

# Environment Agency permitting decisions

## Variation

We have decided to issue the variation for Enstone Farm Poultry Unit operated by Faccenda Farms (Enstone) Limited.

The variation number is EPR/QP3733RZ/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.

This is a Substantial Variation for:

- increasing broiler numbers from 327,600 to 462,000 and increasing the installation site area to accommodate the additional three poultry houses (making a total of 11 at the site)
- adding a 1,765kWth poultry manure boiler to burn poultry manure for site heat and electricity and associated manure store capable of holding 850 tonnes of poultry manure.

## 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 consultations and web publicising responses.

## **Key issues of the decision**

### **1) Burning of Poultry Manure in a Combustion Plant**

The European Union (EU) has recently amended the Animal By-Products Regulations (ABPR) effectively recognising that poultry manure can be defined as a by-product. From 15 July 2014, unprocessed poultry manure can be burnt in a burner meeting the requirements of the ABPR on the site where the poultry manure is produced. Where this is the case the Animal and Plant Health Agency (APHA) regulate the burner under the ABPR. Where the burner is installed on an installation under the Environmental Permitting Regulations (EPR) and the heat and electricity is utilised by the farm it is deemed to be a directly associated activity (DAA). The Environment Agency regulate the emissions from the burner within the Environmental Permit for the installation but approval from APHA is required in order to operate the burner at the installation.

The Environment Agency (EA) is satisfied that the poultry manure used in the proposed burner at the Enstone Farm Poultry Unit can be classed as an animal by-product.

### **2) Air Emissions Audit - Poultry Manure Fuelled Burner**

A separate audit of the environmental risk of emissions to air on habitats and human health from the proposed poultry manure burner was undertaken by the EA. This used the data provided in the Cambridge Environmental Research Consultants (CERC) report submitted with the application as well as internal datasets held by the EA. Appropriate emission concentrations have been used in the assessment and they are consistent with emission limit values outlined in the ABPR. The emission rates used are constants based on the stack parameters presented within the application.

#### Habitat Receptors:

In accordance with the EA 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.

#### Human Receptors:

The EA has previously carried out a screening assessment of potential impacts from small scale boilers. The recommendations from this exercise were that where boilers have a thermal capacity of <2MWth and receptors are >50m from the stack, modelling is not required as the environmental risk can be considered low.

The EA has reviewed the applicants data and conclude that the proposed poultry manure burner would not result in exceedances of any Environmental Quality Standards at human receptors or critical levels and loads at designated habitat sites. The EA consider the environmental risk to be low and agree with the conclusions set out in the applicants report.

Therefore, the proposed poultry manure burner at Enstone Farm Poultry Unit is not considered likely to pose a significant risk to the environment or human health and no further assessment is required.

### 3) Ammonia Impacts from increased broiler numbers

There are two Sites of Special Scientific Interest (SSSI) within 3.3km, three Local Wildlife Sites (LWS) within 2km and one Ancient Woodland (AW) within 1.6km of the facility.

Conservation sites are protected in law by legislation. The Habitats Directive provides the highest level of protection for Special Areas of Conservation (SAC) and Special Protection Areas (SPA), domestic legislation provides a lower but important level of protection for SSSI. Finally the Environment Act provides more generalised protection for flora and fauna rather than for specifically named conservation designations. It is under the Environment Act that we assess other sites (such as LWS) which prevents us from permitting something that will result in significant pollution and which offers levels of protection proportionate with other European and national legislation. However, it should not be assumed that because levels of protection are less stringent for these other sites that they are not of considerable importance. Local sites link and support EU and national nature conservation sites together and hence help to maintain the UK's biodiversity resilience.

For SAC SPA, Ramsars and SSSI we consider the process contribution (PC) and the background levels in making an assessment of impact. In assessing these other sites under the Environment Act we look at the impact from the Installation alone in order to determine whether it would cause significant pollution. This is a proportionate approach in line with the levels of protection offered by the conservation legislation to protect these other sites whilst ensuring that we do not restrict development.

