

Environment Agency permitting decisions

Substantial Variation

We have decided to issue the variation for **Court Farm** operated by **Court Farm Chickens Limited**.

The variation number is **EPR/EP3935FY/V005**

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:

- explains how the application has been determined
- provides a record of the decision-making process
- shows how all relevant factors have been taken into account
- justifies the specific conditions in the permit other than those in our generic permit template.

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

Structure of this document

- Key issues
- Annex 1 the decision checklist
- Annex 2 the consultation and web publicising.

Key Issues

The operator has applied for a substantial variation. This is because the application is for a change in poultry broilers numbers from **559,000 to 790,500**, an increase of 231,500. This is above the scheduled activity section 6.9 A (1) (a) (i) threshold of 40,000. Therefore in line with our regulatory guidance this is a substantial variation (Substantial Changes RGN No.8 Guidance).

Overview

The operator is applying for increasing broiler numbers as detailed above. This is based on an increase in land area within Block A of the installation boundary and the addition of four new poultry houses.

Two new biomass boilers are added, linked to heating poultry houses, in block B within the installation boundary. These two boilers are of a total thermal input of 2,176 kWh. The addition of these biomass boilers does not increase the installation boundary for Block B.

Other than the addition of biomass boilers for Block B within the installation, the production cycle and operating practices of the farm will be in line with the existing permit. The four new poultry houses will be drained in a similar way as current poultry houses.

The installation consists of three blocks with bird numbers after this variation as follows:

- Block A - 300,000 ; increased with this variation
- Block B – 305,500 ; no change with this variation
- Block C – 185,000 ; no change with this variation

The operator has submitted an overall environmental assessment for the installation covering poultry production, use of vehicles within installation ,carcass disposal and covering odour, noise and ammonia emissions.

The only environmental impact to be assessed with this variation is the ammonia emissions impact on habitat sites with the change in broiler numbers.

The key permit changes for this variation are as follows:

- S1.1 activities table updated for new broiler numbers
- S1.2 operating techniques table updated for techniques linked to new broiler numbers and new biomass boilers
- S3.1 and S3.2 emission location tables updated.

The permit changes linked to Industrial Emissions Directive have already been added within previous variation EPR/EP3935FY/V004

Ammonia Emissions

There is one site which is both a Special Area of Conservation (SAC) and a Special Protection Area (SPA) located within 10km of the installation. There is also one Sites of Special Scientific Interest (SSSI) located within 5 kilometres of the installation. There is are also ten other conversation sites within 2km of the installation.

We have carried out a pre-screening assessment on operator application environmental impacts. This is based on usage of our Ammonia Screening Tool AST v.4.4 (report dated 6th May 2015)

All the habitat sites screen out utilising the Ammonia Screening Tool report.

The details of the assessment are provided below.

Ammonia Assessment – SAC / SPA / Ramsar sites

The following trigger thresholds have been designated for assessment of European sites including Ramsar 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 overlapping in combination assessment will be completed where existing farms are identified within 10km of the application.

River Wye SAC/SPA

This is an aquatic feature with negligible information on sensitive features in the waters. With the low risk of acidification and the likely dominance of other diffuse sources of nitrogen we have concluded that the application of critical levels for ammonia and critical loads for nitrogen and acid deposition for this habitat site is not appropriate.

The advice from Natural England June 11 2014 still applied. This is specifically that given the absence of information on direct damage to this type of vegetation, the low risk of acidification and the likely dominance of other (diffuse, aquatic) sources of nitrogen - the application of the critical level for atmospheric ammonia is not considered defensible at this time.

Therefore no further assessment is necessary for these sites.

Ammonia Assessment – SSSI's

The following trigger thresholds have been applied for assessment of SSSI's. 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. The operator has utilised detailed modelling to confirm installation process contributions.

River Wye SSSI

The same justification applies as for River Wye as a SAC/SPA.

Hence no further assessment is required for this habitat site.

