

Environment Agency permitting decisions

Bespoke permit

We have decided to grant the permit for Bodway Poultry Farm operated by W. Potter & Sons (Poultry) Limited.

The permit number is EPR/HP3831EZ.

This was applied for and determined as a new bespoke.

The application was duly made on 13/06/2014.

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 – Industrial Emissions Directive; Ammonia Emissions Assessment; Odour Emissions Assessment
- Annex 1 the decision checklist
- Annex 2 the consultation and web publicising responses

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

This permit implements the requirements of the EU 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 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 Bodway Poultry Farm (dated May 2014) 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 or soil monitoring will be required at this installation as a result.

Ammonia Emissions Assessment

There are six Sites of Special Scientific Interest (SSSIs) located within five kilometres of the installation; nine Local Wildlife Sites (LWSs) and three Ancient Woodlands (AWs) within two kilometres of Bodway Poultry Farm.

Ammonia Assessment – SSSIs <20%

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 ammonia screening tool (AST) version 4.4 has indicated that emissions from Bodway Poultry Farm will only have potential impact on SSSIs with a CLe of 1 µg/m³ if they are within 958 metres of the emission source. Screening indicates that beyond this distance the PC on the SSSIs for ammonia, acid and nitrogen deposition from the application site are under 4% (<0.04 µg/m³) significance threshold and can be screened out as having not likely significant effect. In this case the following SSSIs are beyond this distance, as shown below.

Table 1 – distance from source

SSSI	Distance (m)
Gamston & Easton Woods & Roadside Verges	2, 129
Clarborough Tunnel	2, 945
Chesterfield Canal	2, 652
Treswell Wood	2, 251
Ashton's Meadow	4, 929

The PC as these sites have 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 <50%

Screening using AST v4.4 was originally completed for 80,000 pullet places. As the applicant wanted to apply for 85,000 pullet places they undertook detailed modelling. However, the detailed modelling highlighted that Castle Hill Wood SSSI does not screen out as insignificant, for permitting purposes, using the precautionary CLe of 1 µg/m³.

During pre-application discussions, Natural England confirmed that Castle Hill Wood SSSI does not have lower plants notified features and therefore a CLe of 3 µg/m³ can be applied. Screening using AST v4.4 was then completed for 85,000 pullet places using the advised CLe of 3 µg/m³.

The screening determined that the process contributions of ammonia, acid and N deposition 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 below the 50% CLe / CLo significance threshold. Under Environment Agency guidelines it is therefore possible to conclude no damage to the site from the installation, no further assessment is required.

Table 2 – ammonia emissions

Site	Critical Level Ammonia $\mu\text{g}/\text{m}^3$	Predicted Process Contribution $\mu\text{g}/\text{m}^3$	% of Critical Level
Castle Hill Wood	3*	0.708	23.6

* Natural England advised a CLe of 3 $\mu\text{g}/\text{m}^3$ could be applied.

Table 3 – nitrogen deposition

Site	Critical Load kg N/ha/yr	PC Kg N/ha/yr	PC % Critical Load
Castle Hill Wood	10	3.675	36.8

CLo values taken from APIS website (www.apis.ac.uk) – 14/03/2014

Table 4 – acid deposition

Site	Critical Load keq/ha/yr	PC Kg N/ha/yr	PC % Critical Load
Castle Hill Wood	11.003	0.262	2.4

CLo values taken from APIS website (www.apis.ac.uk) – 14/03/2014

Ammonia assessment – LWSs and AWs

There are eight Local Wildlife Sites (LWS) and three Ancient Woodlands (AW) within two kilometres of Bodway 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 AST v4.4.

Screening using AST v4.4 has indicated that emissions from Bodway Farm will only have a potential impact on sites with a CLe of 1 $\mu\text{g}/\text{m}^3$ if they are within 335 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 LWSs and AWs below are beyond this distance.

Table 5 – distance from source

Site	Distance (m)
Durham Hill Pasture LWS	1,180
Eaton Wood LWS	2,128
Plaster Hill Plantation LWS	1,394
Top Lodge Plantation LWS	817
Castle Hill Wood, Horse Close Plantation	437

and Swindell Spring Wood LWS	
Darlton Wood LWS	1,196
Headon Wood/School House Plantation LWS	1,815
Beverley Spring LWS	1,465
Eaton Wood AW	2,128
Castle Hill Wood AW	437
Beverley Spring AW	1,465

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.

