

Environment Agency permitting decisions

Bespoke permit

We have decided to grant the permit for Bentley Farm Poultry Unit operated by Bentley Growers Limited.

The permit number is EPR/RP3135EW/A001

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 of the decision

Ammonia Impacts

There are two Special Areas of Conservation (SAC) and two Ramsar sites within 10km of the site. There are four Sites of Special Scientific Interest (SSSI) within 5km of the site. There are three Local Wildlife Sites (LWS) and one Ancient Woodland (AW) within 2km of the site.

Assessment of Special Areas of Conservation (SAC) and Ramsar sites

The following trigger thresholds have been applied for assessment of SSSI's. 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.

Initial screening using Ammonia Screening Tool (v4.4) has indicated that emissions from Bentley Farm Poultry Unit will only have a potential impact on SACs and Ramsars with the most precautionary critical level of 1 µg/m³ if they are within 3,313m of the emission source. Beyond 3,313m the PC is less than 0.04 µg/m³ (i.e. less than 4% of the 1µg/m³ critical level) and therefore beyond this distance the PC is

insignificant. All SACs and Ramsar sites, except for Midland Meres and Mosses Phase 2 Ramsar, are beyond this distance (see table below).

Where the precautionary critical level of $1\mu\text{g}/\text{m}^3$ is used, and the process contribution is assessed to be less than 4% the site automatically screens out as insignificant, and no further assessment of critical load is necessary. In these cases the $1\mu\text{g}/\text{m}^3$ level used has not been confirmed by Natural England, but it is precautionary. It is therefore possible to conclude no damage on these sites and no further assessment is required.

Table 1 – SAC/Ramsar Distance from Site

Site	Designation	Distance from Bentley Farm (m)
West Midlands Mosses	SAC	7,528
Fenn's, Whixall, Bettisfield, Wem & Cadney Mosses	SAC	6,633
Midland Meres & Mosses - Phase 1	Ramsar	4,854
Midland Meres & Mosses Phase 2	Ramsar	2,846

Midland Meres and Mosses Phase 2 Ramsar site is within 3,313m of the Installation, therefore further assessment is necessary. We have been advised by Natural England to assign Midland Meres and Mosses Phase 2 a Critical Level of $3\mu\text{g}/\text{m}^3$ for the area covered by Brownheath Moss SSSI. Using data from APIS (<http://www.apis.ac.uk>) we have assigned a Critical Load for nitrogen deposition of 10 kg N/ha/year and 1.6 keq/ha/yr for acid deposition (for wet woodland habitat).

Screening using the results of Ammonia Screening Tool v4.4 shows that the process contribution for ammonia, nitrogen and acid deposition will be below the 4% threshold of the Critical Level and Loads (see Table 2 below). It is therefore possible to conclude no damage on this site and no further assessment is required.

Table 2 – Midland Meres & Mosses Phase 2 Ramsar Assessment

Midland Meres & Mosses Phase 2 Ramsar Site	Ammonia	CLe Ammonia	AST Predicted Ammonia PC	PC as % of CLe
		$3\mu\text{g}/\text{m}^3$	$0.053\mu\text{g}/\text{m}^3$	1.8%
	Nitrogen deposition	CLo Nitrogen	AST Predicted Ammonia PC	PC as % of CLe
		10 kg N/ha/year	0.275 kg N/ha/year	2.7%
	Acid deposition	CLo Acid	AST Predicted Ammonia PC	PC as % of CLe
		1.6 keq/ha/yr	0.02 keq/ha/yr	1.2%

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. Where this threshold is exceeded an in-combination assessment and/or detailed modelling may be required.

Initial screening using Ammonia Screening Tool v4.4 has indicated that emissions from Bentley Farm Poultry Unit will only have a potential impact on SSSI sites with a precautionary critical level of $1\mu\text{g}/\text{m}^3$ if they are within 1,383m of the emission source.

Initial screening indicates that beyond 1,383m the PC is less than 0.2ug/m³ (i.e. less than 20% of the precautionary 1ug/m³ critical level) and therefore beyond this distance the PC is insignificant. All SSSIs are beyond this distance (see table below).

Where the precautionary level of 1µg/m³ is used, and the process contribution is assessed to be less than 20% the site automatically screens out as insignificant, and no further assessment of critical load is necessary. In these cases the 1µg/m³ level used has not been confirmed by Natural England, but it is precautionary. It is therefore possible to conclude no damage on these sites.

Table 5 – SSSI Assessment

Name of SSSI	Distance from site (m)
Sweat Mere And Crose Mere	4,372
Ruewood Pastures	2,548
Brownheath Moss	2,864
Fenemere	4,854

Ammonia assessment - LWS/AW

There are three Local Wildlife Sites (LWS) and one Ancient Woodland (AW) within 2 km of Bentley Farm Poultry Unit. The following trigger thresholds have been applied for the assessment of these sites. If PC is < 100% of relevant Critical Level or Load, then the farm can be permitted.