Ammonia assessment - LWS/AW/LNR.

There are 10 Local Wildlife Sites (LWS) / Ancient Woodland / Local Nature Reserves within 2 km of this installation. The following trigger thresholds have been applied for the assessment of these sites.

1. If PC is < 100% of relevant Critical Level or Load, then the farm can be permitted (H1 or ammonia screening tool)
2. If further modelling shows PC <100%, then the farm can be permitted.

Sites that screen out as PC's < 100 %.

For the following sites this farm has been screened out at Stage 1, as set out above, using results of the Ammonia Screening Tool version 4.4 dated 06/05/15.

Table 1 – Ammonia emissions

Site	Critical level ammonia $\mu\text{g}/\text{m}^3$	Predicted PC $\mu\text{g}/\text{m}^3$	PC % of Critical level
Woodlands around Weaver Hill	1*	0.204	20.4
Two ponds at Brom-y-Close	1*	0.269	26.9
Mynde Wood	1*	0.204	20.4
Lady Coppice	1*	0.310	31.0
Flat Wood	1*	0.131	13.1
Moor Wood	1*	0.152	15.2
Ellis Grove Wood	1*	0.364	36.4
Cockshoot Rough	1*	0.139	13.9
Helen's Wood	1*	0.364	36.4
Athelstan's and Rough Hill Woods and The Crickets	1*	0.313	31.3

*A precautionary critical level of 1 µg/m³ has been assigned to this site. Where the precautionary level of 1 µg/m³ is used, and the PC is assessed to be less than the 100% insignificance threshold in this circumstance it is not necessary to further consider nitrogen deposition or acid deposition critical load values.

On the above basis no further assessment is necessary.

Therefore overall the installation impacts on all the relevant habitat sites screen out and therefore there is no significant impact from installation on these habitat sites.

Groundwater and soil monitoring

The Industrial Emissions Directive soil and ground water condition has already been added to this permit within previous variation EPR/EP3539KS/V004.

The addition of two new poultry houses has led to an increase in the installation boundary and therefore the requirement for an updated site condition report.

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 dated March 2015 is updated within this variation application to cover the variation changes. The operator has provided a new site location plan and new site drainage plans for blocks A and B.

The surrounding land is predominantly used for arable farming. There are some small villages in the area.

The site itself is relatively flat or gently undulating. Historically the land has been used for arable farming production.

The site is neither within a Groundwater Source Protection Zone nor a flood plain.

Our technical review of this specific former land usage is as follows.

- There is no record of installation area land contamination.
- There is no record of any usage of the installation area except for agricultural usage.
- The site is not within a Source Protection Zone.

Therefore the conclusion is there is a low risk of historic groundwater and land contamination due to former activities within installation boundary.

Therefore, although condition 3.1.3 is included in the permit, no groundwater monitoring will be required at this installation as a result.

Biomass boilers

Biomass boiler assessment.

The operator is varying their permit to include two biomass boilers with a net rated maximum thermal input of 2,176 kWh in total to heat Block B poultry houses. There are now in total five biomass boilers within the installation with a total thermal input of 3,670 kWh.

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;

For poultry:

- A. the aggregate net rated thermal input is less than 0.5MW_{th}, or:
- B. the aggregate boiler net rated thermal input is less than or equal to 4 MW_{th}, and no individual boiler has a thermal input greater than 1 MW_{th}, and;
 - the stack height must be a minimum of 5 meters above the ground (where there are buildings within 25 meters the stack height must be greater than 1 meter above the roof level of buildings within 25 meters) and;
 - there are no sensitive receptors within 50 meters 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 boilers.