Critical levels (CL<sub>e</sub>) and critical loads (CL<sub>o</sub>) are set to protect the most vulnerable habitat types. Thresholds change in accordance with the levels of protection afforded by the legislation. Therefore the thresholds for SAC, SPA and SSSI features are more stringent than those for other nature conservation sites.

Therefore we would generally conclude that the Installation is not causing significant pollution at these other sites if the PC is less than the relevant CL<sub>e</sub> or CL<sub>o</sub> provided that the Applicant is using BAT to control emissions.

#### Assessment of SSSI:

If the PC is below 20% of the relevant CL<sub>e</sub> or CL<sub>o</sub> then the farm can be permitted with no further assessment. Initial screening using Ammonia Screening Tool (AST) v4.4 has indicated that the PC for Glyme Valley SSSI is predicted to be less than 20% CL<sub>e</sub> for ammonia.

Natural England have confirmed that the ammonia CL<sub>e</sub> for Glyme Valley SSSI is 3µg/m<sup>3</sup>. This SSSI screens out using a CL<sub>e</sub> of 3µg/m<sup>3</sup>. Therefore it is possible to conclude no significant impact will occur and therefore consultation with Natural England is not required.

Natural England have confirmed that the ammonia CL<sub>e</sub> for Little Tew Meadows SSSI is also 3µg/m<sup>3</sup>. However, initial screening using AST v4.4 has indicated that the PC for is predicted to be between 20% and 50% CL<sub>e</sub> for ammonia and therefore may cause damage to features of the SSSI. The results of the ammonia screening for Little Tew Meadows SSSI are given in Table 1 below.

**Table 1: Assessment of ammonia emissions (SSSI)**

Name	Ammonia	Ammonia deposition (N)	Acidification (N)	PC as % of CLe (Ammonia)
Little Tew Meadows	0.745ug/m <sup>3</sup>	3.872kg/ha/yr	0.277keq/ha/yr	24.8%

Where emissions of ammonia or ammonia deposition (nutrient nitrogen or acid) are between 20% and 50% of the relevant CLe or CLo the proposal requires in-combination screening. This was not undertaken for Little Tew Meadows SSSI as there are no other intensive farming installations with a PC above 20% of the CLe within 5km acting in-combination with this application.

As the PC is between 20% and 50% CLe for ammonia and there is no effect from any in-combination impacts at the SSSI we have concluded no likely significant impact will occur and therefore consultation with Natural England is not required.

#### Assessment of LWS and AW:

The following trigger thresholds have been applied for the assessment of non-statutory LWS and AW:

- If PC is <100% of relevant CLe or CLo then the farm can be permitted (H1 or ammonia screening tool)
- If the predicted environmental concentration (PEC) <CLe or CLo then the farm can be permitted
- If further modelling shows PC <100%, then the farm can be permitted.

Using the AST v4.4, Lidstone Bottom LWS, Enstone Meadow LWS and West Wood AW all screen out using the worst case scenario of a CLe of 1ug/m<sup>3</sup>. For the Valley near Church Enstone LWS, no protected lichen/bryophyte species are present therefore the appropriate CLe of ammonia for this site is 3µg/m<sup>3</sup>. This LWS also screens out and therefore no further assessment of these sites is required. The results are presented in Table 2 below.

**Table 2: Assessment of ammonia emissions (LWS and AW)**

Name	Ammonia µg/m <sup>3</sup>	N kg/ha/yr	Acid keq/ha/yr	PC of CLe Ammonia
Lidstone Bottom LWS	0.550	2.857	0.204	55.0%
Enstone Meadow LWS	0.812	4.218	0.301	81.2%
Valley near Church Enstone LWS	1.660	8.620	0.616	55.3%
West Wood AW	0.823	4.275	0.305	82.3%