Screening using Ammonia Screening Tool v4.4 has indicated that emissions from Bentley Farm Poultry Unit will only have a potential impact on sites with a precautionary critical level of 1 µg/m³ if they are within 578m of the emission source. Screening indicates that beyond this distance, the Process Contribution at conservation sites is less than 1ug/m³ (i.e. less than 100% of the 1ug/m³ critical level) and therefore beyond this distance the PC is insignificant. In this case all LWS and AW sites below are beyond this distance (see table below).

Where the precautionary level of 1µg/m³ is used, and the process contribution is assessed to be < 20% the site automatically screens out as insignificant, and no further assessment of critical load is necessary. 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.

Table 6 – LWS / AW Assessment

Site	Designation	Distance from site (m)
Ruewood Pools	LWS	1,982
Oldewood Burlton	LWS	2,020
Moor-Fields Loppington	LWS	687
Old Wood	AW	2,023

Biomass Boiler Assessment

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

This guidance states that the Environment Agency has assessed the pollution risks and 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 where:

- (i) the fuel will be derived from virgin timber, miscanthus or straw, and;
- (ii) the biomass boiler appliance and installation meets the technical criteria to be eligible for the Renewable Heat Incentive, and;
- (iii) the aggregate boiler net rated thermal input is:
 - A. less than 0.5MWth, or;
 - B. less than 1MWth where the stack height is greater than 1 metre above the roof level of adjacent buildings (where there are no adjacent buildings, the stack height must be a minimum of 3 metres above ground), and there are:
 - no Special Areas of Conservation, Special Protection Areas, Ramsar sites or Sites of Special Scientific Interest within 500 metres of the emission point(s);
 - no National Nature Reserves, Local Nature Reserves, ancient woodlands or local wildlife sites within 100 metres of the emission point(s), or;
 - C. less than 2MWth where, in addition to the above criteria for less than 1MWth boilers, there are:
 - no sensitive receptors within 150 metres of the emission point(s).

The biomass boilers meets the requirements of criteria A above, as the combined boiler net rated thermal input is 0.398MW. Therefore no further assessment was required.

Groundwater/Soil Monitoring

As a result of the requirements of the Industrial Emissions Directive, all permits are now required to contain condition 3.1.3 relating to 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 the 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 your 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 for Bentley Farm Poultry Unit (*Appendix 2, Site Condition Report, 18th March 2014*) demonstrates that there are no hazards to land or groundwater and no historic contamination on site that may present a hazard. **Therefore, although this condition is included in the permit, no groundwater or soil monitoring will be required at this installation as a result.**

Annex 1: decision checklist

This document should be read in conjunction with the Duly Making checklist, the application and supporting information and permit/ notice.

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. Refer to key issues section above for further information regarding the Industrial Emissions Directive (IED).	✓
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.	✓
Site condition report	The operator has provided a description of the condition of the site. We consider this description is satisfactory. The decision was taken in accordance with our guidance on site	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	condition reports and baseline reporting under IED–guidance and templates (H5).	
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 sites for the reasons outlined in the Key Issues section.</p> <p>An Appendix 11 Assessment for SAC's and Ramsar sites and an Appendix 4 Assessment for SSSI's has been saved to EDRM for information only. An 'other nature conservation sites' proforma was saved to EDRM for information on 29/04/2014.</p>	✓
Environmental Risk Assessment and operating techniques		
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>	✓
Operating techniques	<p>We have reviewed the techniques used by the operator and compared these with the relevant guidance notes.</p> <p>The operator has proposed the following key techniques:</p> <ul style="list-style-type: none"> • Dirty water storage facilities are in place on site; • Nipple drinkers are used to reduce wastage of water and maintain dry litter; • Chemical storage is within a purpose-built store on site that is fully bunded; • All housing is well insulated and have a damp-proof course to reduce condensation and heat loss; • Each broiler house is monitored by a computer system which automatically records and controls 	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	<p>humidity and temperature;</p> <ul style="list-style-type: none"> • Heating will be provided by space heaters fuelled by biomass boilers using sustainable wood chip and/or miscanthus and operating at over 90% efficiency. <p>The operator has proposed the following key techniques with regards to the biomass boilers on site:</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. <p>The proposed techniques for priorities for control are in line with the benchmark levels contained in SGN EPR6.09 'How to comply with your environmental permit for intensive farming (version 2)' Technical Guidance Note and we consider them to represent appropriate techniques for the facility.</p> <p>We consider that the operating techniques specified in the permit reflect the BAT for the installation.</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 in the 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), miscanthus or straw shall be used as a fuel for the biomass boiler. These materials are never to be mixed with, or replaced by, waste.</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</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	taken in accordance with RGN 5 on Operator Competence.	
Relevant convictions	<p>The National Enforcement Database has been checked to ensure that all relevant convictions have been declared.</p> <p>No relevant convictions were found.</p> <p>The operator satisfies the criteria in RGN 5 on Operator Competence.</p>	✓
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

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

Response received from
Shropshire County Council - Environmental Health department – 29 th April 2014
Brief summary of issues raised
No comment.
Summary of actions taken or show how this has been covered
No action necessary.

The following organisations were also consulted, however no response was received:

- Health and Safety Executive;
- Shropshire County Council – Planning department.

This proposal was also publicised on the Environment Agency's website between 25/04/2014 and 27/05/2014, but no representations were received during this period.