

Intensive Farming Decision Document

Variation

We have decided to issue the variation for Beck House Poultry Farm operated by Mr John Howard Mitchinson and Mrs Barbara Mitchinson.

The permit number is EPR/LP3530UB.

The variation number is EPR/LP3530UB/V004.

This was applied for and determined as a substantial variation.

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 responses

Key Issues

Industrial Emissions Directive (IED)

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

No site condition report was submitted with the original application for 'Site 1' farm; however, it was constructed on a greenfield site with no known contamination in the past or subject to any previous hazards. The site condition report (SCR) submitted for 'Site 2' with application EPR/LP3530UB/V003 on 04 October 2010 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.

Biomass boilers

The applicant is varying their permit to include 7 biomass boilers with a net rated thermal input of 1.55 MW.

In line with the Environment Agency's May 2013 document (amended October 2014) "Biomass boilers on EPR Intensive Farms", an assessment has been undertaken to consider the proposed addition of the biomass boilers.

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;
 - 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 boiler(s).

The Environment Agency's risk assessment has shown that the biomass boiler(s) meet the requirements of criteria B 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 emissions

There are 2 Special Areas of Conservation (SAC) sites located within 10 kilometres of the installation. There is 1 Site of Special Scientific Interest (SSSI) located within 5 km of the installation. There are also 3 Ancient Woodlands (AW) within 2 km of the installation.

Ammonia assessment – SAC/SPA/Ramsar sites

The following trigger thresholds have been designated for the assessment of European sites:

1. If the process contribution (PC) is below 4% of the relevant critical level (CL_e) or critical load (CL_o) then the farm can be permitted with no further assessment.
2. Where this threshold is exceeded an assessment alone and in combination is required.
3. An in combination assessment will be completed to establish the combined PC for all existing farms identified within 10 km of the application.

Screening using the ammonia screening tool (version 4.4) has determined that the PC on the SAC for ammonia, acid and nitrogen deposition from the application site are under the 4% significance threshold and can be screened out as having no likely significant effect. See results below.

CL_o for nitrogen and acid has not been included in the assessment as the SAC is designated mainly for aquatic features. However, APIS has specified a CL_o for 'Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea'. This standing water vegetation may be affected by any potential nitrogen deposition from intensive farming activities. The Joint Nature Conservation Committee (JNCC) website indicates that this particular feature of the River Eden SAC is located at Ullswater lake. Ullswater is located approximately 23 km away from Beck House Poultry Farm. The screening indicates that emissions from Beck House Poultry Farm will only have a potential impact on the site with a critical level of 1 µg/m³ if they are within 5,635 metres of the emission source.

Table 1 – Ammonia emissions

Site	Critical level ammonia µg/m ³	Predicted PC µg/m ³	PC % of Critical level
River Eden SAC	3*	0.068	2.3

* The ammonia critical level for the River Eden SSSI, SAC is 3 µg/m³ for the protection of higher plants (general vegetation) (July 2013).

The ammonia impact on the second SAC within 10 km of Beck House Poultry Farm can be screened out due to distance criteria.

Screening using ammonia screening tool (version 4.4) has indicated that emissions from Beck House Poultry Farm will only have a potential impact on sites with a critical level of $1 \mu\text{g}/\text{m}^3$ if they are within 5,635 metres of the emission source. Screening indicates that beyond this distance, the PC at conservation sites is less than $1 \mu\text{g}/\text{m}^3$. $1 \mu\text{g}/\text{m}^3$ is 4% of the $1 \mu\text{g}/\text{m}^3$ CLe and therefore beyond this distance the PC is insignificant. The identified SAC is beyond this distance. Therefore, the site screens out for airborne ammonia.

No further assessment is necessary.

Table 2 – distance from source

Site	Distance (m)
Cumbrian Marsh Fritillary Site	6,768

Ammonia assessment – SSSIs

There is 1 SSSI within 5 km of Beck House Poultry Farm. The following trigger thresholds have been applied for the assessment of these sites.