The Environment Agency's risk assessment has shown that the biomass boilers do not fully meet the requirements of criteria A **or B above**

The total aggregated thermal input for the installation does fall below 4 MW_{th} option and the stack height criteria is complied with. However the block A and C biomass boilers are marginally above 1 MW_{th} (1.088 MW_{th} for Block A and 1.084 MW_{th} for block C). For Blocks A and B there are no sensitive receptors within 200 metres of the emission points. For Block C the biomass boiler emission point is beyond 50 metres from the closest sensitive receptor (NGR 350323, 339216) at approximately 70 metres, although the residential property is within 50 metres of the installation boundary.

In addition for each of the three blocks A, B and C the maximum thermal input only any one block is 2.176 MW_{th}. The blocks are approximately 500 metres apart.

Conclusion

As such based on above reasoning it is considered this is a marginal case of being only just beyond criteria B requirements to be screened out. In reality, from our experience of similar applications, a more detailed assessment would screen out the impacts from the biomass emissions as having insignificant environmental impact on human health and the environment.

In terms of virgin wood chip/pellet storage the biomass facility maximum timber storage capacity is 350 tonnes. Boiler Ash is to be securely stored before being spread to land under a waste exemption.

In addition the variation application includes a biomass boiler specific accident management plan, overall site emergency plan and H1 accident management plan risk assessment with fire precautions and procedures in place to respond to any potential fire linked to operation of biomass boilers.

Odour

There are multiple sensitive receptors within 400 metres of the installation and therefore an odour management plan has been prepared. The residential properties are grouped across blocks A, B and C as follows:

Block A

Receptor Name	Description	Distance	Orientation	National Grid Reference
Group of housing at Tump Lane	Residential approximately 40 property's	250m to nearest	North North West	Central Grid Reference 2349758,230542
Group of Housing at Much Birch Village	Residential approximately 40 property's	270m to nearest	North North East	Central Grid Reference 350318,230538
Residence	Residential	374m	West South West	349481,230127

Block B

Receptor Name	Description	Distance	Orientation	National Grid Reference
Group of Housing at Much Birch Village	Residential approximately 40 property's	320m to nearest	North	Central Grid Reference 350318,230538
Residence	Residential	320m	North East	350742,230113

Block C

Receptor Name	Description	Distance	Orientation	National Grid Reference
Residence	Residential	70m	North East	350384,229405
Residence	Residential	40m	South	350323,229216
Residence	Residential	85m	South West	350283,229181

There is no history of odour complaints from local residents linked to the installation activities over last three years.

In addition it should be noted that the direction of the extension of the installation boundary for block A to the south is not leading to the scheduled activities being carried out any closer to residential properties.

An Odour Management Plan has been submitted with this application. The OMP consists of:

- Duly making response with more detailed OMP including list of sensitive receptors, application of Poultry Code of Practice Checklist giving more details on appropriate measures for odour pollution minimisation beyond installation boundary plus procedures on odour monitoring and complaints management.

The OMP covers feed selection, feed storage and containment, ventilation design, techniques to manage wash down and litter management.

Overall there is the potential for odour pollution from the installation. However the risk of odour pollution beyond the installation boundary is considered insignificant.

Noise

There are sensitive receptors within 400 metres of the installation boundary as stated above in the odour review. The applicant has hence provided a noise risk assessment and a noise management plan within their supplementary application information.

Operations with the most potential to cause noise nuisance have been assessed as those involving feed delivery, removal of finished- weight birds and used litter from the site where main source of noise is vehicle engines plus noise from ventilation fans.

The noise management plan covers control measures for each of these potential noise hazards.

The management plan includes a commitment to assess noise levels during such activities and optimise vehicles and procedures to minimise noise.

There is no history of noise complaints linked to the existing poultry farm.

Clean out and repair/maintenance work are limited except under emergency scenarios to between 0700 and 1800. In addition standby generator test runs have been limited to taking place between 0800 and 1800.

Overall there is the potential for noise from the installation beyond the installation boundary. However the risk of noise beyond the installation boundary is considered insignificant.

