

# Environment Agency permitting decisions

## Variation

We have decided to issue the variation for Moor Barn Farm Poultry Unit operated by Anthony Dawson Limited.

The variation number is EPR/VP3734HH/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.

It should be noted at this point that consultation with an external party has been undertaken as part of this determination which would not normally be required as part of a normal variation to a permit. The query and outcome of the consultation is presented in Appendix 2 of this document.

## Key issues of the decision

### Ammonia Impacts

Out of the nine Local Wildlife Sites (LWS) within 2km of the installation, Marnham to Harby Dismantled Railway is located 70m from the installation boundary. As part of this variation there is no proposed increase in the poultry numbers above that already permitted for the installation however, the current proposal does have an affect on this LWS.

This discussion relates to the impacts of ammonia emissions to air from the installation and are based upon previous detailed modelling undertaken by AEA (AEA Report Ref: AEA/R/ED57996 Issue Number 2 dated 26/06/2012 'Ammonia impact assessment: Moor Barn Farm site' - Assessment of ammonia for 220,000 places, and AEA Report Ref: AEA/R/ED57996 Issue Number 1 dated 08/08/2012 'Ammonia impact assessment: Moor Barn Farm site' - Assessment of ammonia for 196,000 places). These two reports were produced as part of an assessment on mitigating the effects of ammonia emissions. The proposals actioned as a result of the findings are discussed below.

### Assessment of LWS

Marnham to Harby Dismantled Railway is on the south-western boundary of the installation with the closest emission point about 70m away from the nearest point of the LWS. The installation is permitted to stock 220,000 broiler places however, the AEA modelling report found that this level of stocking would have an adverse effect on the LWS.

To mitigate this a second AEA modelling report was undertaken. This concluded that the maximum number of broiler places which would not have an adverse effect to be 196,000. The Operator, with agreement from the Environment Agency, continued to stock at 220,000 broiler places but to mitigate the ammonia emissions heat exchanger units were installed on each house to reduce ammonia emissions sufficiently as not to adversely effect the LWS.

As part of this variation (EPR/VP3734HH/V005) the Operator is upgrading the poultry houses in order to meet BAT requirements as well as installing biomass boilers to improve energy efficiency. This means that the heat exchangers will no longer be in place at the site. Following direction from the Environment Agency, the Operator is required to prove that the biomass boilers will reduce ammonia emissions sufficiently as not to impact on the LWS by collecting at least 12 months of data from a comparable poultry installation in line with Environment Agency guidance and as agreed with the Environment Agency.

The monitoring study and data needs to demonstrate sufficient ammonia reductions through the use of biomass boilers as a mitigation proposal. If the monitoring study and data indicates that the biomass boilers do not achieve a sufficient reduction in emissions of ammonia to air then the Operator will be required to propose and implement an additional or alternative method to abate ammonia emissions to air.

As a monitoring study and data is not yet available as part of this variation application, we have decided that an improvement condition is necessary within the permit requiring the Operator to submit a report on the outcomes of a suitably comparable monitoring study and its data proving that the site biomass boilers installed at Moor Barn Farm will achieve

a sufficient reduction in emissions of ammonia to air so as not to impact adversely on the LWS.

Also, with respect to the protection of the LWS from airborne emissions of ammonia from the installation, consultation was undertaken with Nottinghamshire Wildlife Trust and Nottinghamshire County Ecologist. The discussions from these consultations are presented in Appendix 2.

## 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
<b>Consultation</b>		
Scope of consultation	The consultation requirements were identified and implemented.	✓
Response to consultation	The consultation response (Annex 2) was taken into account in the decision. The decision was taken in accordance with our guidance.	✓
<b>Operator</b>		
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.	✓
<b>European Directives</b>		
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).	✓
<b>The site</b>		
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.	✓
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 previous consultations with the Environment Agency during permit variation application EPR/VP3734HH/V002.</p> <p>We consider that there is the potential for the application to affect the features of a LWS. An improvement condition has been set in the environmental permit to ensure an appropriate and comparable monitoring report and data is submitted and assessed regarding the potential impact from aerial ammonia emissions on the nature conservation site. Please refer to the key issues section for more details.</p>	✓