1. If PC is <20% of relevant critical level or load, then the farm can be permitted (H1 or ammonia screening tool)
2. If further modelling shows PC <20%, then the farm can be permitted.

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).

Screening using ammonia screening tool (version 4.4) has indicated that emissions from Beck House Poultry Farm will only have a potential impact on sites with a critical level of $1 \mu\text{g}/\text{m}^3$ if they are within 1,971 metres of the emission source. Screening indicates that beyond this distance, the PC at conservation sites is less than $1 \mu\text{g}/\text{m}^3$. $1 \mu\text{g}/\text{m}^3$ is 20% of the $1 \mu\text{g}/\text{m}^3$ CLe and therefore beyond this distance the PC is insignificant. The identified SSSI is beyond this distance.

Table 3 – distance from source

Site	Distance (m)
River Eden and Tributaries	3,996

The PC at these sites has been screened as insignificant. It is possible to conclude no significant pollution will occur at these sites and no further assessment is required.

Ammonia assessment - AW

There are 3 Ancient Woodland (AW) within 2 km of Beck House Poultry Farm. The following trigger thresholds have been applied for the assessment of these sites.

3. If PC is <100% of relevant critical level or load, then the farm can be permitted (H1 or ammonia screening tool)
4. If further modelling shows PC <100%, then the farm can be permitted.

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).

Screening using ammonia screening tool (version 4.4) has indicated that emissions from Beck House Poultry Farm will only have a potential impact on sites with a critical level of $1 \mu\text{g}/\text{m}^3$ if they are within 689 metres of the emission source. Screening indicates that beyond this distance, the PC at conservation sites is less than $1 \mu\text{g}/\text{m}^3$. $1 \mu\text{g}/\text{m}^3$ is 100% of the $1 \mu\text{g}/\text{m}^3$ CLE and therefore beyond this distance the PC is insignificant. In this case all AW are beyond this distance.

Table 4 – distance from source

Site	Distance (m)
Gill Beck Wood	1,132
Raughtongull Wood	2,097
Nebsters Wood	2,187

The PC at these sites has been screened as insignificant. It is possible to conclude no significant pollution will occur at these sites and no further assessment is required.

Odour

The application included an Odour Management Plan (OMP) due to sensitive receptors being located within 400m of the installation.

To manage the potential for impact, we required the operator to create and implement an OMP to ensure that the site is managed in such a way that the risk of odour nuisance to the local amenity is minimised as far as practicable. It details control measures for the management and control of odour on site. The operator is required to periodically review the OMP to ensure its continued suitability for this installation.

The OMP was assessed against the Poultry Industry Good Practice Checklist. This document has been jointly produced by the Environment Agency, British Egg Council, British Poultry Council and the National Farmers Union. Operators undertaking measures set out in this document are considered to be operating in line with Best Available Techniques.

The operator submitted a revised OMP based upon the recommendations from the above assessment. While we accept the measures specified, elements of the OMP require further improvement. However, for the purposes of determining the variation application, we are happy to agree the plan. Since

commencing operations in 2007, no odour complaints have been received. Additionally, the closest residential property is 365 m away (Lough Cottage). The low risk nature of the site has meant that we have taken a decision to accept the OMP in its current format. Improvements to the OMP will be undertaken during the ongoing regulation of Beck House Poultry Farm.