Annex 1: decision checklist

Aspect considered	Justification / Detail	Criteria met
		Yes
Scope of consultation	The consultation requirements were identified and implemented. The decision was taken in accordance with RGN 6 High Profile Sites, our Public Participation Statement and our Working Together Agreements. The application was sent for consultation with <ul style="list-style-type: none">Herefordshire Council Health DepartmentHSE	✓
Responses to consultation and web publicising	The web publicising and consultation responses (Annex 2) were taken into account in the decision. No consultations comments were received. The decision was taken in accordance with our guidance.	✓
Operator		
Control of the facility	We are satisfied that the applicant (now the operator) is the person who will have control over the operation of the facility after the grant of the permit. The decision was taken in accordance with EPR RGN 1 Understanding the meaning of operator.	✓
European Directives		
Applicable directives	All applicable European directives have been considered in the determination of the application.	✓
The site		
Extent of the site of the facility	The operator has provided a plan which we consider is satisfactory, showing the extent of the site of the facility. There is a change to the installation boundary and hence the installation plan has been amended.	✓
Site condition report	The operator has provided a description of the condition of the site in the original permit application. The updated site condition report is accepted as per discussion in key issues section above. The decision was taken in accordance with our guidance on site condition reports and baseline reporting under IED – guidance and templates (H5).	✓
Biodiversity, Heritage, Landscape and Nature Conservation	The application is within the relevant distance criteria of sites of heritage, landscape or nature conservation, and/or protected species or habitat. A full assessment of the application and its potential to affect the sites has been carried out as part of the permitting process. We consider that the application will not affect the features of the sites. Please refer to section 'Ammonia Assessment' in Key Issues above. We have sent an appendix 11 to Natural England for information only. An Appendix 4 has been completed and saved to public register for the SSSI. The decision was taken in accordance with our guidance.	✓
Environmental Risk Assessment and operating techniques		
Environmental risk	We have reviewed the operator's assessment of the environmental risk from the facility. The operator's risk assessment is satisfactory. The assessment shows that, applying the conservative criteria in our guidance on Environmental Risk Assessment, all emissions may be categorised as environmentally not significant.	✓
Operating techniques	We have reviewed the techniques used by the operator and compared these with the relevant guidance notes. The operator has provided operating techniques for the new poultry houses, revised site drainage and biomass boilers.	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	<p>These are included in the technical standards document within supplementary application information plus additional operating procedures for the biomass boilers and an updated accident management plan linked to fire risk minimisation for the boilers.</p> <p>The maximum storage capacity for the biomass feed for the boilers, spread across the three blocks linked to the installation, is 350 tonnes per annum. The boiler ash is spread to land under a waste exemption.</p> <p>Table S1.2 has been updated with the variation changes.</p> <p>The proposed techniques for priorities for control are in line with the benchmark levels contained in the TGN and we consider them to represent appropriate techniques for the facility. The permit conditions ensure compliance with relevant BREFs and BAT Conclusions, and ELVs deliver compliance with BAT-AELs.</p>	
The permit conditions		
Incorporating the application	<p>We have specified that the applicant must operate the permit in accordance with descriptions in the application, including all additional information received as part of the determination process.</p> <p>These descriptions are specified in the Operating Techniques table S1.2 in the permit.</p>	✓
Operator Competence		
Environment management system	<p>There is no known reason to consider that the operator will not have the management systems to enable it to comply with the permit conditions. The decision was taken in accordance with RGN 5 on Operator Competence.</p>	✓
Relevant convictions	<p>The National Enforcement Database has been checked to ensure that all relevant convictions have been declared. One relevant conviction has been found in 2010. This was linked to operating without a permit. The operator responded promptly and has had a permit since the end of 2009. Our compliance team has confirmed the operator has complied with their permit since issue and has operated the installation in an effective manner without environmental incidents.</p> <p>The operator satisfies the criteria in RGN 5 on Operator Competence.</p>	✓

Annex 2: Consultation and Web Advertising.

Summary of responses to consultation and the way in which we have taken these into account in the determination process

No comments have been received.