

# **Environment Agency permitting decisions**

## **Variation**

We have decided to issue the variation for Manor Poultry Farm operated by Mr Harold Schofield, Mrs Patricia Schofield and Mr Richard Schofield (trading as Messrs H Schofield)

The variation number is `EPR/ZP3237ME/V004`

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

## **Key issues of the decision**

### **Changes to the original permit as a result of consolidation**

As part of this variation and consolidation, the following changes have been made:

- Some conditions have been renumbered, reworded or deleted as a result of the consolidation
- Livestock numbers have been amended in table S1.1 activities
- The biomass boilers are added as a DAA in Table S1.1 and as emission points in table S3.1
- Table S2.1 now refers to biomass boiler fuel;
- Inclusion of condition 3.5.1 and 3.6
- Inclusion of conditions 3.1.3 and 4.3.1 as a result of the requirements of the Industrial Emissions Directive (IED).
- Site drainage has been clarified and table S3.2 emissions to water (formerly S4.2) has been amended.

### **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. These Regulations transpose the requirements of the Industrial Emissions Directive (IED).

Amendments have been made to the conditions of this variation and a consolidated permit has been issued, so that it now implements the requirements of the EU Directive on Industrial Emissions.

### **Poultry House Ventilation**

The variation application came in with conflicting information regarding the ventilation of houses 3 and 4. This was clarified in an email dated 25/06/14 and a revised technical standards, site plan and site drainage plan were sent in by the applicant contact on 30/06/14. Houses 1 and 2 have side inlets with high velocity fan outlets, and houses 3 and 4 have side inlets with gable end fan outlets.

## Groundwater and soil monitoring

As a result of the requirements of the Industrial Emissions Directive, all permits are now required to contain condition 3.1.3 relating to 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 the 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 your 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 for Manor Poultry Farm (updated and received 20/06/14) demonstrated that the hazards to land or groundwater have been mitigated/minimised such that there is little likelihood of pollution and there is no evidence of historic contamination on site. **Therefore, although this condition is included in the permit, no groundwater monitoring will be required at this installation as a result.**

## **Biomass boilers**

The applicant is varying their permit to include 2 biomass boilers with a net rated thermal input of 442.2 kW.

In line with the Environment Agency's May 2013 document "Biomass boilers on EPR Intensive Farms", an assessment has been undertaken to consider the proposed addition of the biomass boilers.

This guidance states that 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 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:
  - A. less than 0.5MWth, or;
  - B. less than 1MWth where the stack height is greater than 1 metre above the roof level of adjacent buildings (where there are no adjacent buildings, the stack height must be a minimum of 3 metres above ground), and there are:
    - no Special Areas of Conservation, Special Protection Areas, Ramsar sites or Sites of Special Scientific Interest within 500 metres of the emission point(s);
    - no National Nature Reserves, Local Nature Reserves, ancient woodlands or local wildlife sites within 100 metres of the emission point(s), or;
  - C. less than 2MWth where, in addition to the above criteria for less than 1MWth boilers, there are:
    - no sensitive receptors within 150 metres of the emission point(s).

The biomass boilers meet the requirements of criteria A above, and are therefore considered not likely to pose a significant risk to the environment or human health and no further assessment is required.

## **Ammonia Emissions**

There is one Special Area of Conservation (SAC), one Special Protection Area (SPA) which is also a Ramsar and two Ramsar sites located within 10 kilometres (km) of the installation. There are two Sites of Special Scientific

Interest (SSSI) located within 5 km of the installation. There are also four Local Wildlife Sites (LWS), and one Local Nature Reserve (LNR) within 2km of the installation.

### Ammonia Assessment – SAC / SPA / Ramsar sites

The following trigger thresholds have been designated for assessment of European sites including Ramsar 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 overlapping in combination assessment will be completed where existing farms are identified within 10km of the application.

Screening using the Ammonia Screening Tool (v4.4) has determined that the Process Contribution (PC) on the SACs, SPAs and Ramsars for ammonia, acid and N deposition from the application site are under the 4% significance threshold and can be screened out as having no likely significant effect. See results below.

**Table 1 – Ammonia Emissions**

Site	Critical Level Ammonia $\mu\text{g}/\text{m}^3$	Predicted Process Contribution $\mu\text{g}/\text{m}^3$	% of Critical Level
River Dee and Bala Lake SAC (England and Wales)	1*	< 0.04**	< 4%
Mersey Estuary SPA and Ramsar	3***	0.045	1.5%
Midland Meres & Mosses - Phase 1 Ramsar	1*	<0.04**	< 4%
Midland Meres & Mosses - Phase 2 Ramsar	1*	<0.04**	< 4%

\*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 4% insignificance threshold, in this circumstance it is not necessary to further consider Nitrogen Deposition or Acidification Critical Load values.