Aspect considered	Justification / Detail	Criteria met
<b>Environmental Risk Assessment and operating techniques</b>		
Operating techniques	<p>We have reviewed the techniques used by the operator and compared these with the relevant guidance notes. The proposed techniques are in line with the SGN 'EPR 6.09' for Intensive Farming and we consider them to represent appropriate techniques for the facility.</p> <p>Where we consider there is a deficiency in the application improvement conditions have been imposed within the permit (refer to the next Section).</p>	✓
<b>The permit conditions</b>		
Improvement conditions	<p>Based on the information on the application, we consider that we need to impose the following improvement condition:</p> <ul style="list-style-type: none"> <li>➤ submit an Emissions Reduction Plan demonstrating that the running of biomass boilers reduces ammonia emissions to air sufficiently to allow stocking of up to 220,000 places regarding Marnham to Harby Dismantled Railway LWS.</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. These descriptions are specified in the Operating Techniques table in the permit and include techniques from the previous application.</p>	✓
<b>Operator Competence</b>		
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> <p>However, we have set a pre-operational condition requiring the Operator to submit an up to date summary of the EMS. This is required to demonstrate that there is an effective management system in place, that the Operator will operate the facility in accordance with the environmental permit and comply with the permit and other legal requirements to protect the environment.</p>	✓

## Annex 2: Consultation, web publicising responses

Summary of the response to our consultation and the way in which we have taken this into account in the determination process.

<b>Response received from</b>
Mark Speck, Nottinghamshire Wildlife Trust – Northern Conservation Officer, dated 10 November 2014.
<b>Brief summary of issues raised</b>
The species list for Marnham and Harby Disused Railway LWS indicates plants associated with both acid and calcareous grassland habitats. Both habitat types are very vulnerable to the effects of nitrification which could cause the growth of coarse, vigorous grasses at the expense of less competitive herb species leading to a reduction in plant diversity. Given the high levels of ammonia predicted above the Critical Level, concern was raised about the potential impacts. It is generally accepted that nitrogen deposition is one of the biggest threats to European habitats.
<b>Summary of actions taken or show how this has been covered</b>
The approach is to confirm that ammonia emission reduction is achieved through the use of biomass boilers. If this turns out not to be the case then proven ammonia reduction technology is to be put in place at the installation to achieve an acceptable reduction in ammonia emissions to air via an improvement condition within the Environmental Permit.

<b>Response received from</b>
Nick Crouch, Nottinghamshire County Council – Senior Conservation Practitioner, dated 11 and 12 November 2014.
<b>Brief summary of issues raised</b>
<p>The LWS is part of a cycle path managed by Nottinghamshire County Council. The obvious concern is that nitrogen deposition arising from ammonia emissions will cause/accelerate a change in the existing habitat away from a finer and more open acid-grassland sward towards one which is more closed and dominated by coarser grassland.</p> <p>A question was raised asking would a year of elevated ammonia emissions have a significant and permanent impact on the grassland habitat and what happens if after the year's monitoring there is found to be too much ammonia being emitted despite the biomass boilers?</p>
<b>Summary of actions taken or show how this has been covered</b>
<p>The part of the LWS immediately south of the poultry houses is woodland that isn't particularly notable. However, the section to the west is one of the nicest parts of the LWS being open grassland in a disused railway cutting parts of which, especially on the old trackbed, are quite acidic in nature.</p> <p>The contour plan appears to show that the 3ug/m<sup>3</sup> contour just about touches the LWS boundary, the 2ug/m<sup>3</sup> contour covers the small woodland area (which is not of particularly high nature conservation value i.e: doesn't have a rich ground flora) and it is the 1ug/m<sup>3</sup> contour that covers c.120m of the grassland area within the LWS to the west.</p>

The ammonia CLe is  $3\mu\text{g}/\text{m}^3$  so predicted ammonia contribution below that would be <100% but we are aware that no in-combination effects (if any) have been considered.

On that basis, the idea of allowing the facility to operate for a year whilst the monitoring is going on is acceptable as it appears that the most important habitats are unlikely to be majorly affected. A comment about no assessment of the in-combination effects has been noted by the Council.

However, confirmation is required to show that ammonia emission reduction is achieved through the use of biomass boilers. If this turns out not to be the case then proven ammonia reduction technology is to be put in place at the installation to achieve an acceptable reduction in ammonia emissions to air.