

Environment Agency permitting decisions

Bespoke permit

We have decided to grant the permit for Kinton Farm operated by Great Ness Poultry Limited.

The permit number is EPR/YP3031WK/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.

Description of the main features of the Installation

The installation comprises of eight poultry houses, numbered one to eight. The eight poultry houses provide a combined capacity for 400,000 broiler places. Birds will be brought onto the farm from a hatchery and are reared on the farm until they are 'de-populated' at the end of the cycle. The average cycle length will be 49 days.

All houses will be ventilated by high velocity roof fans, with an emission point higher than 5.5 metres above ground level and an efflux speed greater than 11 metres per second. All houses also have gable end fans, although these are operated infrequently to maintain temperature, typically in the summer months.

All manure is exported from the installation for spreading on land owned by third parties. Water from the wash out of poultry houses is channelled to underground collection tanks close to the houses to await export off site. Roof and yard water from all houses drains to a swale present within the installation boundary. The swale discharges into a ditch which ultimately discharges into the River Severn.

Associated food is stored on the installation in sealed food bins. Mortalities are collected daily and stored in a secure container on site and are removed under the National Fallen Stock Scheme. At the end of the cycle the houses are de-populated, washed and disinfected ready for the next cycle.

Two biomass boilers will be installed on the farm. Each boiler will have a thermal input of 1.1Mw.

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

Key issues of the decision

Ammonia emissions

There are 2 Ramsar sites located within 10 kilometres of the installation. There are 2 Sites of Special Scientific Interest (SSSI) located within 5 km of the installation. There are also 6 Local Wildlife Sites (LWS) and 2 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:

- 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.
- Where this threshold is exceeded an assessment alone and in combination is required.
- An in combination assessment will be completed to establish the combined PC for all existing farms identified within 10 km of the application.

For the following sites this farm has been screened out at stage 1, as set out above.

Screening using the ammonia screening tool (version 4.4) has indicated that emissions from Kinton Farm will only have a potential impact on sites with a critical level of 1 µg/m³ if they are within 5082 metres of the emission source. Screening indicates that beyond this distance, the PC at conservation sites is less than 0.04 µg/m³. 0.04 µg/m³ is 4% of the 1 µg/m³ CL_e and therefore beyond this distance the PC is insignificant. In this case the two RAMSARs are beyond this distance.

Table 1 – distance from source

Site	Distance (m)
Midland Meres & Moses – Phase 1 RAMSAR	7376
Midland Meres & Moses – Phase 2 RAMSAR	8223

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 – SSSIs

The following trigger thresholds have been applied for assessment of SSSIs. 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.

Shrawardine Pool SSSI

For Shrawardine Pool this farm has been screened out at stage 1, as set out above.

Screening using ammonia screening tool (version 4.4) has indicated that emissions from Kinton 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 1777 metres of the emission source. Screening indicates that beyond this distance, the PC at conservation sites is less than $0.2 \mu\text{g}/\text{m}^3$. $0.2 \mu\text{g}/\text{m}^3$ is 20% of the $1 \mu\text{g}/\text{m}^3$ CLe and therefore beyond this distance the PC is insignificant. In this case is one SSSI beyond this distance.

Table 2 – distance from source

Site	Distance (m)
Shrawardine Pool	4204

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.

Lin Can Moss SSSI

Initial modelling using the ammonia screening tool (version 4.4) has determined that the PCs of ammonia from the application site are over the 20% threshold, and therefore may cause damage to features of the SSSI. An in combination assessment has therefore been carried out.

There are no other farms acting in combination with this application. The PC is predicted to be less than the 50% critical level significance threshold used for in combination assessments. Under Environment Agency guidelines it is therefore possible to conclude no likely damage to the site from the installation, no further assessment is required.

Table 3 – Ammonia emissions

Site	Critical level ammonia $\mu\text{g}/\text{m}^3$	Predicted process contribution $\mu\text{g}/\text{m}^3$	% of critical level
Lin Can Moss	1*	0.430	43

*a precautionary critical level of $1 \mu\text{g}/\text{m}^3$ has been assigned to this site). Where the precautionary level of $1 \mu\text{g}/\text{m}^3$ is used, and the process contribution is assessed to be less than the 20% insignificance threshold in this circumstance it is not necessary to further consider nitrogen deposition or acid deposition critical load values.

Ammonia assessment – LWS and AW

There are 6 Local Wildlife Sites (LWS) and 2 Ancient Woodlands (AW) within 2 km of Kinton Farm. The following trigger thresholds have been applied for the assessment of these sites.

1. If PC is <100% of relevant critical level or load, then the farm can be permitted (H1 or ammonia screening tool)
2. 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.