Odour Emissions Assessment

As part of the application a dispersion modelling assessment, to assess the odour implications of the poultry houses, was undertaken. The modelling was conducted to predict odour concentrations at near by receptors. This was done using UK Atmospheric Dispersion Modelling System (ADMS) Version 5. There are 29 residential receptors within 400 metres of the installation.

The following benchmark levels have been set in the H4 Odour Management horizontal guidance. The benchmark levels are based on the 98th percentile of hourly average concentrations of odour modelled over a year. The benchmarks are:

- 1.5 odour units for **most offensive** odours;
- 3 odours units for **moderately offensive** odours;
- 6 odour units for **less offensive** odours.

Odours from livestock housing are usually placed in the 'moderately offensive' group and therefore the $3\text{ou}_E \text{m}^{-3}$ as the 98th percentile of hourly averages criteria applies. However, ADAS stated that odours from livestock housing are unlikely to cause unacceptable off-site impacts with annual 98th percentile odour concentrations of less than $5\text{ou}_E \text{m}^{-3}$. Any modelled results that project exposures above this benchmark level, after taking uncertainty into account, indicates the likelihood of unacceptable odour pollution.

The odour dispersion modelling predicted that the odour concentrations at two receptors, receptor one a residence occupied by the poultry unit and receptor two a residence not associated with the poultry unit, exceed the H4 benchmark of $3\text{ou}_E \text{m}^{-3}$ as the 98th percentile of hourly averages. However, the odour concentrations at all residential receptors are below $5\text{ou}_E \text{m}^{-3}$ as the 98th percentile of hourly averages.

Table 6 - Odour concentrations at receptor locations

Receptor	Name	Predicted odour concentration (ou_E m⁻³ as the 98th percentile of hourly averages)
1	Residence, Bodway Farm	4.89
2	HH next door	3.78
3	Residence, Grove	2.29
4	Residence, Grove	1.81
5	Residence, Grove	1.40
6	Residence, Grove	1.12
7	Residence, Grove	1.11
8	Residence, Main St, Grove	1.00
9	Residence, Grove	1.48
10	PW, Grove	0.89
11	Residence, Vernon Cl, Grove	0.86
12	Residence, Vernon Cl, Grove	0.77
13	School, Grove	0.86
14	Residence, Vernon Cl, Grove	0.79
15	Residence, Grove / Grove Grange Farm	0.69
16	The Lodge	0.12
17	Six Oaks	0.19
18	Grove Moor Farm	0.07
19	Gringley Grange	0.08
20	Corner Farm House	0.23
21	Glynojoke	0.16
22	White House Farm, Little Gringley	0.14
23	Bracken Lane Farm	0.07
24	Grove Kennels	0.07
25	Low Farm	0.05
26	East West Cottage	0.06
27	Residence, Greenspotts Lane	0.05
28	Residence, Grove Road	0.06
29	Khamsin	0.11

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. The permit implements the requirements of the EU Directive on Industrial Emissions. See key issues 'IED' section above for further information.	✓
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	The operator has provided a description of the condition	✓

Aspect considered	Justification / Detail	Criteria met Yes
report	<p>of the site.</p> <p>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).</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.</p> <p>See key issues ‘Ammonia Emissions Assessment’ section above for further information.</p> <p>An Appendix 4 was completed and saved to EDRM on 09/06/2014 ‘for audit only’.</p> <p>We have not formally consulted on the application. The decision was taken in accordance with our guidance.</p>	✓
Environmental Risk Assessment and operating techniques		
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>	✓
Operating techniques	<p>We have reviewed the techniques used by the operator and compared these with the relevant guidance notes.</p> <p>The operator has proposed the following key techniques:</p> <ul style="list-style-type: none"> • Dirty water storage facilities are in place on site; • Nipple drinkers are used to reduce wastage of 	✓

Aspect considered	Justification / Detail	Criteria met Yes
	<p>water and maintain dry litter;</p> <ul style="list-style-type: none"> • Chemical storage is within a purpose-built store on site that is fully bunded; • All fuels are stored in bunded fuel stores; • Emergency generator on site in case of power failure; and • Carcasses stored in sealed bins before being sent for incineration by an approved contractor. <p>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.</p>	
The permit conditions		
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	<p>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.</p>	✓
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>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
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 responses

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

Response received from
Health and Safety Executive – 27/06/2014
Brief summary of issues raised
No comments regarding application.
Summary of actions taken or show how this has been covered
N/A

The following organisations were consulted, however no responses were received:

- Local Planning Authority – Bassetlaw District Council
- Environmental Health – Bassetlaw District Council

This proposal was also publicised on the Environment Agency's website between 25/06/2014 and 24/07/2014, but no representations were received during this period.