

Permitting decisions

Variation

We have decided to grant the variation for Silverdale Farm Poultry Unit operated by Mr Peter Hemmings, Mr Timothy Hemmings and Mr Robert Hemmings.

The variation number is EPR/EP3137MV/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 in to 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

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.

Amendments have been made to the conditions of this variation so that it now 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 Silver Dale Farm Poultry Unit (01/09/16) 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.**

Odour

Odour modelling report 'Odour Assessment, 23rd January 2017' was submitted with the application and was considered when determining the risk of potential odour impacts from the farm. The applicant predicted a maximum 98th percentile of hourly odour concentrations of 2.97 OU_E/m³.

An independent audit of the modelling report was undertaken by the Environment Agency – Air Quality Modelling and Assessment Unit (AQMAU). The conclusions of this audit is that we disagree with the conclusions of the odour modelling report and as such we cannot rule out the potential for exceedances of the 3OU_E/m³ benchmark.

Many assumptions are made when modelling odour, and therefore model predictions are associated with a number of uncertainties. Predictions therefore are indicative only, and it is necessary to consider wider odour management at any site when making permitting decisions.

In this case, as the modelling indicates there may be potential for odour pollution, we would requested a detailed odour management plan (OMP) to be implemented which sets out measures to ensure the site is

managed in such a way that the risk of odour nuisance to the local amenity is minimised as far as practicable.

The applicant has submitted an odour management plan with additional contingency measures which we have reviewed as part of the application process.

We are satisfied with the measures set out in the OMP; however we also require that it is periodically reviewed by the operator to ensure its continued suitability for this installation.

Biomass boilers

The applicant is varying their permit to include 1 biomass boiler(s) with a net rated thermal input of 0.6 MW.

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 farms 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 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.

Ammonia

There is 1 Special Area(s) of Conservation (SAC),/Special Protection Area(s) (SPA),/Ramsar sites located within 10 kilometres of the installation. There is 1 Sites of Special Scientific Interest (SSSI) located within 5 km of the installation. There are also 3 Local Wildlife Site(s) (LWS),/Ancient Woodland(s) (AW), Local Nature Reserve(s) (LNR) within 2 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 (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 SAC.

Initial screening using ammonia screening tool version 4.5 has indicated that emissions from Silver Dale Farm Poultry Unit will only have a potential impact on the SAC site with a precautionary critical level of $1\mu\text{g}/\text{m}^3$ if they are within XX metres of the emission source.

Beyond 5777m 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 the SAC/SPA/Ramsar is 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 – SAC Assessment

Name of SAC	Distance from site (m)
The Stiperstones and The Hollies	8599

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 Silverdale Farm Poultry Unit 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 1990 metres of the emission source.

Beyond 1990m 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 SSSI is 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 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)
River Severn at Montford	4216

Ammonia assessment – LWS and AW

The following trigger thresholds have been applied for the assessment of these sites:

- If the process contribution (PC) is below 100% of the relevant critical level (CLe) or critical load (CLo) then the farm can be permitted with no further assessment.

Initial screening using ammonia screening tool version 4.5 has indicated that emissions from Silverdale Farm Poultry Unit will only have a potential impact on the LWS and AW sites with a precautionary critical level of $1\mu\text{g}/\text{m}^3$ if they are within 686 metres of the emission source.

Beyond 686m the PC is less than $1\mu\text{g}/\text{m}^3$ and therefore beyond this distance the PC is insignificant. In this case all LWS and AW are beyond this distance (see table below) and therefore screen out of any further assessment.

Table 3 – LWS and AW Assessment

Name of LWS	Distance from site (m)
Cardeston Quarry	2094
Name of AW	Distance from site (m)
Broxton Wood	1854
Unknown	1641

Decision checklist

Aspect considered	Decision
Receipt of application	
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.
Consultation/Engagement	
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> <p>Health and Safety Executive</p> <p>Shropshire County Council - Environmental Health</p> <p>Food Standards Agency</p> <p>No responses were received.</p>
The site	
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 including the discharge points. 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 and baseline reporting under the Industrial Emissions Directive.
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>

Aspect considered	Decision
	<p>We have not consulted Natural England 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>
Operating techniques	
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 that the applicant must use are specified in table S1.2 in the environmental permit.</p> <p>The operating techniques are as follows:</p> <ul style="list-style-type: none"> • Revised odour management plan – appendix 8 and cleaning policy, • Revised biomass boiler specification (net thermal input of 600KWth • 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 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>
Permit conditions	
Emission limits	No emission limits have been added, amended or deleted as a result of this variation.
Operator competence	
Management system	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.

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. The consultation process for this application ran from the 8th February to the 8th March 2017.

Responses from organisations listed in the consultation section

Response received from
Food Standards Agency
Brief summary of issues raised
No Issues Raised
Summary of actions taken or show how this has been covered
N/A

Response received from
Health and Safety Executive
Brief summary of issues raised
No Issues Raised
Summary of actions taken or show how this has been covered
N/A

Response received from
Shropshire County Council – Environmental Health
Brief summary of issues raised
No Issues Raised
Summary of actions taken or show how this has been covered
N/A

Representations from individual members of the public.

No responses were received during the consultation period.