

Environment Agency permitting decisions

Variation

We have decided to issue the variation for Lodge Farm Poultry Unit operated by Mr James Chandler (trading as Shoby Poultry).

The permit number is [EPR/WP3537XU](#)

The variation number is [EPR/WP3537XU/V002](#)

This was applied for and determined as a substantial variation.

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 – Ammonia emissions and biomass boiler
- Annex 1 the decision checklist
- Annex 2 the consultation and web publicising responses

Key issues of the decision

Ammonia Emissions

There are no Special Areas of Conservation (SAC), Special Protection Areas (SPA) or Ramsar sites located within 10km of the installation. There are 2 Sites of Special Scientific Interest (SSSI) located within 5 kilometres of the installation. There are also 25 Local Wildlife Sites (LWS) and 1 Ancient Woodlands (AW) within 2km of the installation.

Ammonia Assessment – SSSI's

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 the PCs for Twenty Acre Piece and Frisby Marsh SSSIs are predicted to be less than 20% Critical Level for ammonia, acid and N deposition therefore it is possible to conclude no damage. The results of the ammonia screening tool v4.4 are given in the tables below.

Table 1 Ammonia Emissions

Name of SSSI	Ammonia Cle ($\mu\text{g}/\text{m}^3$)	PC ($\mu\text{g}/\text{m}^3$)	PC as % of Critical level
Twenty Acre Piece SSSI	$1\mu\text{g}/\text{m}^3$ *	0.144	14.4%
Frisby Marsh SSSI	$1\mu\text{g}/\text{m}^3$ *	0.052	5.2

* Natural England confirmed that a Cle of 1 for ammonia should be applied due to presence of priority species lichens and bryophytes

No further assessment is required.

Ammonia assessment – LWS and AW

There are 25 Local Wildlife Sites (LWS) and 1 Ancient Woodland (AW) within 2 km of Lodge 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 Lodge Farm will only have a potential impact on sites with a critical level of 1 µg/m³ if they are within 976m of the emission source. Screening indicates that beyond this distance, the Process Contribution at conservation sites is less than 1ug/m³. 1ug/m³ is 100% of the 1ug/m³ critical level and therefore beyond this distance the PC is insignificant. In this case all local wildlife sites below are beyond this distance.

TABLE 2 – distance from source

Site	Distance (m)
Shoby Scholes Grassland 1 LWS	1219
Shoby Scholes Grassland 2 LWS	1083
Mature Crack Willow LWS	1243
Badger Oak LWS	1321
Deep Marshy Stream LWS	1050
Mature Ash	1320
Grimston tunnel Grassland	1840
Old Dalby Test Track & Green Lane Pastures: Site S	1828
Old Dalby Test Track & Green Lane Pastures: Site T LWS	1831
Old Dalby Test Track & Green Lane Pastures: Site N LWS	1905
Shoby Scholes Grassland Area 3 Seasonal Pond LWS	1096
Shoby Scholes Hedgerow 27069 LWS	1477
Shoby House Farm Hedgerow LWS	1842
Lord Aylesford's Oak LWS	1034
Grassland 1 LWS	1000
Grassland 2 LWS	984
Old Dalby Test Track & Green Lane Pastures: Site P LWS	1967
Old Dalby Test Track & Green Lane Pastures: Site M LWS	2000
Old Dalby Test Track & Green Lane Pastures: Site Q LWS	1941
Sidings LWS	1972
Old Dalby Wood AW	1167

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.

For the following sites this farm has not been screened out, as set out above, using the distance criteria of the Ammonia Screening Tool version 4.4. Therefore the ammonia screening tool was used to assess the impacts at the individual sites in comparison to the 100% threshold. Tables 3 to 5 below show the results of the assessments for ammonia, nutrient enrichment and acidification.

Table 3 - Ammonia Emissions LWS's and AW

Site	Critical Level Ammonia $\mu\text{g}/\text{m}^3$	PC $\mu\text{g}/\text{m}^3$	PC % Critical Level
Grimstone Hedgerow LWS	3**	0.596	59.6%
Lord Aylesford's Northern Ash LWS	3**	0.445	44.5%
Mature Willow LWS	3**	0.340	34.0%
Lord Aylesford's Southern Ash LWS	3**	0.345	34.5%

** CLe3 applied as no protected lichen or bryophytes species were found when checking easimap layer

Table 4 - Nutrient enrichment

Site	Critical Load nutrient enrichment $\text{kg N}/\text{ha}/\text{yr}$	PC $\text{Kg N}/\text{ha}/\text{yr}$	PC % Critical Load
Grimstone Hedgerow LWS	10*	5.854	92.9%
Lord Aylesford's Northern Ash LWS	10*	6.93	69.3%
Mature Willow LWS	10*	5.3	53.0%
Lord Aylesford's Southern Ash LWS	10*	5.38	53.8%

* Critical load values taken from APIS website (www.apis.ac.uk) – 07/01/14

Table5 - Acidification

Site	Critical Load acidification $\text{keq}/\text{ha}/\text{yr}$	PC $\text{keq}/\text{ha}/\text{yr}$	PC % Critical Load
Grimstone Hedgerow LWS	8.6***	0.664	7.4%
Lord Aylesford's Northern Ash LWS	8.6***	0.495	5.8%
Mature Willow LWS	8.6***	0.378	4.4%
Lord Aylesford's Southern Ash LWS	8.6***	0.384	4.5%

* Critical load values taken from APIS website (www.apis.ac.uk) – 07/01/14

The Process Contribution on the LWS above for ammonia, acid and N deposition from the application site are under the 100% significance threshold and can be screened out as having no likely significant effect and therefore no further assessment is required.

