

Environment Agency permitting decisions

Variation

We have decided to issue the variation for The Hill Poultry Farm operated by Robert Manning.

The variation number is EPR/KP3936MC/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.

Description of the changes introduced by the Variation

This is a Substantial Variation.

The purpose of this variation is to remove pre-operational condition 1, included in variation V004, and replace it with three new pre-operational conditions. The expansion of bird numbers from 141,500 to 223,500 will now be undertaken in two phases. The proposed expansion is addressed in pre-operational conditions 1 and 3. Pre-operational condition 2 sets out the information that is required once a specific brand of heat exchanger has been selected.

The proposed ammonia mitigation measures included in Pre-operational condition 1 in variation V004 are to remain the same in the revised pre-operational conditions 1 and 3. The only change is that heat exchangers will no longer be installed on poultry houses 1-4.

Even with this change there is still an environmental improvement as a result of the proposed development overall and for each of the two phases of development. This has been demonstrated in the ammonia modelling provided by the operator (*A Report on the Modelling of the Dispersion of Ammonia from the Existing and Proposed Broiler Chicken Rearing Houses at the Hill Farm, Castle Frome, Herefordshire, by AS Modelling & Data Ltd., dated 24/08/15*). We have reviewed this modelling and agree with the conclusions.

Key issues of the decision

Ammonia Emissions

Detailed ammonia modelling has been provided to support the proposed changes to the permit (*A Report on the Modelling of the Dispersion of Ammonia from the Existing and Proposed Broiler Chicken Rearing Houses at the Hill Farm, Castle Frome, Herefordshire, by AS Modelling & Data Ltd., dated 24/08/15*). There is one Site of Special Scientific Interest (SSSI) (Birchend SSSI) and a number of Local Wildlife Sites (LWS) and Ancient Woodlands (AW) within the screening distance of this installation. The SSSI has been included in the modelling with a representative sample of the closest LWS/AW to the installation.

The modelling demonstrates that there is an environmental improvement as a result of the proposals, overall and for each of the two phases of development. This is still the case in the absence of heat exchangers on poultry houses 5 and 6. This means that permitting the proposed changes via issuing this variation will still result in a reduction in the predicted ammonia concentrations at local ecological receptors.

In some instances the process contributions stay the same between phases 1 and phase 2. In all of these instances there is still an overall reduction in ammonia emissions between the existing scenario and phase 2 and thus an environmental improvement.

We have reviewed the ammonia modelling. We agree with the applicant that the modelling indicates a systematic reduction in environmental impacts and the extent of any exceedences at local ecological receptors

The development scenarios are presented in table 1 below. The predicted process contributions are presented in table 2 below. The results presented are at the maximum point of concentration for each habitat site. The proposal represents an environmental improvement as the process contributions reduce with the transition into each phase of the development.

Table 1 – Development Scenarios

Existing	Phase 1	Phase 2
-As permitted in EPR/KP3936MC/V004	-Installation of high velocity roof fans onto poultry houses 1-5. -Installation of high velocity roof fans onto poultry houses 5 and 6. -Installation of heat exchanger onto poultry house 6.	-Installation of heat exchanger onto poultry house 5

Table 2 – Predicted ammonia concentration at discrete receptors taken from preliminary modelling run.

Receptor Name	Maximum point of concentration		Ammonia concentration ($\mu\text{g}/\text{m}^3$) ^{*1}		
	X(m)	Y(m)	Existing	Phase 1	Phase 2
Birchend SSSI	367008	244757	0.313	0.086	0.085
Foxhill and Fishpool LWS/AW	367552	245407	11.956	3.958	3.415
Meadows at Catley Farm LWS	368381	244795	0.175	0.060	0.059
Field near Merrings Farm LWS	368149	243821	0.075	0.032	0.032
Meephill Coppice and Childer Wood LWS/AW	366351	243809	0.063	0.028	0.028
Woodlands above Birchend LWS	367094	245104	0.752	0.210	0.209
Beacon Hill LWS/AW	369441	245146	0.066	0.036	0.035
Fishers Coppice LWS	366815	246187	0.128	0.056	0.056
Camp Coppice AW	367133	245356	0.796	0.161	0.161
Juniper Hill Wood AW	367094	245104	0.752	0.210	0.209
Yew Tree Coppice AW	367349	244534	0.227	0.083	0.082
Coppice Ash Bed AW	368149	243821	0.075	0.032	0.032
Unnamed AW	367427	244884	0.576	0.172	0.170
Unnamed AW	367612	244660	0.297	0.106	0.105

*1 – GFS, with calms, no terrain

Annex 1: decision checklist

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

Aspect considered	Justification / Detail	Criteria met
		Yes
Receipt of submission		
Confidential information	A claim for commercial or industrial confidentiality has not been made.	✓
Identifying confidential information	We have not identified 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	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. For this application we consulted the following bodies: <ul style="list-style-type: none"> • Environmental Health – Herefordshire Council • Health and Safety Executive 	✓
Responses to web publicising and consultation	The web publicising and consultation responses (Annex 2) were taken into account in the decision. The decision was taken in accordance with our guidance. No responses were received.	✓
European Directives		
Applicable directives	All applicable European directives have been considered in the determination of the application.	✓
The site		
Biodiversity, Heritage, Landscape and Nature Conservation	The application is within the relevant distance criteria of a site 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.	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
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>See key issues section for how ammonia emissions from the installation have been considered.</p>	✓
Operating techniques	<p>We have reviewed the techniques used by the operator and compared these with the relevant guidance notes.</p> <p>The variation will not result in a change to how the site will be operated.</p>	✓
The permit conditions		
Pre-operational conditions	<p>Based on the information in the application, we consider that we need to impose pre-operational conditions.</p> <p>1 – The ammonia mitigation measures stated in the pre-operational condition shall be installed prior to the increase in bird numbers from 141,500 to 211,000. This is to ensure that appropriate mitigation measures are in place to offset the increase in ammonia emissions from the additional birds.</p> <p>2 – The operator is undecided which brand of heat exchanger to use. The make and specification of the proposed heat exchangers, in addition to how they will be operated shall be provided prior to the increase in bird numbers from 141,500 to 211,000. This is required to ensure that the Environment Agency has full details of the operators proposals and to ensure that they are being operated effectively in order to reduce ammonia emissions.</p> <p>3 - The ammonia mitigation measures stated in the pre-operational condition shall be installed prior to the increase in bird numbers from 211,000 to 223,500. This is to ensure that appropriate mitigation measures are in place to offset the increase in ammonia emissions from the additional birds.</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
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> <p>The operator has confirmed that the primary heating system in poultry houses 5 and 6 is an LPG fired direct heating system. An indirect heating system fired by Biomass is used as a back-up. This requirement has been incorporated into the operating techniques table.</p>	✓
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.	✓

Annex 2: External Consultation and web publicising

Summary of responses to external consultation and web publication and the way in which we have taken these into account in the determination process. (Newspaper advertising is only carried out for certain application types, in line with our guidance.)

Response received from
Public Health England
Brief summary of issues raised
None raised
Summary of actions taken or show how this has been covered
None required

Environmental Health – Herefordshire Council, the Health and Safety Executive and the Department for Public Health were consulted. However, no responses were received.

The application was published on our website from 22/12/15 to 22/01/16. No responses were received.