Annex 1: decision checklist

Aspect considered	Justification / Detail	Criteria met
		Yes
Consultation		
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.	✓
Responses to consultation and web publicising	The web publicising and consultation responses (Annex 2) were taken into account in the decision. 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 permit implements the requirements of the industrial emissions directive.	✓
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. A plan is included in the permit and the operator is required to carry on the permitted activities within the site boundary.	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
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>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 site</p> <p>In accordance with the Environment Agency's Air Quality Technical Advisory Guidance 14: "for combustion plants under 5MW, no habitats assessment is required due to the size of combustion plant". Therefore this proposal is considered acceptable and no further assessment is required.</p> <p>An Appendix 11 dated 08 April 2015 has been produced which has been sent to Natural England for information only. An Appendix 4 has also been completed. No consultation with Natural England was necessary.</p>	✓
Environmental Risk Assessment and operating techniques		
Environmental risk	<p>We have carried out a risk assessment on behalf of the operator.</p> <p>See Key Issues section for further explanation.</p>	✓
Operating techniques	<p>We have reviewed the techniques used by the operator and compared these with the relevant guidance notes.</p> <p>The operating techniques are as follows:</p> <ul style="list-style-type: none"> • the fuel is derived from virgin timber, • the biomass boiler appliance and it's installation meets the technical criteria to be eligible for the Renewable Heat Incentive; and • the stacks are 1m or more higher than the apex of the adjacent buildings. <p>The proposed techniques for priorities for control are in line with the benchmark levels contained in the Sector Guidance Note EPR6.09 and we consider them to</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	represent appropriate techniques for the facility. The permit conditions ensure compliance with relevant BREFs.	
The permit conditions		
Updating permit conditions during consolidation.	<p>We have updated previous permit conditions to those in the new generic permit template as part of permit consolidation. The new conditions have the same meaning as those in the previous permit(s).</p> <p>The operator has agreed that the new conditions are acceptable.</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 appropriate. These materials are never to be mixed with or replaced by, waste.</p>	✓
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 in the permit.</p>	✓
Operator Competence		
Financial provision	There is no known reason to consider that the operator will not be financially able to comply with the permit conditions. The decision was taken in accordance with RGN 5 on Operator Competence.	✓

Annex 2: Consultation and web publicising advertising responses

Local Authority Environmental Health

Response received on 30/03/2015 from
Environmental Health – Eden District Council
Brief summary of issues raised
<p>Eden District Council Environmental Health responded with the following comments:</p> <ol style="list-style-type: none">1. Highlighted that the installation of the seven biomass boilers does not have relevant planning permission.2. Raised concerns of the impact of noise from the installation of the biomass boilers and requested that the applicant provide background noise data to assess the noise impact from the boilers.3. Human health impact from the emissions from the biomass boilers.
Summary of actions taken or show how this has been covered
<ol style="list-style-type: none">1. The Environmental Permitting Regulations do not require planning permission to be in place before we grant or issue an environmental permit or variation for an installation.2. Conditions 3.4.1 and 3.4.2 require the operator to prevent noise emissions outside the site boundary. The closest residential property not owned by the operator is approximately 375 m away from the Beck House Poultry Farm (Lough Cottage). The site has been operating for 8 years. The main sources of noise are from the fans and during clearing out of the sheds. We have had no noise complaints from these or any other noise sources on the farm. Based on our experience the biomass boilers will be a small addition to overall background and are thus judged to be insignificant. Biomass boilers are housed within a building.3. The position statement for biomass boilers at intensive farms screens out the proposal from requiring a quantitative assessment of air emissions. Where a proposal screens out, we consider that it is not likely to pose a significant risk to the environment or human health.

Local Authority Planning

Response received on 18/03/2015 from
Environmental Health – Eden District Council
Brief summary of issues raised
Confirmed that the Eden District Council has no comments on the proposal. All previous planning applications have been approved and there are currently no enforcement cases against the site.
Summary of actions taken or show how this has been covered
No action required

Health and Safety Executive

Response received on 06/03/2015 from
Health and Safety Executive
Brief summary of issues raised
Confirmed that the HSE has no comments on the proposal. There is no record of any recent enforcement action being taken by the HSE.
Summary of actions taken or show how this has been covered
No action required

The application was advertised externally on the GOV.UK website between 02/03/2015 and 30/03/2015 to invite any responses and comments from the general public. No responses were received.