report was therefore not required with this application.</p>

Response received from
Local Authority Environmental Health (LAEH) – Suffolk
Brief summary of issues raised
LAEH reiterated the comments made by Public Health England and further advised that any effects on air quality from the intensive farming facility be fully considered given the impact that particulate matter can have on the wider public health.
Summary of actions taken or show how this has been covered
<p>As there are sensitive receptors located within 100 metres of the permit boundary, the Operator was required to submit a dust and bioaerosol management plan with their application. We have reviewed the Operator's Dust and Bioaerosol Management Plan and consider the measures it contains to demonstrate BAT for the facility.</p> <p>The 'Fugitive Emissions' conditions of the permit will also ensure that emissions of particulates from the facility are controlled. See the Key Issues section above for further details.</p>