For the following site this farm has not been screened out, as set out above. Using results of the detailed modelling supplied by the applicant as part of the application (Document Reference: Modelling of the Dispersion and Deposition of Ammonia prepared by Steve Smith, AS Modelling & Data, 19th January 2014) further assessment was undertaken as shown in tables 6 and 7 below.

Table 6 - Ammonia Emissions

Site	Critical Level Ammonia $\mu\text{g}/\text{m}^3$	PC $\mu\text{g}/\text{m}^3$	PC % Critical Level
Hedgerow LWS	3**	3.018	100.02%

** CLe3 applied as no protected lichen or bryophytes species were found when checking easimap layer

The ADMS modelling system used to model this proposal has a number of conservative measures built into it, and as such although the predicted Ammonia PC value marginally exceeds %100 of the CLe threshold it is unlikely to be exceeded in reality and as such is not considered to have a significant impact.

Table 7 - Nutrient enrichment - nitrogen

Site	Critical Load nutrient enrichment kg N/ha/yr	PC Kg N/ha/yr	PC % Critical Load
Hedgerow LWS	10**	9.622	96.22%

* Critical load values taken from APIS website (www.apis.ac.uk) – 07/01/14

Acidification

The Critical Load for nitrogen deposition provides a stricter test than the Critical Load for acid deposition, and therefore acid deposition was not considered further.

No further assessment for these sites is required.

Biomass boiler

The applicant is varying their permit to include one biomass boiler with a thermal input of 199kW.

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 boiler.

This guidance states that the Environment Agency has assessed the pollution risks and have 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 boiler meets the requirements of criteria A above, and is therefore considered not likely to pose a significant risk to the environment or human health and no further assessment is required.

Site boundary

The site boundary has been extended to incorporate the new poultry house. The applicant emailed confirmation on 12/03/2014 to confirm that the new permitted area has no history of pollution incidents and the original Site Condition Report remains applicable, and will be operated using the same techniques as the rest of the site.

Correction of permit error

This variation includes the correction of an error in the permit: shed 12 was originally omitted. This shed has been reinstated in this variation (in the emissions table S3.1) to correct that error.

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		
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.	✓
Responses to consultation and web publicising	The web publicising and consultation responses (Annex 2) were taken into account in the decision. The decision was taken in accordance with our guidance.	✓
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. This consolidated permit document now meets the requirements of the Industrial Emissions Directive – please see Key issues section above for details.	✓
The site		
Site condition report	The operator has provided a description of the condition of the site for the additional area of land to be included in the permit (dated 12/03/2014). See key issues ‘Site boundary’ section above for further information. We consider this description is satisfactory. The decision was taken in accordance with our guidance on site condition reports – guidance and templates (H5).	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	<p>The applicant has provided a statement (by email on 12/03/14) which updates the Site Condition Report. This stated that the additional area of the site (being added to accommodate shed 16) has no history of pollution incidents and will be operated in the same way as the rest of the site.</p>	
Extent of the site of the facility	<p>The operator has provided a plan which we consider is satisfactory, showing the extent of the site of the facility.</p> <p>A plan is included in the permit and the operator is required to carry on the permitted activities within the site boundary.</p>	✓
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>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 – see Key Issues section for more details.</p> <p>Natural England were consulted in the construction of the Environment Agency’s May 2013 document “Biomass boilers on EPR Intensive Farms”. This proposal screened out based on the criteria within that paper and as such is considered acceptable in terms of potential to impact sites of heritage, landscape or nature conservation, and/or protected species or habitat.</p> <p>Formal consultation has been carried out with Natural England in line with our Operational Instruction 84_07:</p> <p>An Appendix 4 form was saved to file for audit only on 26/02/2014.</p> <p>An other conservation sites proforma was saved to file for information only on 11/03/2014.</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
Environmental Risk Assessment and operating techniques		
Environmental risk	We have carried out a risk assessment on behalf of the operator. The operator considers this risk assessment is satisfactory.	✓
Environmental risk	We have carried out a risk assessment on behalf of the operator. The operator considers this risk assessment is satisfactory – see Key Issues ‘Biomass boilers’ section for further explanation.	✓
Operating techniques	We have reviewed the techniques used by the operator and compared these with the relevant guidance notes. The operator has proposed the following Operating Techniques: <ul style="list-style-type: none"> • housing will be well insulated and have a damp proof course; • drinkers and troughs are designed to prevent leakage; • litter will be kept loose and friable; • the biomass boiler is used to ensure temperature should meet health and welfare needs for the age and number of birds; • the fuel is derived from virgin timber; and • the biomass boiler appliance and it's installation meets the technical criteria to be eligible for the Renewable Heat Incentive. The proposed techniques for priorities for control are in line with the benchmark levels contained in the SGN EPR6.09 ‘How to comply with your environmental permit for intensive farming (version 2)’ and we consider them to represent appropriate techniques for the facility. The permit conditions ensure compliance with relevant BREFs and BAT Conclusions.	✓
The permit conditions		
Updating permit conditions during consolidation.	We have updated previous permit conditions to those in the new generic permit template as part of permit consolidation. The new conditions have the same meaning as those in the previous permit.	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	The operator has agreed that the new conditions are acceptable.	
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>	✓
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>	✓
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.</p> <p>The operator satisfies the criteria in RGN 5 on Operator Competence.</p>	✓

Annex 2: Consultation and web publicising responses

Summary of responses to consultation and web publication and the way in which we have taken these into account in the determination process.

Melton County Council Environmental Health, Melton County Council Planning Department and the Health and Safety Executive were all consulted on this application, but no responses were received.

This application was publicised on the Environment Agency website between 5th February and 5th March 2014, but no representations were received during this time.