

# Permitting decisions

## Variation

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We have decided to grant the variation for Forge Farm Poultry Unit operated by Mr Guy Home (trading as James Home and Partners).

The variation number is EPR/DP3432UR/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 provides a record of the decision making process. It summarises the decision making process in the decision checklist to show how all relevant factors have been taken into account.

This decision document provides a record of the decision making process. It:

- highlights [key issues](#) in the determination
- summarises the decision making process in the [decision checklist](#) to show how all relevant factors have been taken into account
- shows how we have considered the [consultation responses](#)

Unless the decision document specifies otherwise we have accepted the applicant's proposals.

Read the permitting decisions in conjunction with the environmental permit and the variation notice. The introductory note summarises what the variation covers.

## Key issues of the decision

### Description of the changes introduced by the Variation

This is a Substantial Variation.

This variation authorises the following changes:

- Increase in broilers by 76,000 to a total of 196,000 broilers.
- The installation of 2 new poultry houses using side ventilation. Yard and roof drainage from these 2 houses is collected by a mix of open and stone filled trenches and a piped system which will discharge to an attenuation pond on the eastern part of the installation. The water will then discharge to the River Tern to the south.
- Two additional feed bins situated between the 2 new poultry houses.
- The installation of 3 biomass boilers with a thermal input capacity of 663 Kilowatts per hour using virgin wood chip and herbaceous biomass (miscanthus).

## 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 Forge Farm (dated 05 May 2017) 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.**

## Biomass boilers

The applicant is varying their permit to include 3 biomass boilers with an aggregated net rated thermal input of 663 kilowatts per hour (kWh).

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 boiler(s).

Our risk assessment has shown that the biomass boilers should meet the requirements of the criteria above, and are, therefore, considered not likely to pose a significant risk to the environment or human health.

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.

## **Odour**

There are sensitive receptors within 400 metres of the installation therefore an Odour Management Plan has been submitted as required in chapter 3, section 3.3 of guidance Sector Guidance Note (SGN) 6.09 How to comply – Intensive Farming - Version 2, published January 2010.

This plan is considered acceptable having been assessed against the requirements of Integrated Pollution Prevention and Control (IPPC) SRG 6.02 (Farming): Odour Management at Intensive Livestock Installations and our 'Top Tips Guidance and Poultry Industry Good Practice Checklist' and with regard to the site specific circumstances at the installation. The operator is required to manage activities at the installation in accordance with condition 3.3.1 of the environmental permit and this Odour Management Plan. The Odour Management Plan includes odour control measures, in particular, procedural controls addressing odours by broiler production housing, carcass storage and disposal, litter removal, washing operations and house clean-out, stored litter, litter/slurry spreading, manufacture and selection of feed, feed storage and delivery, ventilation system, and dirty water management. The Odour Management Plan is required to be reviewed at least every 4 years and/or after a complaint is received, whichever is the sooner.

There is the potential for odour pollution from the installation, however the operator's compliance with their Odour Management Plan, submitted with this application, should minimise the risk of odour pollution beyond the installation boundary. The risk of odour pollution at sensitive receptors beyond the installation boundary is not considered significant. We, 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.

## **Noise**

There are sensitive receptors within 400 metres of the installation boundary as stated above in the odour section. The applicant has therefore submitted a Noise Management Plan as part of the application supporting documentation.

Operations with the most potential to cause noise nuisance have been assessed as those involving delivery vehicles travelling to and from the farm, vehicles on site, feeding system, operation of ventilation fans, testing of alarm system and standby generator, noise from birds, bird restocking, bird removal and loading on to vehicles, clean out operations, staff and contractors, and repairs. The Noise Management Plan covers control measures, in particular, procedural controls addressing ventilation fans, boiler flue outlets and boilers, feed deliveries, fuel deliveries, feeding systems, alarm systems, broilers/bird catching, clean out operations, maintenance and repair, set up and placement, and standby generators.