\*\* AST4.4 screens out as less than 4% at distances greater than 3845m

\*\*\*Natural England advised that a Cle of 3 for ammonia should be applied (20/05/14)

**Table 2 – Nitrogen deposition**

Site	Critical Load kg N/ha/yr	PC Kg N/ha/yr	PC % Critical Load
Mersey Estuary SPA and Ramsar	20	0.232	1.2%

Critical load values taken from APIS website ([www.apis.ac.uk](http://www.apis.ac.uk)) – 06/05/14

**Table 3 – Acid deposition**

Site	Critical Load keq/ha/yr	PC Kg N/ha/yr	PC % Critical Load
Mersey Estuary SPA and Ramsar	n/a*	0.017	n/a

\* Eurasian curlew nitrogen sensitive, no species sensitive to acidity (from APIS website ([www.apis.ac.uk](http://www.apis.ac.uk)) – 06/05/14)

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.

Screening using the Ammonia Screening Tool (v4.4) has indicated that SSSI sites beyond a distance of 1555m from the installation will have a PC of ammonia of < 20% for a CLe of 1µg/m<sup>3</sup>, and therefore beyond this distance the PC is insignificant. In this case all sites below are beyond this distance.

**TABLE 4 – distance from source**

Site	Distance (m)
Mersey Estuary SSSI	3549
Dunsdale Hollow SSSI	4378

As the installation screens out for a precautionary CLe of 1µg/m<sup>3</sup>, it was not necessary to consider critical loads for nitrogen deposition and acid deposition. It is possible to conclude no damage.

No further assessment is required.

### **Ammonia assessment - LWS /LNR.**

There is one Local Nature Reserves (LNR) and four Local Wildlife Sites (LWS) within 2 km of Manor Poultry 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, using results of the Ammonia Screening Tool version 4.4.

Screening using Ammonia Screening Tool 4.4 has indicated that emissions from Manor Poultry 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 633m of the emission source. Screening indicates that beyond this distance, the Process Contribution at conservation sites is less than  $1\mu\text{g}/\text{m}^3$ , which is 100% of the critical level, and therefore beyond this distance the PC is insignificant. In this case all local wildlife sites below are beyond this distance.

**TABLE 5 – distance from source**

Site	Distance (m)
Helsby Quarry LNR	1814
Frodsham and Helsby and Ince Marshes LWS	952
Helsby Hill LWS	2071
Wood's Poultry Farm LWS	1680
Hoblane Ponds LWS	1750

As the installation screens out for a precautionary CLe of  $1\mu\text{g}/\text{m}^3$ , it was not necessary to consider critical loads for nitrogen deposition and acid deposition. It is possible to conclude no damage.

It is possible to conclude no significant pollution will occur at these sites and no further assessment is required.

## 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>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 implements the requirements of the EU Directive on Industrial Emissions.  <b>See key issues section above for further information.</b>	✓
<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. There has been no change to the installation boundary as a result of this variation.	✓
Biodiversity, Heritage, Landscape and Nature Conservation	Ammonia emissions: 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 original permitting process. We consider that the application will not affect the features of the sites. <b>Please refer to section 'Ammonia Assessment' in Key Issues above.</b>	✓



Aspect considered	Justification / Detail	Criteria met Yes
	<p>Natural England did not need to be consulted as this meets scenario 5 of guidance 84_07 which is for an 'existing farm, no impact caused by variation'. The decision was taken in accordance with our guidance 84_07.</p> <p>An Appendix 11 has been completed and sent to Natural England for information only (dated 02/07/14).</p> <p>An Appendix 4 has been completed for audit purposes only (dated 02/07/14).</p> <p>An Other Nature Conservation Sites Assessment has been completed for audit purposes only (dated 02/07/14).</p> <p>All documents have been saved on EDRM.</p> <p>Biomass boiler emissions:  <b>Please refer to section 'Biomass Boilers' in Key Issues above.</b></p>	
<b>Environmental Risk Assessment and operating techniques</b>		
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>The assessment shows that, applying the conservative criteria in our guidance on Environmental Risk Assessment, all emissions may be categorised as environmentally insignificant.</p>	✓
Environmental risk	<p>We have carried out a risk assessment on behalf of the operator.</p> <p>The operator considers this risk assessment is satisfactory – see Key Issues, Ammonia Assessment section for further explanation.</p>	✓
Operating techniques	<p>We have reviewed the techniques used by the operator and compared these with the relevant guidance notes.</p> <p>The operating techniques are as follows:</p> <ul style="list-style-type: none"> <li>• the fuel is derived from virgin timber, and</li> <li>• the biomass boiler appliance and it's installation meets the technical criteria to be eligible for the Renewable Heat Incentive</li> </ul> <p>The proposed techniques for priorities for control are in</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	line with the benchmark levels contained in the SGN EPR6.09 and we consider them to represent appropriate techniques for the facility. The permit conditions ensure compliance with relevant BREFs and BAT Conclusions, and ELVs deliver compliance with BAT-AELs.	
<b>The permit conditions</b>		
Updating permit conditions during consolidation.	<p>We have updated previous permit conditions to those in the new generic permit template as part of the permit consolidation. The new conditions have the same meaning as those in the previous permits.</p> <p>The operator has agreed that the new conditions are acceptable.</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>	✓
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>	✓
<b>Operator Competence</b>		
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.	✓