Screening using ammonia screening tool (version 4.4) has indicated that emissions from Kinton 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 626 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 LWS and AW are beyond this distance.

Table 3 – distance from source

Site	Distance (m)
Lin Can Coppice LWS	1101
Army Camp Grassland LWS	1675
Knockin Heath LWS	2105
Nesscliffe, Great Ness LWS	960
Cranberry Moss LWS	1119
The Cliffe LWS	1866
Nesscliffe Hill Wood AW	1024
Bullmoor AW	1264

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.

Biomass boilers

The applicant is varying their permit to include 2 biomass boilers each with a net rated thermal input of 1.1MW.

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;
 - the aggregate boiler net rated thermal input is less than or equal to 4 MWth, and no individual boiler has a net thermal input greater than 1 MWth, and;
 - the stack height must be a minimum of 5 metres above the ground (where there are buildings within 25 metres the stack height must be greater than 1 metre above the roof level of buildings within 25 metres) and;
 - there are no sensitive receptors within 50 metres of the emission point(s).

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 boilers.

The Environment Agency's risk assessment has shown that the biomass boilers meet the requirements above, and are therefore considered not likely to pose a significant risk to the environment or human health and no further assessment is required.

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.

One of the criteria used to screen the boilers is that no individual boiler has a net rated thermal input greater than 1 MWth. The two boilers that are to be installed each have a net rated thermal input of 1.1 MW. The boilers are only marginally over this threshold. In addition, the nearest sensitive human receptor is 150m away. Therefore, the level of environmental risk posed by the boilers is still considered to be low and no further screening is necessary.

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 2013. 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.

The site condition report (SCR) for Kinton Farm (dated 06/07/15) 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.**

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	<p>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.</p> <p>For this application we consulted the following bodies:</p> <ul style="list-style-type: none"> • Environmental Health – Shropshire Council • Local Planning Authority – Shropshire Council • Health and Safety Executive 	✓
Responses to consultation and web publicising	<p>The web publicising and consultation responses (Annex 2) were taken into account in the decision.</p> <p>The decision was taken in accordance with our guidance.</p>	✓
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.	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	The requirements of the Industrial Emissions Directive have been incorporated into the permit.	
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 condition reports and baseline reporting under IED– guidance and templates (H5).	✓
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 habitats has been carried out as part of the permitting process. We consider that the application will not affect the features of the site. See key issues section. An Appendix 11 was sent to Natural England for information only in relation to Midland Meres & Moses – Phase 1 RAMSAR and Midland Meres & Moses – Phase 2 RAMSAR	✓
Environmental Risk Assessment and operating techniques		
Environmental risk	We have reviewed the operator's assessment of the environmental risk from the facility. The operator's risk assessment is satisfactory. The assessment shows that, applying the conservative criteria in our guidance on Environmental Risk Assessment , all emissions may be categorised as environmentally insignificant.	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	See key issues section	
Operating techniques	<p>We have reviewed the techniques used by the operator and compared these with the relevant guidance notes. The relevant guidance note for this installation is Sector Guidance Note EPR6.09.</p> <p>The operating techniques include:</p> <ul style="list-style-type: none"> • The sheds are fan ventilated with a fully littered floor and are equipped with a non-leaking drinking system. • Litter is to be kept dry and friable. • Wash water generated during the clean out of the sheds is to be collected and disposed of separately. <p>In relation to the biomass boilers, the operating techniques include the following:</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 TGN and we consider them to represent appropriate techniques for the facility. The permit conditions ensure compliance with relevant BREFs and BAT Conclusions.</p> <p>We have reviewed the operators Odour Management Plan. The revised OMP submitted as part of this variation is considered sufficient to managed the risk of odour from the site. The OMP should be reviewed on a regular basis to ensure that it reflects the most up to date management practices and infrastructure.</p>	✓
The permit conditions		
Use of conditions other than	Based on the information in the application, we consider that we do not need to impose conditions other than those in our permit template, which was developed in	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
those from the template	consultation with industry having regard to the relevant legislation.	
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. These materials are never to be mixed with or replaced by, waste.</p>	✓
Waste types	We have specified the permitted waste types, descriptions and quantities, which can be accepted at the regulated facility.	✓
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		
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.	✓
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. 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. (Newspaper advertising is only carried out for certain application types, in line with our guidance.)

Response received from
Local Planning Authority – Shropshire Council
Brief summary of issues raised
No records of any planning permission or undetermined planning application for poultry development at this site.
Summary of actions taken or show how this has been covered
None required

Environmental Health- Shropshire Council and the Health and Safety Executive were consulted, however, no responses were received.

This proposal was also publicised on our website between 08/10/15 and 05/11/15 and no representations were received.