There is the potential for noise from the installation beyond the installation boundary, however the operator's compliance with the Noise Management Plan, submitted with this application, should minimise the risk of noise pollution beyond the installation boundary. The risk of noise pollution at sensitive receptors beyond the installation boundary is therefore not considered significant. We, the Environment Agency, have reviewed

and approved the Noise Management Plan. 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.

## Dust and bioaerosols

There are measures included within the permit (the 'Fugitive Emissions' conditions) to provide a level of protection. The use of Best Available Techniques and good practice will ensure minimisation of emissions. Furthermore, condition 3.2.1 'Emissions of substances not controlled by an emission limit' is included in the permit. This is used in conjunction with condition 3.2.2 which states that in the event of fugitive emissions causing pollution following commissioning of the installation, the Operator is required to undertake a review of site activities, provide an emissions management plan and to undertake any mitigation recommended as part of that report, once agreed in writing with the Environment Agency.

The applicant has also submitted a Dust Assessment, written in accordance with Environment Agency's EPR 6.09 How to Comply with your Environmental Permit for Intensive Farming Appendix 11 guidance. We consider that the measures outlined in the Dust Assessment will help to minimise the potential for bioaerosol emissions from the installation.

## Ammonia emissions

There are 2 Ramsar sites located within 10 kilometres of the installation and 2 Sites of Special Scientific Interest (SSSI) located within 5 km of the installation.

### Ammonia assessment – SAC/SPA/Ramsar

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 (CLe) or critical load (CLo) 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 Ramsars.

Initial screening using ammonia screening tool version 4.5 has indicated that emissions from Forge Farm will only have a potential impact on the Ramsar sites with a precautionary critical level of  $1\mu\text{g}/\text{m}^3$  if they are within 4,892 metres of the emission source.

Beyond 4,892 m the PC is less than  $0.04\mu\text{g}/\text{m}^3$  (i.e. less than 4% of the precautionary  $1\mu\text{g}/\text{m}^3$  critical level) and therefore beyond this distance the PC is insignificant. In this case all Ramsar sites are beyond this distance (see table below) and therefore screen out of any further assessment.

Where the precautionary 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 this case 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 likely significant effect

**Table 1 – Ramsar Assessment**

Name of Ramsar	Distance from site (m)
Midland Meres & Mosses – Phase 1	5,846
Midland Meres & Mosses – Phase 2	8,561

## Ammonia assessment – SSSI

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 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 5 km of the SSSI.

Initial screening using the ammonia screening tool version 4.5 has indicated that emissions from Forge Farm 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 2,191 metres of the emission source.

Beyond 2,191 metres the PC is less than  $0.2\mu\text{g}/\text{m}^3$  (i.e. less than 20% of the precautionary  $1\mu\text{g}/\text{m}^3$  critical level) and therefore beyond this distance the PC is insignificant. In this case the Allscott Settling Ponds SSSI is beyond this distance (see table below) and therefore screens out of any further assessment.

Where the precautionary level of  $1\mu\text{g}/\text{m}^3$  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 this case 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 likely damage to these sites.

**Table 2 – SSSI Assessment**

Name of SSSI	Distance from site (m)
Allscott Settling Ponds SSSI	1,322

Screening using the ammonia screening tool version 4.5 has indicated that the PC for Attingham Park SSSI is predicted to be less than 20% of the critical level for ammonia emissions therefore it is possible to conclude no damage. The results of the ammonia screening tool version 4.5 are given in the tables below.

**Table 3 – Ammonia emissions**

Site	Ammonia Cle ( $\mu\text{g}/\text{m}^3$ )	PC ( $\mu\text{g}/\text{m}^3$ )	PC % critical level
Attingham Park SSSI	3*	0.507	16.9

\* Critical level values taken from APIS website ([www.apis.ac.uk](http://www.apis.ac.uk)) – 03 May 2017

An assessment of nitrogen and acid deposition was not carried out as the APIS website indicates that there is no impact on Attingham Park SSSI from acid and nitrogen.

No further assessment is required.