## 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
Receipt of submission		
Identifying confidential information	We have not identified any information provided as part of the application that we consider to be confidential. The decision was taken in accordance with our guidance on commercial confidentiality.	✓
Consultation		
Scope of consultation	<p>The consultation requirements were identified and implemented. The decision was taken in accordance with Regulatory Guidance Note (RGN) 6 High Profile Sites, our Public Participation Statement and our Working Together Agreements.</p> <p>For this application we consulted the following external bodies:</p> <ul style="list-style-type: none"><li>➤ Local Authority (Environmental Health and Planning)</li><li>➤ Animal and Plant Health Agency</li><li>➤ Health and Safety Executive.</li></ul>	✓
Responses to consultation, web publicising	The web publicising, consultation responses (Annex 2) were taken into account in the decision. The decision was taken in accordance with our guidance.	✓
European Directives		
Applicable directives	All applicable European directives have been considered in the determination of the application. This permit has implemented the requirements of the Industrial Emissions Directive (IED) as well as taking account of the amendments made to the Animal By-Products Regulations (ABPR).	✓
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	<p>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 condition reports and baseline reporting under IED – guidance and templates (H5).</p> <p>The site condition report (SCR) for Enstone Farm Poultry Unit</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	(dated 26 March 2015) demonstrates that there are no significant hazards or likely pathways to land or groundwater and no historic contamination sources on site that may present a significant risk. Therefore, on the basis of the assessment presented in the SCR the Environment Agency accepts that no baseline reference data needs to be provided for the site soil and groundwater conditions as part of application EPR/QP3733RZ/V002.	
Biodiversity, Heritage, Landscape and Nature Conservation	<p>The application is within the relevant distance criteria of several sites of nature conservation. We have not formally consulted on the application. The decision was taken in accordance with our guidance.</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>	✓
<b>Environmental Risk Assessment and operating techniques</b>		
Environmental risk	<p>We have reviewed the operator's air quality assessment of the environmental risk from the facility with specific reference to the poultry manure fuelled burner. The operator's risk assessment is satisfactory.</p> <p>The assessment shows that, applying the conservative criteria in our guidance on Environmental Risk Assessment (or similar methodology supplied by the operator and reviewed by ourselves), all emissions may be categorised as environmentally insignificant. Please refer to the key issues section.</p>	✓
Operating techniques	<p>We have reviewed the techniques used by the operator and compared these with the relevant guidance notes. The proposed techniques for priorities for control are in line with the benchmark levels contained in SGN EPR6.09 and we consider them to represent appropriate techniques for the facility. Please refer to the key issues section.</p> <p>The Environment Agency have reviewed and approved the Odour Management Plan and consider it complies with the requirements of our H4 Odour management guidance note. 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.</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	Under the Environmental Permitting Regulations (2010) we are required to review permits periodically and additionally may do so at any time in the light of new information. Should evidence of an effect consistent with negative impacts from heat exchanger condensate be found in the future, we may need to revise the permit to address the issue.	
<b>The permit conditions</b>		
Updating permit conditions during consolidation	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 permits. The operator has agreed that the new conditions are acceptable.	✓
Raw materials	<p>We have specified limits and controls on the use of raw materials and fuels. We have specified that only unprocessed poultry manure meeting the criteria as an animal by-product can be used as a fuel in a poultry manure burner. The poultry manure is never to be mixed with, or replaced by, waste, or processed or to be imported from another site.</p> <p>Please refer to the key issues section for more details relating to animal by-product for combustion.</p>	✓
Pre-operational conditions	<p>Based on the information in the application, we consider that we need to impose pre-operational conditions. We have imposed pre-operational conditions to ensure that the operator:</p> <ul style="list-style-type: none"> <li>➤ submits a report demonstrating that the necessary procedures, and accident and emergency plans are in place for the operation of the poultry manure fuelled burner</li> <li>➤ staff have received specific training for the use and management of the poultry manure fuelled boiler from the supplier of the unit.</li> </ul>	✓
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 and include techniques from the previous applications.</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
Operator Competence		
Environment management system	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.	✓
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, web publicising responses**

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

The Local Authority (Environmental Health and Planning), the Animal and Plant Health Agency and the Health and Safety Executive were all consulted. However, consultation responses from them were not received during the statutory consultation period.

This application was publicised in the Environment Agency publications section within the gov.uk website between 10 June and 08 July 2015. However, no responses were received from the public during this period.