## Decision checklist

Aspect considered	Decision
<b>Receipt of application</b>	
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.
<b>Consultation</b>	
Consultation	<p>The consultation requirements were identified in accordance with the Environmental Permitting Regulations and our public participation statement.</p> <p>The application was publicised on the GOV.UK website.</p> <p>We consulted the following organisations:</p> <ul style="list-style-type: none"> <li>- Health and Safety Executive</li> <li>- Local Authority Environmental Health Department</li> <li>- Director of Public Health</li> <li>- Public Health England</li> <li>- Natural England (for information only)</li> </ul> <p>The comments and our responses are summarised in the <a href="#">consultation section</a>.</p>
<b>The site</b>	
Extent of the site of the facility	The operator has provided plans which we consider are satisfactory, showing the extent of the site of the facility. The plan is included in the permit.
Site condition report	The operator has provided a description of the condition of the site, which we consider is satisfactory. The decision was taken in accordance with our guidance on site condition reports.
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>We have assessed the application and its potential to affect all known sites of nature conservation, landscape and heritage and/or protected species or habitats identified in the nature conservation screening report as part of the permitting process.</p> <p>We consider that the application will not affect any sites of nature conservation, landscape and heritage, and/or protected species or habitats identified.</p>
<b>Environmental risk assessment</b>	
Environmental risk	<p>We have reviewed the operator's assessment of the environmental risk from the facility.</p> <p>See <a href="#">key issues</a> section for further explanation.</p>

Aspect considered	Decision
<b>Operating techniques</b>	
General operating techniques	<p>We have reviewed the techniques used by the operator and compared these with the relevant guidance notes and we consider them to represent appropriate techniques for the facility.</p> <p>The operating techniques are as follows:</p> <ul style="list-style-type: none"> <li>- Ventilation is provided by side ventilation.</li> <li>- Yard and roof water is collected by trenches and pipes to an attenuation pond before discharging to controlled waters.</li> <li>- The biomass boiler appliance and its installation meets the technical criteria to be eligible for the Renewable Heat Incentive.</li> <li>- The biomass boiler fuel is derived from virgin timber and herbaceous biomass.</li> <li>- The stacks are at least 1 metre higher than the apex of the adjacent buildings.</li> </ul> <p>The proposed techniques for priorities for control are in line with the benchmark levels contained in the Sector Guidance Note EPR6.09 and we consider them to represent appropriate techniques for the facility. The permit conditions ensure compliance with relevant BREFs</p>
Odour management	<p>We have reviewed the Odour Management Plan in accordance with our guidance on odour management.</p> <p>We consider that the Odour Management Plan is satisfactory.</p>
Noise management	<p>We have reviewed the Noise Management Plan in accordance with our guidance on noise assessment and control.</p> <p>We consider that the Noise Management Plan is satisfactory.</p>
<b>Permit conditions</b>	
Updating permit conditions during consolidation	<p>We have updated permit conditions to those in the current generic permit template as part of permit consolidation. The conditions will provide the same level of protection as those in the previous permit(s).</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), straw, miscanthus or a combination of these. These materials are never to be mixed with or replaced by, waste.</p>
<b>Operator competence</b>	
Management system	<p>There is no known reason to consider that the operator will not have the management system to enable it to comply with the permit conditions.</p>

## Consultation

The following summarises the responses to consultation with other organisations, our notice on Gov.UK for the public, and the way in which we have considered these in the determination process.

### Responses from organisations listed in the consultation section

<b>Response received from</b>
Public Health England – 21 February 2017
<b>Brief summary of issues raised</b>
We recommend that any Environmental Permit issued for this site should contain conditions to ensure that the following potential emissions do not impact upon public health: odour, fugitive emissions of ammonia and dust to air from feed and litter. Based solely on the information contained in the application provided, PHE has no significant concerns regarding risk to health of the local population from this proposed activity, providing that the applicant takes all appropriate measures to prevent or control pollution, in accordance with the relevant sector technical guidance or industry best practice.
<b>Summary of actions taken or show how this has been covered</b>
Standard conditions have been included in the permit, no further action is necessary.

### Responses not received

The Health and Safety Executive, Local Authority Environment Health Department, and Director of Public Health were also consulted. No further consultation responses were received from these parties and no representations were made following publication of the notice on Gov.UK.